

COOK INLET  
REGIONAL  
SALMON  
ENHANCEMENT  
PLANNING

PHASE I PLAN: 1981 - 2000

PHASE II PLAN:

2006 - 2025

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# COOK INLET REGIONAL SALMON ENHANCEMENT PLANNING

*PHASE I PLAN: 1981 - 2000*

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<b>TABLE OF CONTENTS</b>
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Section	Page
<b>CHAPTER 1.0 INTRODUCTION TO THE <i>PHASE II PLAN 2006 - 2025</i> PLANNING PROCESS</b>	1 - 1
<b>1.1 INTRODUCTION TO THE MANDATED PLANNING STRUCTURE</b>	1 - 1
1.1.1 Overview	1 - 1
1.1.2 Legislative Background	1 - 1
1.1.3 Alaska Department of Fish and Game	1 - 2
1.1.4 Cook Inlet Aquaculture Association	1 - 2
1.1.5 The Regional Planning Team	1 - 3
<b>1.2 SIGNIFICANT CHANGES IN CONTEXT SINCE APPROVAL OF THE <i>PHASE I PLAN 1981 - 2000</i></b>	1 - 4
1.2.1 Overview	1 - 4
1.2.2 Dissolution of the FRED Division of ADF&G	1 - 4
1.2.3 Closure of Hatcheries	1 - 4
1.2.4 Development of New Fisheries	1 - 6
1.2.5 Land Use Policy Changes	1 - 7
1.2.6 Policy for the Management of Sustainable Salmon Fisheries	1 - 7
<b>1.3 APPROACH TO THE <i>PHASE II PLAN 2006 - 2025</i></b>	1 - 9
1.3.1 Development of the <i>Phase I Plan 1981 - 2000</i>	1 - 9
1.3.2 Identification of Potential Project Implementers	1 - 9
1.3.3 <i>Phase II Plan 2006 - 2025</i> Planning Process	1 - 9
<b>1.4 EFFECTIVE LIFE OF THE PLAN</b>	1 - 10
<b>1.5 PUBLIC PARTICIPATION</b>	1 - 10
1.5.1 Preparation of Working Draft Plan	1 - 10
1.5.2 Verification of Contents of the Working Draft Plan	1 - 10
1.5.3 Preparation and Circulation of Public Review Draft	1 - 11
1.5.4 Consideration of Public Comments	1 - 11
1.5.5 Submission to the Commissioner of the Alaska Department of Fish and Game for Approval	1 - 11
<b>1.6 APPROVAL AND AUTHORITY OF THE PLAN</b>	1 - 11
<b>CHAPTER 2.0 STATUS OF PREVIOUSLY IDENTIFIED STRATEGIES, TACTICS AND PROJECTS</b>	2 - 1
<b>2.1 OVERVIEW</b>	2 - 1
<b>2.2 INTRODUCTION</b>	2 - 1
2.2.1 Previously Identified Strategies, Tactics and Projects	2 - 1
2.2.2 The Evaluation Process	2 - 1
<b>2.3 RESEARCH / EVALUATION STRATEGY, TACTICS AND PROJECTS</b>	2 - 1
2.3.1 Strategy	2 - 1
2.3.2 Tactics	2 - 2
2.3.3 Status of Identified Research / Evaluation Projects	2 - 3
<b>2.4 REHABILITATION / ENHANCEMENT STRATEGY, TACTICS AND PROJECTS</b>	2 - 3
2.4.1 Strategy	2 - 3
2.4.2 Tactics	2 - 3
2.4.3 Status of Identified Rehabilitation / Enhancement Projects	2 - 3
<b>2.5 DISTRIBUTION / ACCESS STRATEGY, TACTICS AND PROJECTS</b>	2 - 3
2.5.1 Strategy	2 - 3
2.5.2 Tactics	2 - 5
2.5.3 Status of Identified Distribution / Access Projects	2 - 5
<b>2.6 HARVEST MANAGEMENT STRATEGY, TACTICS AND PROJECTS</b>	2 - 5

2.6.1	Strategy	2 - 5
2.6.2	Tactics	2 - 6
2.6.3	Status of Identified Harvest Management Projects	2 - 6
<b>2.7</b>	<b>HABITAT PROTECTION STRATEGY, TACTICS AND PROJECTS</b>	<b>2 - 7</b>
2.7.1	Strategy	2 - 7
2.7.2	Tactics	2 - 7
2.7.3	Status of Identified Habitat Protection Projects	2 - 7
<b>CHAPTER 3.0 FRAMEWORK FOR LOCALIZED UNIT ANALYSIS</b>		<b>3 - 1</b>
<b>3.1</b>	<b>OVERVIEW</b>	<b>3 - 1</b>
<b>3.2</b>	<b>IDENTIFICATION OF THE TEN LOCALIZED UNITS</b>	<b>3 - 1</b>
3.2.1	Kamishak Bay Unit	3 - 1
3.2.2	Westside Unit	3 - 3
3.2.3	Susitna River Unit	3 - 3
3.2.4	Knik Arm Unit	3 - 3
3.2.5	Turnagain Arm Unit	3 - 3
3.2.6	Upper Peninsula / Kenai River Unit	3 - 3
3.2.7	Kasilof River / Mid-Peninsula Unit	3 - 4
3.2.8	Kachemak Bay Unit	3 - 4
3.2.9	Gulf Coast Unit	3 - 4
3.2.10	Greater Resurrection Bay Unit	3 - 4
<b>3.3</b>	<b>DEFINITION OF TERMS</b>	<b>3 - 4</b>
3.3.1	Context	3 - 4
3.3.2	Cook Inlet Regional Planning Team and the Alaska Board of Fisheries	3 - 4
3.3.2.1	Rehabilitation and Enhancement	3 - 5
3.3.2.2	Terms Related to the Character or Condition of the Resource	3 - 6
3.3.3	Alaska Department of Fish and Game's "Genetic Policy"	3 - 11
3.3.3.1	Salmon Stock	3 - 11
3.3.3.2	Genetic Variability	3 - 11
3.3.3.3	Significant Stock	3 - 12
3.3.3.4	Unique Stock	3 - 12
3.3.3.5	Wild Stock Sanctuary / Stock Reserve	3 - 13
3.3.4	Relationship Between Concepts	3 - 13
<b>3.4</b>	<b>ASSUMPTIONS</b>	<b>3 - 14</b>
3.4.1	Changing Times	3 - 14
3.4.2	Availability of Support Facilities	3 - 14
3.4.3	Recurring Demands for Rehabilitation or Enhancement Projects	3 - 15
3.4.4	The Status of Baseline Information	3 - 15
3.4.5	Policy Position of the National Park Service	3 - 15
3.4.6	Unique Stocks	3 - 16
3.4.7	Genetic Compatibility	3 - 16
<b>3.5</b>	<b>OBJECTIVES</b>	<b>3 - 16</b>
3.5.1	Adopt Common Language	3 - 16
3.5.2	Understand Salmon Enhancement and Rehabilitation in the Context of Management of the Overall Resource	3 - 16
3.5.3	Identifying Opportunities for Organizational Cooperation	3 - 17
3.5.4	Anticipating Issues	3 - 17
3.5.5	Improving Public Understanding of the Benefits and Limitations of Salmon Rehabilitation and Enhancement Projects	3 - 17



3.5.6	Standardized Evaluation	3 - 18
<b>CHAPTER 4.0 KAMISHAK BAY UNIT ANALYSIS</b>		
<b>4.1</b>	<b>OVERVIEW</b>	4 - 1
<b>4.2</b>	<b>RELEVANT LAND USE POLICIES</b>	4 - 1
4.2.1	National Park Service	4 - 1
4.2.2	Alaska Department of Fish and Game	4 - 1
4.2.3	Alaska Department of Natural Resources	4 - 4
4.2.4	Kenai Peninsula Borough	4 - 4
<b>4.3</b>	<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>	4 - 4
<b>4.4</b>	<b>SIGNIFICANT STOCKS</b>	4 - 16
<b>4.5</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>	4 - 16
4.5.1	King Salmon	4 - 17
4.5.2	Sockeye Salmon	4 - 17
4.5.3	Coho Salmon	4 - 17
4.5.4	Pink Salmon	4 - 17
4.5.5	Chum Salmon	4 - 17
<b>4.6</b>	<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>	4 - 18
4.6.1	Projects Identified in the <i>Phase I Plan 1981 - 2000</i>	4 - 18
4.6.1.1	Paint River System [AWC 243-20-10020]	4 - 18
4.6.1.2	Chenik Lake [AWC 243-30-10200]	4 - 18
4.6.1.3	Kirschner Lake Stream Rechannelization [no AWC number]	4 - 20
4.6.1.4	Strike Creek Fish Ladder [AWC 243-10-10030-2015]	4 - 20
4.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 - 2000</i>	4 - 21
4.6.2.1	Bruin Lake [AWC 243-50-10050]	4 - 21
4.6.2.2	Ursus Lake [AWC 248-10-10020]	4 - 21
<b>4.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	4 - 21
4.7.1	Anadromous Salmon Habitat Issues	4 - 21
4.7.1.1	Potential Secondary Impacts of Pebble Mine Development	4 - 21
4.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	4 - 21
4.7.2.1	Chenik Lake Sockeye Salmon [AWC 243-30-10200]	4 - 22
4.7.2.2	McNeil River Chum Salmon [AWC 243-20-10035]	4 - 22
4.7.2.3	Douglas River Coho Salmon [AWC 248-40-10100]	4 - 22
4.7.2.4	Unnamed Tributary (old Douglas River channel) Coho Salmon [AWC 243-10-10150]	4 - 22
4.7.2.5	Kamisahk River Coho Salmon [AWC 243-10-10040]	4 - 23
4.7.2.6	Amakdedori Creek Coho Salmon [AWC 243-40-10010]	4 - 23
4.7.3	Continuation of Existing Anadromous Salmon Projects	4 - 23
4.7.3.1	<b>ADF&amp;G</b> Aerial and Ground Surveys to Monitor Salmon Systems with Escapement Goals	4 - 23
4.7.3.2	<b>ADF&amp;G</b> Mikfik Lake Video Sockeye Salmon Escapement Enumeration	4 - 23
4.7.3.3	<b>ADF&amp;G</b> Chenik Lake Video Sockeye Salmon Escapement Enumeration	4 - 23
4.7.3.4	<b>CIAA</b> Chenik Lake Sockeye Salmon Escapement Enumeration	4 - 23
4.7.3.5	<b>CIAA</b> Kirschner Lake Sockeye Salmon Stocking	4 - 24
4.7.3.6	<b>CIAA</b> Paint River Stocking Evaluations	4 - 24
4.7.3.7	<b>OTHER</b> None	4 - 24
4.7.4	Proposed New Anadromous Salmon Projects	4 - 24
<b>CHAPTER 5.0 WESTSIDE UNIT ANALYSIS</b>		
<b>5.1</b>	<b>OVERVIEW</b>	5 - 1
<b>5.2</b>	<b>RELEVANT LAND USE POLICIES</b>	5 - 3
5.2.1	National Park Service	5 - 3

5.2.2	Alaska Department of Fish and Game	5 - 3
5.2.3	Alaska Department of Natural Resources	5 - 4
5.2.4	Kenai Peninsula Borough	5 - 5
<b>5.3</b>	<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>	<b>5 - 5</b>
<b>5.4</b>	<b>SIGNIFICANT STOCKS</b>	<b>5 - 42</b>
<b>5.5</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>	<b>5 - 43</b>
5.5.1	King Salmon	5 - 43
5.5.2	Sockeye Salmon	5 - 43
5.5.3	Coho Salmon	5 - 43
5.5.4	Pink Salmon	5 - 43
5.5.5	Chum Salmon	5 - 44
<b>5.6</b>	<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>	<b>5 - 44</b>
5.6.1	Projects Identified in the <i>Phase I Plan 1981 - 2000</i>	5 - 44
5.6.1.1	Spawning Ground Survey	5 - 44
5.6.1.2	Upper Cook Inlet Run Modeling	5 - 45
5.6.1.3	Big River Lakes [AWC 245-50-10050]	5 - 45
5.6.1.4	Crescent River [AWC 245-30-10010]	5 - 46
5.6.1.5	Packers Lake Development [AWC 246-20-10020]	5 - 46
5.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 - 2000</i>	5 - 48
5.6.2.1	Coffee Creek Fishladder [AWC 247-30-10090]	5 - 48
5.6.2.2	Cannery Creek Fishladder [AWC 245-50-10090]	5 - 49
<b>5.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	<b>5 - 49</b>
5.7.1	Anadromous Salmon Habitat Issues	5 - 50
5.7.1.1	Potential Impacts of Increased Recreational Use of Big River Lakes	5 - 50
5.7.1.2	Potential Impacts of Increased Airboat Use in Chinitna Bay	5 - 50
5.7.1.3	Potential Impacts of Chuitna Coal Mine Development	5 - 50
5.7.1.4	Potential Impacts of BLM Determination of Non-navigability in the Chuitna River	5 - 50
5.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	5 - 50
5.7.2.1	Theodore River King Salmon [AWC 247-30-10080]	5 - 51
5.7.3	Continuation of Existing Anadromous Salmon Projects	5 - 51
5.7.3.1	<b>ADF&amp;G</b> Annual Operation of the Crescent River Sonar Sockeye Salmon Escapement Monitor	5 - 51
5.7.3.2	<b>ADF&amp;G</b> Packers Lake Video Sockeye Salmon Escapement Enumeration	5 - 51
5.7.3.3	<b>ADF&amp;G</b> Big River Lakes Video Sockeye Salmon Escapement Enumeration	5 - 51
5.7.3.4	<b>CIAA</b> Cannery Creek Fishladder	5 - 51
5.7.3.5	<b>CIAA</b> Annual Operation of the Marten Lake Flow Control Structure	5 - 52
5.7.3.6	<b>CIAA</b> Annual Operation of the Packers Lake Flow Control Structure	5 - 52
5.7.3.7	<b>OTHER</b> None	5 - 52
5.7.4	Proposed New Anadromous Salmon Projects	5 - 52
5.7.4.1	<b>ADF&amp;G</b> Silver Salmon Creek Escapement abd Recreational Harvest Monitoring	5 - 52
5.7.4.2	<b>CIAA</b> Introduction of Salmon Production to Fisher Lake	5 - 52
5.7.4.3	<b>CIAA</b> Tyonek Rearing Facilities	5 - 53
5.7.4.4	<b>CIAA</b> Tuxedni Bay Sockeye Salmon Smolt-Release, Cost-Recovery Project	5 - 53
5.7.4.5	<b>CIAA</b> Renewal of Packers Lake Sockeye Salmon Enhancement	5 - 53
5.7.4.6	<b>NPS</b> Silver Salmon Creek Escapement abd Recreational Harvest Monitoring	5 - 53
5.7.4.7	<b>OTHER</b> None	5 - 53
<b>CHAPTER 6.0 SUSITNA RIVER UNIT ANALYSIS</b>		<b>6 - 1</b>
<b>6.1</b>	<b>OVERVIEW</b>	<b>6 - 1</b>
<b>6.2</b>	<b>RELEVANT LAND USE POLICIES</b>	<b>6 - 3</b>

6.2.1	National Park Service	6 - 3
6.2.2	Alaska Department of Fish and Game	6 - 3
6.2.3	Alaska Department of Natural Resources	6 - 4
6.2.4	Matanuska-Susitna Borough	6 - 5
<b>6.3</b>	<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>	<b>6 - 6</b>
<b>6.4</b>	<b>SIGNIFICANT STOCKS</b>	<b>6 - 57</b>
<b>6.5</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>	<b>6 - 58</b>
6.5.1	King Salmon	6 - 58
6.5.2	Sockeye Salmon	6 - 59
6.5.3	Coho Salmon	6 - 60
6.5.4	Pink Salmon	6 - 60
6.5.5	Chum Salmon	6 - 60
<b>6.6</b>	<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>	<b>6 - 60</b>
6.6.1	Projects Identified in the <i>Phase I Plan 1981 - 2000</i>	6 - 60
6.6.1.1	Spawning Ground Survey	6 - 60
6.6.1.2	Upper Cook Inlet Run Modeling	6 - 61
6.6.1.3	Deshka River Coho Salmon Study	6 - 62
6.6.1.4	Susitna River Radio Tagging Study	6 - 62
6.6.1.5	Larson Lake Fertilization [AWC 247-41-10200-2370-3080-0010]	6 - 62
6.6.1.6	Byers Lake Fertilization	6 - 63
6.6.1.7	Shell Lake Fertilization [AWC 247-41-10200-2053-3205-4050-0010]	6 - 63
6.6.1.8	Willow Creek King Salmon Enhancement [AWC 247-41-10200-2120]	6 - 63
6.6.1.9	Willow Creek Coho Salmon Enhancement [AWC 247-41-10200-2120]	6 - 64
6.6.1.10	Caswell Creek Coho Salmon Enhancement [AWC 247-41-10200-2190]	6 - 64
6.6.1.11	Escapement Monitoring	6 - 65
6.6.1.12	In-season Effort and Catch Monitoring	6 - 65
6.6.1.13	Upper Cook Inlet Central District Test Fishing	6 - 66
6.6.1.14	Upper Cook Inlet Stock Separation	6 - 66
6.6.1.15	Off-shore Test Fishing	6 - 66
6.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 - 2000</i>	6 - 67
6.6.2.1	Chelatna Lake [AWC 247-41-10200-2053-3170-0010]	6 - 67
6.6.2.2	Judd Lake [AWC 247-41-10200-2053-3205-4053-5066-0010]	6 - 67
6.6.2.3	Hewitt Lake [AWC 247-41-10200-2053-3213-4050-0010]	6 - 68
6.6.2.4	Upper Susitna River Salmon Enhancement Study	6 - 69
6.6.2.5	An Estimate of Adult Sockeye Salmon Production for the Susitna River Drainage, Alaska	6 - 70
6.6.2.6	Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems	6 - 71
<b>6.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	<b>6 - 71</b>
6.7.1	Anadromous Salmon Habitat Issues	6 - 71
6.7.1.1	Impacts of Beaver Dams on Annual Salmon Migration	6 - 71
6.7.1.2	Apparent Low Dissolved Oxygen Levels in Hewitt Lake	6 - 71
6.7.1.3	Impact of Northern Pike Predation on Juvenile Salmon	6 - 71
6.7.1.4	Impacts of Increased Water Temperatures in Susitna River System Lakes	6 - 72
6.7.1.5	Impacts of Increased Development Along Stream Banks	6 - 72
6.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	6 - 72
6.7.2.1	Trinity Lake Sockeye Salmon [AWC 247-41-10200-2053-3205-4053-5066-6012-0010]	6 - 72
6.7.2.2	Susitna River System Sockeye Salmon Production [AWC 247-41-10200]	6 - 72
6.7.2.3	Local Perceptions of Smaller Runs Having Disappeared	6 - 72
6.7.3	Continuation of Existing Anadromous Salmon Projects	6 - 73
6.7.3.1	<b>ADF&amp;G</b> Annual Operation of the Yentna River Sonar Sockeye Salmon Escapement Monitor	6 - 73
6.7.3.2	<b>ADF&amp;G</b> Deception Creek King Salmon Stocking	6 - 73
6.7.3.3	<b>ADF&amp;G</b> Susitna River Sockeye Salmon Mark/Recapture Project for Population Estimate	6 - 73

6.7.3.4	<b>ADF&amp;G</b>	Susitna River Sockeye Salmon Radio Telemetry Project for Spawner Distribution	6 - 73
6.7.3.5	<b>CIAA</b>	Annual Seasonal Modification of Beaver Dam Barriers to Salmon Migration	6 - 73
6.7.3.6	<b>CIAA</b>	Byers Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 73
6.7.3.7	<b>CIAA</b>	Chelatna Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 74
6.7.3.8	<b>CIAA</b>	Shell Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 74
6.7.3.9	<b>CIAA</b>	Stephan Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 74
6.7.3.10	<b>CIAA</b>	Larson Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 74
6.7.3.11	<b>CIAA</b>	Hewitt Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 74
6.7.3.12	<b>CIAA</b>	Judd Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology	6 - 75
6.7.3.13	<b>OTHER</b>	None	6 - 75
6.7.4		Proposed New Anadromous Salmon Projects	6 - 75
6.7.4.1	<b>ADF&amp;G</b>	Beaver Dam Removal in Shell and Trinity Lake Systems	6 - 75
6.7.4.2	<b>CIAA</b>	Conceptual Plan for Lake Louise Sockeye Salmon Stocking	6 - 75
6.7.4.3	<b>OTHER</b>	Other	6 - 75

**CHAPTER 7.0 KNIK ARM UNIT ANALYSIS** 7 - 1

**7.1 OVERVIEW** 7 - 1

**7.2 RELEVANT LAND USE POLICIES** 7 - 1

7.2.1 Alaska Department of Natural Resources 7 - 1

7.2.2 Matanuska-Susitna Borough 7 - 4

**7.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT** 7 - 5

**7.4 SIGNIFICANT STOCKS** 7 - 26

**7.5 WILD STOCK SANCTUARIES / STOCK RESERVES** 7 - 26

7.5.1 King Salmon 7 - 26

7.5.2 Sockeye Salmon 7 - 27

7.5.3 Coho Salmon 7 - 27

7.5.4 Pink Salmon 7 - 27

7.5.5 Chum Salmon 7 - 27

**7.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT** 7 - 28

7.6.1 Projects Identified in the *Phase I Plan 1981 - 2000* 7 - 28

7.6.1.1 Upper Cook Inlet Run Modeling 7 - 28

7.6.1.2 Big Lake Hatchery 7 - 28

7.6.1.3 Anchorage Hatchery Complex - Ft. Richardson and Elmendorf 7 - 28

7.6.1.4 Eklutna Hatchery 7 - 29

7.6.1.5 Finger, Delyndia and Butterfly Lakes 7 - 30

7.6.1.6 Little Susitna River Coho Salmon Enhancement 7 - 30

7.6.1.7 Little Susitna River King Salmon Enhancement 7 - 31

7.6.1.8 Knik Arm Tributaries Coho Salmon Enhancement 7 - 31

7.6.1.9 In-season Effort and Catch Monitoring 7 - 32

7.6.1.10 Upper Cook Inlet Central District Test Fishing 7 - 32

7.6.1.11 Upper Cook Inlet Stock Separation 7 - 32

7.6.1.12 Off-shore Test Fishing 7 - 33

7.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 - 2000* 7 - 33

7.6.2.1 Finger, Delyndia and Butterfly Lakes Coho Salmon Stocking 7 - 33

7.6.2.2 Eagle River King Salmon Stocking 7 - 33

7.6.2.3 Ship Creek King Salmon Stocking 7 - 34

7.6.2.4 Ship Creek Coho Salmon Stocking 7 - 34

7.6.2.5 Nancy Lake Coho Salmon Stocking 7 - 34

7.6.2.6 Moose Creek Fish Habitat and Population Restoration Project 7 - 34

**7.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING** 7 - 34

7.7.1	Anadromous Salmon Habitat Issues		7 - 35
7.7.1.1	Impacts to Aquatic Environment of Big Lake		7 - 35
7.7.1.2	Impacts of Bank Degradation and Migration Barriers in the Eklutna River		7 - 35
7.7.1.3	Impact of Highway Culverts		7 - 35
7.7.1.4	Impacts of Increased Development in River and Lake Riparian Zones		7 - 36
7.7.1.5	Impacts of Increased Boat Traffic on Smaller River Systems		7 - 36
7.7.1.6	Impacts of Dams on Ship Creek		7 - 36
7.7.1.7	Impacts of Anchorage Port Expansion		7 - 36
7.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation		7 - 36
7.7.2.1	Big Lake Sockeye Salmon [AWC 247-50-10330-0010]		7 - 36
7.7.2.2	Cottonwood Creek Sockeye Salmon Production [AWC 247-50-10300]		7 - 37
7.7.3	Continuation of Existing Anadromous Salmon Projects		7 - 37
7.7.3.1	ADF&G	Eklutna Tailrace King Salmon Stocking	7 - 37
7.7.3.2	ADF&G	Ship Creek King Salmon Stocking	7 - 37
7.7.3.3	ADF&G	Eklutna Tailrace Coho Salmon Stocking	7 - 37
7.7.3.4	ADF&G	Ship Creek Coho Salmon Stocking	7 - 37
7.7.3.5	CIAA	Big Lake Sockeye Salmon Stocking and Smolt / Adult Weir Operation	7 - 37
7.7.3.6	CIAA	Maintenance of the Eklutna Salmon Hatchery as a Back-up / Satellite Facility	7 - 37
7.7.3.7	CTVC	Moose Creek Fish Habitat and Population Restoration Project	7 - 38
7.7.3.8	OTHER	None	7 - 38
7.7.4	Proposed New Alaska Department of Fish and Game		7 - 38
7.7.4.1	ENV	Eklutna River Habitat Restoration	7 - 38
7.7.4.2	MSB	Big Lake Habitat Investigation	7 - 38
7.7.4.3	MSB	Construction and/or Improvement of Roads	7 - 38
7.7.4.4	OTHER	None	7 - 38

<b>CHAPTER 8.0 TURNAGAIN ARM UNIT ANALYSIS</b>			8 - 1
<b>8.1</b>	<b>OVERVIEW</b>		8 - 1
<b>8.2</b>	<b>RELEVANT LAND USE POLICIES</b>		8 - 1
8.2.1	Alaska Department of Natural Resources, Division of Parks		8 - 1
8.2.2	United States Forest Service		8 - 1
8.2.3	United States Fish and Wildlife Service		8 - 3
8.2.4	Municipality of Anchorage		8 - 4
8.2.5	Kenai Peninsula Borough		8 - 4
<b>8.3</b>	<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>		8 - 4
<b>8.4</b>	<b>SIGNIFICANT STOCKS</b>		8 - 21
<b>8.5</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>		8 - 21
8.5.1	King Salmon		8 - 21
8.5.2	Sockeye Salmon		8 - 22
8.5.3	Coho Salmon		8 - 22
8.5.4	Pink Salmon		8 - 22
8.5.5	Chum Salmon		8 - 22
<b>8.6</b>	<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>		8 - 22
8.6.1	Projects Identified in the <i>Phase I Plan 1981 - 2000</i>		8 - 22
8.6.1.1	Upper Cook Inlet Run Modeling		8 - 22
8.6.1.2	Sixmile Creek King Salmon and Coho Salmon Study		8 - 23
8.6.1.3	Sixmile Creek King Run Development		8 - 23
8.6.1.4	Portage Ponds Development		8 - 24
8.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 - 2000</i>		8 - 24
8.6.2.1	Campbell Creek Coho Salmon Stocking		8 - 24

8.6.2.2		Bird Creek Coho Salmon Stocking	8 - 25
8.6.2.3		Sixmile Creek Coho Salmon Stocking	8 - 25
8.6.2.4		Resurrection Creek Habitat Rehabilitation	8 - 25
8.6.2.5		Ingram Creek Stocking	8 - 25
<b>8.7</b>		<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	<b>8 - 26</b>
8.7.1		Anadromous Salmon Habitat Issues	8 - 26
8.7.1.1		Impacts of Seward Highway Construction	8 - 26
8.7.2		Apparent Anadromous Salmon Run Anomalies Requiring Investigation	8 - 26
8.7.2.1		Twentymile River Coho Salmon [AWC 247-60-10230]	8 - 26
8.7.3		Continuation of Existing Anadromous Salmon Projects	8 - 26
8.7.3.1	<b>ADF&amp;G</b>	Aerial Stream Surveys	8 - 27
8.7.3.2	<b>ADF&amp;G</b>	Campbell Creek Coho Salmon Stocking	8 - 27
8.7.3.3	<b>ADF&amp;G</b>	Bird Creek Coho Salmon Stocking	8 - 27
8.7.3.4	<b>USFS</b>	Resurrection Creek Habitat Restoration	8 - 27
8.7.3.5	<b>USFS</b>	Resurrection Creek Nutrient Enrichment	8 - 27
8.7.3.6	<b>USFS</b>	Granite Creek Habitat Restoration	8 - 27
8.7.3.7	<b>USFS</b>	Public Education - Invasive Fish Species	8 - 27
8.7.3.8	<b>USFS</b>	Public Outreach and Education	8 - 27
8.7.3.9	<b>OTHER</b>	None	8 - 28
8.7.4		Proposed New Anadromous Salmon Projects	8 - 28
8.7.4.1	<b>ADF&amp;G</b>	Twentymile River Creel Survey	8 - 28
8.7.4.2	<b>USFS</b>	Placer River Gravel Extraction and Habitat Restoration	8 - 28
8.7.4.3	<b>USFS</b>	Portage Creek Enhancement	8 - 28
8.7.4.4	<b>USFS</b>	Ingram Creek Enhancement	8 - 28
8.7.4.5	<b>USFS</b>	Public Education - Invasive Species	8 - 28
8.7.4.6	<b>OTHER</b>	None	8 - 28

**CHAPTER 9.0 UPPER PENINSULA / KENAI RIVER UNIT ANALYSIS** 9 - 1

<b>9.1</b>		<b>OVERVIEW</b>	<b>9 - 1</b>
<b>9.2</b>		<b>RELEVANT LAND USE POLICIES</b>	<b>9 - 3</b>
9.2.1		United States Fish and Wildlife Service	9 - 3
9.2.2		United States Department of Agriculture, Forest Service	9 - 4
9.2.3		Kenai Peninsula Borough	9 - 4
<b>9.3</b>		<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>	<b>9 - 5</b>
<b>9.4</b>		<b>SIGNIFICANT STOCKS</b>	<b>9 - 31</b>
<b>9.5</b>		<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>	<b>9 - 31</b>
9.5.1		King Salmon	9 - 32
9.5.2		Sockeye Salmon	9 - 32
9.5.3		Coho Salmon	9 - 32
9.5.4		Pink Salmon	9 - 32
9.5.5		Chum Salmon	9 - 33
<b>9.6</b>		<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>	<b>9 - 33</b>
9.6.1		Projects Identified in the <i>Phase I Plan 1981 - 2000</i>	9 - 33
9.6.1.1		Spawning Ground Survey	9 - 33
9.6.1.2		Upper Cook Inlet Run Modeling	9 - 33
9.6.1.3		Evaluation of Hatchery Stocked Fry Survival - Kenai Lake	9 - 34
9.6.1.4		Hidden Lake Assessment	9 - 34
9.6.1.5		Quartz Creek Broodstock Evaluation	9 - 35
9.6.1.6		Kenai River Spawning and Rearing Study	9 - 35
9.6.1.7		Genetics of Russian River Sockeye Salmon	9 - 36

9.6.1.8	Trail Lakes Hatchery	9 - 36
9.6.1.9	Ptarmigan Lake	9 - 37
9.6.1.10	Birch Hill Hatchery	9 - 37
9.6.1.11	Early Russian River Sockeye Salmon Enhancement	9 - 38
9.6.1.12	Early Kenai River King Salmon Enhancement	9 - 38
9.6.1.13	Late Kenai River Coho Salmon Enhancement	9 - 38
9.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 - 2000</i>	9 - 39
9.6.2.1	Quartz Creek Sockeye Salmon Stocking	9 - 39
9.6.2.2	Quartz Creek Coho Salmon Stocking	9 - 39
9.6.2.3	Tern Lake Coho Salmon Stocking	9 - 39
9.6.2.4	Grant Lake Coho Salmon Stocking	9 - 39
9.6.2.5	Daves Creek King Salmon Spawning Pools	9 - 40
9.6.2.6	Daniels Lake Flow Control Structure	9 - 40
9.6.2.7	Cooperative Daniels Lake Habitat Project	9 - 40
9.6.2.8	Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems	9 - 40
9.6.2.9	Russian River Bank Stabilization	9 - 40
<b>9.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	<b>9 - 40</b>
9.7.1	Anadromous Salmon Habitat Issues	9 - 41
9.7.1.1	River Bank Degradation on the Kenai River	9 - 41
9.7.1.2	Hydrocarbon Levels in the Kenai River and Uplands	9 - 41
9.7.1.3	Impacts of ATV Use in All Areas	9 - 41
9.7.1.4	Impacts of Migration Barriers Such as Culverts	9 - 41
9.7.1.5	Impacts of Invasive Plants	9 - 41
9.7.1.6	Impacts of Increasing Water Temperatures	9 - 41
9.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	9 - 42
9.7.2.1	Skilak Lake Sockeye Salmon	9 - 42
9.7.2.2	Bishop Creek Sockeye Salmon	9 - 42
9.7.3	Continuation of Existing Anadromous Salmon Projects	9 - 42
9.7.3.1	<b>ADF&amp;G</b> Moose River Coho Salmon Smolt Weir	9 - 42
9.7.3.2	<b>ADF&amp;G</b> Kenai River Coho Fishwheel Index	9 - 42
9.7.3.3	<b>ADF&amp;G</b> Northern Pike Predator Control	9 - 43
9.7.3.4	<b>ADF&amp;G</b> Russian River Sockeye Salmon Weir	9 - 43
9.7.3.5	<b>ADF&amp;G</b> Kenai River King Salmon Genetic Stock Identification	9 - 43
9.7.3.6	<b>ADF&amp;G</b> Kenai River Sockeye Salmon Population Estimate	9 - 43
9.7.3.7	<b>ADF&amp;G</b> Late Russian River Sockeye Salmon Genetic Stock Identification	9 - 43
9.7.3.8	<b>ADF&amp;G</b> Kenai River King Salmon Sonar	9 - 44
9.7.3.9	<b>ADF&amp;G</b> Kenai River King Salmon Creel Survey	9 - 44
9.7.3.10	<b>ADF&amp;G</b> Kenai River King Salmon Sampling	9 - 44
9.7.3.11	<b>ADF&amp;G</b> Stocked Lakes Evaluation	9 - 44
9.7.3.12	<b>ADF&amp;G</b> Kenai River Sockeye Salmon Sonar	9 - 44
9.7.3.13	<b>CIAA</b> Daniels Lake Flow Control Structure	9 - 44
9.7.3.14	<b>CIAA</b> Hidden Lake Sockeye Salmon Stocking	9 - 45
9.7.3.15	<b>USFS</b> Russian River Bank Stabilization	9 - 45
9.7.3.16	<b>USFS</b> Public Education - Invasive Fish Species	9 - 45
9.7.3.17	<b>USFS</b> Public Outreach and Education	9 - 45
9.7.3.18	<b>OTHER</b> None	9 - 45
9.7.4	Proposed New Anadromous Salmon Projects	9 - 45
9.7.4.1	<b>ADF&amp;G</b> Kenai River King Salmon Population Estimate	9 - 45
9.7.4.2	<b>ADF&amp;G</b> Stormy Lake Northern Pike Barrier	9 - 45

9.7.4.3	ADF&G	West Fork Moose River Northern Pike Survey	9 - 46
9.7.4.4	ADF&G	Kenai River Bank Erosion Assessment	9 - 46
9.7.4.5	ADF&G	Slikok Creek Culvert Assessment	9 - 46
9.7.4.6	USFWS	Funny River King Salmon Weir	9 - 46
9.7.4.7	USFS	Cooper Creek Habitat Restoration	9 - 47
9.7.4.8	USFS	Tern Lake Culvert Replacement	9 - 47
9.7.4.9	USFS	Dave's Creek Habitat Restoration	9 - 47
9.7.4.10	USFS	Quartz Creek Bank Stabilization	9 - 47
9.7.4.11	USFS	Public Education - Invasive Species	9 - 47
9.7.4.12	OTHER	None	9 - 47

**CHAPTER 10.0 KASILOF RIVER / MID- PENINSULA UNIT ANALYSIS** 10 - 1

**10.1 OVERVIEW** 10 - 1

**10.2 RELEVANT LAND USE POLICIES** 10 - 1

10.2.1 United States Fish and Wildlife Service 10 - 1

10.2.2 Alaska Department of Natural Resources 10 - 4

10.2.3 Kenai Peninsula Borough 10 - 4

**10.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT** 10 - 4

**10.4 SIGNIFICANT STOCKS** 10 - 21

**10.5 WILD STOCK SANCTUARIES / STOCK RESERVES** 10 - 21

10.5.1 King Salmon 10 - 21

10.5.2 Sockeye Salmon 10 - 22

10.5.3 Coho Salmon 10 - 22

10.5.4 Pink Salmon 10 - 22

10.5.5 Chum Salmon 10 - 22

**10.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT** 10 - 22

10.6.1 Projects Identified in the *Phase I Plan 1981 - 2000* 10 - 22

10.6.1.1 Spawning Ground Survey 10 - 23

10.6.1.2 Upper Cook Inlet Run Modeling 10 - 23

10.6.1.3 Crooked Creek King Salmon Enhancement 10 - 24

10.6.1.4 Evaluation of Responses to Sockeye Fry Stocking in a Lake with Naturally Reproducing Sockeye Stocks - Tustumena Lake 10 - 24

10.6.1.5 Anchor River King Salmon Study 10 - 25

10.6.1.6 Kasilof Hatchery 10 - 25

10.6.1.7 Kasilof Hatchery Evaluation 10 - 26

10.6.1.8 Ninilchik Native Association Hatchery 10 - 27

10.6.1.9 Escapement Monitoring 10 - 27

10.6.1.10 In-season Effort and Catch Monitoring 10 - 27

10.6.1.11 Upper Cook Inlet Central District Test Fishing 10 - 28

10.6.1.12 Upper Cook Inlet Stock Separation 10 - 28

10.6.1.13 Offshore Test Fishing 10 - 29

10.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 - 2000* 10 - 29

10.6.2.1 Crooked Creek King Salmon Stocking 10 - 29

10.6.2.2 Crooked Creek Coho Salmon Stocking 10 - 29

10.6.2.3 Ninilchik River King Salmon Stocking 10 - 29

10.6.2.4 Coal Creek Sockeye Salmon Smolt Release 10 - 30

10.6.2.5 Twin Falls King Salmon Smolt Release 10 - 30

10.6.2.6 Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems 10 - 30

10.6.2.7 Evaluation of Landscape Setting on First-order Stream Support of Juvenile Coho Salmon in the Kenai Lowlands 10 - 30



<b>10.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	10 - 31
10.7.1	Anadromous Salmon Habitat Issues	10 - 31
10.7.1.1	Storm Damage to Tustumena Lake Tributaries	10 - 31
10.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	10 - 31
10.7.3	Continuation of Existing Anadromous Salmon Projects	10 - 31
10.7.3.1	<b>ADF&amp;G</b> Operation of Kasilof River Sonar for Escapement Enumeration	10 - 31
10.7.3.2	<b>CIAA</b> Enumeration of Tustumena Lake Sockeye Salmon Smolt Migrations	10 - 31
10.7.3.3	<b>KWF</b> Ranking of Culverts with Negative Impacts	10 - 31
10.7.3.4	<b>OTHER</b> None	10 - 32
10.7.4	Proposed New Anadromous Salmon Projects	10 - 32
10.7.4.1	<b>OTHER</b> None	10 - 32

**CHAPTER 11.0 KACHEMAK BAY UNIT ANALYSIS** 11 - 1

<b>11.1</b>	<b>OVERVIEW</b>	11 - 1
<b>11.2</b>	<b>RELEVANT LAND USE POLICIES</b>	11 - 1
11.2.1	United States Fish and Wildlife Service	11 - 1
11.2.2	Alaska Department of Natural Resources	11 - 4
11.2.3	Kenai Peninsula Borough	11 - 4
<b>11.3</b>	<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>	11 - 4
<b>11.4</b>	<b>SIGNIFICANT STOCKS</b>	11 - 21
<b>11.5</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>	11 - 21
11.5.1	King Salmon	11 - 21
11.5.2	Sockeye Salmon	11 - 22
11.5.3	Coho Salmon	11 - 22
11.5.4	Pink Salmon	11 - 22
11.5.5	Chum Salmon	11 - 22
<b>11.6</b>	<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>	11 - 22
11.6.1	Projects Identified in the <i>Phase I Plan 1981 - 2000</i>	11 - 22
11.6.1.1	Homer Area Salmon Smolt Stocking Program	11 - 22
11.6.1.2	Tutka Hatchery Evaluation	11 - 23
11.6.1.3	Halibut Cove Lagoon Saltwater Rearing Evaluation	11 - 25
11.6.1.4	Tutka Hatchery	11 - 25
11.6.1.5	English Bay Lakes Hatchery	11 - 26
11.6.1.6	Leisure Lake Fishpass	11 - 27
11.6.1.7	Bradley Lake Hatchery	11 - 27
11.6.1.8	Humpy Creek Weir	11 - 28
11.6.1.9	Kachemak Bay Salmon and Shellfish Subsistence Catch Monitoring	11 - 28
11.6.1.10	English Bay-Port Graham Monitoring	11 - 29
11.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 -2000</i>	11 - 29
11.6.2.1	Leisure Lake Sockeye Salmon Stocking	11 - 30
11.6.2.2	Hazel Lake Sockeye Salmon Stocking	11 - 30
11.6.2.3	Caribou Lake Coho Salmon Stocking	11 - 30
11.6.2.4	Nick Dudiak Fishing Lagoon Early-run King Salmon Stocking	11 - 30
11.6.2.5	Nick Dudiak Fishing Lagoon Late-run King Salmon Stocking	11 - 30
11.6.2.6	Tutka Bay Lagoon Sockeye Salmon Stocking	11 - 30
11.6.2.7	Port Graham Hatchery	11 - 31
11.6.2.8	Seldovia Lake Coho Salmon Stocking	11 - 31
11.6.2.9	Seldovia Bay Coho Salmon Stocking	11 - 32
11.6.2.10	Seldovia Bay King Salmon Stocking	11 - 32
11.6.2.11	Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems	11 - 32

<b>11.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	11 - 32
11.7.1	Anadromous Salmon Habitat Issues	11 - 32
11.7.1.1	Impacts of Past Logging in the Port Graham / English Bay Area	11 - 32
11.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	11 - 32
11.7.2.1	English Bay Lakes Sockeye Salmon	11 - 33
11.7.2.2	Fox River Coho Salmon	11 - 33
11.7.3	Continuation of Existing Anadromous Salmon Projects	11 - 33
11.7.3.1	<b>ADF&amp;G</b> Aerial and Ground Surveys to Monitor Salmon Systems with Escapement Goals	11 - 33
11.7.3.2	<b>ADF&amp;G</b> Nick Dudiak Fishing Lagoon Early-run Coho Salmon Stocking	11 - 33
11.7.3.3	<b>ADF&amp;G</b> Halibut Cove Lagoon King Salmon Stocking	11 - 33
11.7.3.4	<b>ADF&amp;G</b> Nick Dudiak Fishing Lagoon King Salmon Stocking	11 - 33
11.7.3.5	<b>ADF&amp;G</b> Seldovia Slough King Salmon Stocking	11 - 33
11.7.3.6	<b>CIAA</b> Nick Dudiak Fishing Lagoon Coho Salmon Stocking	11 - 33
11.7.3.7	<b>CIAA</b> Tutka Lagoon Sockeye Salmon Remote Release	11 - 34
11.7.3.8	<b>CIAA</b> Leisure Lake Sockeye Salmon Stocking and Lake Fertilization	11 - 34
11.7.3.9	<b>CIAA</b> Hazel Lake Sockeye Salmon Stocking	11 - 34
11.7.3.10	<b>CIAA</b> Seldovia Slough Coho Salmon Stocking	11 - 34
11.7.3.11	<b>NSEP</b> Nanwalek Salmon Enhancement Project (NSEP) Sockeye Salmon Smolt / Adult Weir Operation in English Bay River and English Bay Lakes	11 - 34
11.7.3.12	<b>PGHC</b> Port Graham Hatchery Sockeye Salmon Stocking	11 - 34
11.7.3.13	<b>KWF</b> Kenai Watershed Forum Habitat Survey	11 - 34
11.7.3.14	<b>OTHER</b> None	11 - 35
11.7.4	Proposed New Anadromous Salmon Projects	11 - 35
11.7.4.1	<b>OTHER</b> None	11 - 35

**CHAPTER 12.0 GULF COAST UNIT ANALYSIS** 12 - 1

<b>12.1</b>	<b>OVERVIEW</b>	12 - 1
<b>12.2</b>	<b>RELEVANT LAND USE POLICIES</b>	12 - 1
12.2.1	National Park Service	12 - 1
12.2.2	Alaska Department of Natural Resources	12 - 1
12.2.3	Kenai Peninsula Borough	12 - 3
12.2.4	Port Graham Corporation	12 - 3
<b>12.3</b>	<b>THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT</b>	12 - 3
<b>12.4</b>	<b>SIGNIFICANT STOCKS</b>	12 - 40
<b>12.5</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>	12 - 40
12.5.1	King Salmon	12 - 41
12.5.2	Sockeye Salmon	12 - 41
12.5.3	Coho Salmon	12 - 41
12.5.4	Pink Salmon	12 - 41
12.5.5	Chum Salmon	12 - 41
<b>12.6</b>	<b>HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT</b>	12 - 42
12.6.1	Projects Identified in the <i>Phase I Plan 1981 - 2000</i>	12 - 42
12.6.1.1	Scurvy Creek	12 - 42
12.6.1.2	Delight and Desire Lakes Fertilization and Stocking	12 - 42
12.6.1.3	Island Creek Clearance	12 - 43
12.6.1.4	Koyuktolik (Dogfish) Bay Creek Clearance	12 - 43
12.6.1.5	Windy Right Creek Clearance	12 - 43
12.6.1.6	Anderson Beach Clearance	12 - 44

12.6.1.7	Bull Dog Cove Clearance	12 - 44
12.6.1.8	Porcupine Cove Clearance	12 - 44
12.6.1.9	Two Arm Bay Clearance	12 - 45
12.6.1.10	Nuka Island Clearance	12 - 45
12.6.1.11	Port Dick (Middle) Creek Clearance	12 - 45
12.6.1.12	Gore Point Lake Clearance	12 - 46
12.6.1.13	Rocky River Clearance	12 - 46
12.6.1.14	Delight Lake Hatchery	12 - 46
12.6.1.15	Nuka Bay Hatchery	12 - 47
12.6.1.16	Port Dick Lake Development	12 - 47
12.6.1.17	Port Chatham Fish Pass	12 - 47
12.6.2	Projects Identified and Implemented After Publication of the <i>Phase I Plan 1981 -2000</i>	12 - 48
12.6.2.1	Windy Left Creek Rearing Ponds	12 - 48
12.6.2.2	Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems	12 - 48
<b>12.7</b>	<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	<b>12 - 48</b>
12.7.1	Anadromous Salmon Habitat Issues	12 - 48
12.7.1.1	Impacts of Past Logging on Numerous Streams Draining to the Gulf Coast	12 - 48
12.7.2	Apparent Anadromous Salmon Run Anomalies Requiring Investigation	12 - 48
12.7.2.1	Rocky River Coho Salmon	12 - 49
12.7.3	Continuation of Existing Anadromous Salmon Projects	12 - 49
12.7.3.1	<b>ADF&amp;G</b> Aerial and Ground Surveys to Monitor Salmon Systems with Escapement Goals	12 - 49
12.7.3.2	<b>OTHER</b> None	12 - 49
12.7.4	Proposed New Anadromous Salmon Projects	12 - 49
12.7.4.1	<b>OTHER</b> None	12 - 49

**CHAPTER 13.0 GREATER RESURRECTION BAY UNIT ANALYSIS** 13 - 1

**13.1 OVERVIEW** 13 - 1

**13.2 RELEVANT LAND USE POLICIES** 13 - 1

13.2.1 National Park Service 13 - 1

13.2.2 United States Forest service 13 - 1

13.2.3 Alaska Department of Natural Resources 13 - 3

13.2.4 Kenai Peninsula Borough 13 - 3

**13.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT** 13 - 3

**13.4 SIGNIFICANT STOCKS** 13 - 25

**13.5 WILD STOCK SANCTUARIES / STOCK RESERVES** 13 - 25

13.5.1 King Salmon 13 - 25

13.5.2 Sockeye Salmon 13 - 25

13.5.3 Coho Salmon 13 - 26

13.5.4 Pink Salmon 13 - 26

13.5.5 Chum Salmon 13 - 26

**13.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT** 13 - 26

13.6.1 Projects Identified in the *Phase I Plan 1981 - 2000* 13 - 26

13.6.1.1 Resurrection Bay Rearing Ponds 13 - 26

13.6.1.2 Resurrection Bay Odd-Year Pink/Chum Development 13 - 27

13.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 -2000* 13 - 27

13.6.2.1 Bear Lake Coho Salmon Stocking 13 - 27

13.6.2.2 Bear Lake Sockeye Salmon Stocking 13 - 27

13.6.2.3 Seward Lagoon Coho Salmon Stocking 13 - 27

13.6.2.4 Seward Lagoon King Salmon Stocking 13 - 28

13.6.2.5 Box Canyon Creek King Salmon Stocking 13 - 28

13.6.2.6		Box Canyon Creek Coho Salmon Stocking	13 - 28
13.6.2.7		Institute of Marine Science Coho Salmon Stocking	13 - 28
13.6.2.8		Lowell Creek King Salmon Stocking	13 - 28
13.6.2.9		Lowell Creek Coho Salmon Stocking	13 - 28
13.6.2.10		Grouse Lake Coho Salmon Stocking	13 - 28
13.6.2.11		Grouse Lake Sockeye Salmon Stocking	13 - 28
13.6.2.12		Thumb Cove King Salmon Stocking	13 - 29
13.6.2.13		Jap Creek Chum Salmon Stocking	13 - 29
13.6.2.14		Spring Creek Chum Salmon Stocking	13 - 29
13.6.2.15		Spring Creek King Salmon Stocking	13 - 29
<b>13.7</b>		<b>ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING</b>	<b>13 - 29</b>
13.7.1		Anadromous Salmon Habitat Issues	13 - 29
13.7.1.1		Impacts of Unpermitted Development Activities on Salmon Habitat	13 - 29
13.7.1.2		Resurrection River Delta Flooding	13 - 29
13.7.1.3		Loss of Seward-area Coho Salmon Habitat	13 - 30
13.7.2		Apparent Anadromous Salmon Run Anomalies Requiring Investigation	13 - 30
13.7.3		Continuation of Existing Anadromous Salmon Projects	13 - 30
13.7.3.1	<b>ADF&amp;G</b>	Aerial and Ground Surveys to Monitor Salmon Systems with Escapement Goals	13 - 30
13.7.3.2	<b>ADF&amp;G</b>	Lowell Creek King Salmon Stocking	13 - 30
13.7.3.3	<b>ADF&amp;G</b>	Lowell Creek Coho Salmon Stocking	13 - 30
13.7.3.4	<b>ADF&amp;G</b>	Seward Lagoon King Salmon Stocking	13 - 30
13.7.3.5	<b>ADF&amp;G</b>	Seward Lagoon Coho Salmon Stocking	13 - 30
13.7.3.6	<b>CIAA</b>	Bear Lake Coho Salmon Stocking	13 - 31
13.7.3.7	<b>CIAA</b>	Bear Lake Sockeye Salmon Stocking	13 - 31
13.7.3.8	<b>USFS</b>	Public Education - Invasive Fish Species	13 - 31
13.7.3.9	<b>USFS</b>	Public Outreach and Education	13 - 31
13.7.3.10	<b>ASLC</b>	Bear Lake Sediment Analysis	13 - 31
13.7.3.11	<b>OTHER</b>	None	13 - 31
13.7.4		Proposed New Anadromous Salmon Projects	13 - 31
13.7.4.1	<b>ADF&amp;G</b>	Resurrection River Coho Salmon Enumeration	13 - 31
13.7.4.2	<b>ADF&amp;G</b>	Aialik Lake Sockeye Salmon Video Enumeration	13 - 31
13.7.4.3	<b>CIAA</b>	Sockeye and/or Coho Salmon Rearing Ponds and/or Net Pens in Resurrection Bay	13 - 31
13.7.4.4	<b>USFS</b>	Public Education - Invasive Species	13 - 32
13.7.4.5	<b>COS</b>	City of Seward: Habitat Work by Enhancement Committee	13 - 32
13.7.4.6	<b>ASLC</b>	Alaska Sealife Center: King Salmon Project	13 - 32
13.7.4.7	<b>ASLC</b>	Alaska Sealife Center: Bear Lake Acoustical Monitoring	13 - 32
13.7.4.8	<b>OTHER</b>	None	13 - 32
<b>CHAPTER 14.0 PHASE II PLAN 2006 - 2025 SUMMARY</b>			<b>14 - 1</b>
<b>14.1</b>	<b>OVERVIEW</b>		<b>14 - 1</b>
<b>14.2</b>	<b>SIGNIFICANT SALMON STOCKS</b>		<b>14 - 1</b>
<b>14.3</b>	<b>WILD STOCK SANCTUARIES / STOCK RESERVES</b>		<b>14 - 11</b>
<b>14.4</b>	<b>RUNS TO BE EVALUATED</b>		<b>14 - 13</b>
<b>14.5</b>	<b>HABITAT ISSUES</b>		<b>14 - 13</b>
<b>14.6</b>	<b>INACTIVE SALMON PROJECTS</b>		<b>14 - 15</b>
<b>14.7</b>	<b>ACTIVE SALMON PROJECTS</b>		<b>14 - 20</b>
<b>14.8</b>	<b>PROPOSED SALMON PROJECTS</b>		<b>14 - 24</b>

<b>LIST OF EXHIBITS</b>		
-------------------------	--	--

<i>Exhibit</i>		<i>Page</i>
<b>EXHIBIT 1-1</b>	<b>HATCHERY OPERATION AND PRODUCTION</b>	1 - 5
<b>EXHIBIT 1-2</b>	<b>OPERATIONAL HISTORY OF COOK INLET HATCHERIES</b>	1 - 6
<b>EXHIBIT 2-1</b>	<b>RESEARCH / EVALUATION STRATEGY PROJECTS</b>	2 - 2
<b>EXHIBIT 2-2</b>	<b>REHABILITATION / ENHANCEMENT STRATEGY PROJECTS</b>	2 - 4
<b>EXHIBIT 2-3</b>	<b>DISTRIBUTION / ACCESS STRATEGY PROJECTS</b>	2 - 5
<b>EXHIBIT 2-4</b>	<b>HARVEST MANAGEMENT STRATEGY PROJECTS</b>	2 - 7
<b>EXHIBIT 3-1</b>	<b>TEN UNITS DESIGNATED FOR ANALYSIS</b>	3 - 2
<b>EXHIBIT 3-2</b>	<b>REHABILITATION AND ENHANCEMENT MATRIX</b>	3 - 7
<b>EXHIBIT 3-3</b>	<b>PROJECT REVIEW CHECKLIST</b>	3 - 19
<b>EXHIBIT 4-1</b>	<b>KAMISHAK BAY UNIT MAP</b>	4 - 2
<b>EXHIBIT 4-2A</b>	<b>KAMISHAK BAY UNIT KING SALMON</b>	4 - 6
<b>EXHIBIT 4-2B</b>	<b>KAMISHAK BAY UNIT SOCKEYE SALMON</b>	4 - 8
<b>EXHIBIT 4-2C</b>	<b>KAMISHAK BAY UNIT COHO SALMON</b>	4 - 10
<b>EXHIBIT 4-2D</b>	<b>KAMISHAK BAY UNIT PINK SALMON</b>	4 - 12
<b>EXHIBIT 4-2E</b>	<b>KAMISHAK BAY UNIT CHUM SALMON</b>	4 - 14
<b>EXHIBIT 4-3</b>	<b>SIGNIFICANT STOCKS</b>	4 - 16
<b>EXHIBIT 5-1</b>	<b>WESTSIDE UNIT MAP</b>	5 - 2
<b>EXHIBIT 5-2A</b>	<b>WESTSIDE UNIT KING SALMON</b>	5 - 7
<b>EXHIBIT 5-2B</b>	<b>WESTSIDE UNIT SOCKEYE SALMON</b>	5 - 14
<b>EXHIBIT 5-2C</b>	<b>WESTSIDE UNIT COHO SALMON</b>	5 - 21
<b>EXHIBIT 5-2D</b>	<b>WESTSIDE UNIT PINK SALMON</b>	5 - 28
<b>EXHIBIT 5-2E</b>	<b>WESTSIDE UNIT CHUM SALMON</b>	5 - 35
<b>EXHIBIT 5-3</b>	<b>SIGNIFICANT STOCKS</b>	5 - 42
<b>EXHIBIT 6-1</b>	<b>SUSITNA RIVER UNIT MAP</b>	6 - 2
<b>EXHIBIT 6-2A</b>	<b>SUSITNA RIVER UNIT KING SALMON</b>	6 - 7
<b>EXHIBIT 6-2B</b>	<b>SUSITNA RIVER UNIT SOCKEYE SALMON</b>	6 - 17
<b>EXHIBIT 6-2C</b>	<b>SUSITNA RIVER UNIT COHO SALMON</b>	6 - 27
<b>EXHIBIT 6-2D</b>	<b>SUSITNA RIVER UNIT PINK SALMON</b>	6 - 37
<b>EXHIBIT 6-2E</b>	<b>SUSITNA RIVER UNIT CHUM SALMON</b>	6 - 47
<b>EXHIBIT 6-3</b>	<b>SIGNIFICANT STOCKS</b>	6 - 57
<b>EXHIBIT 7-1</b>	<b>KNIK ARM UNIT MAP</b>	7 - 2
<b>EXHIBIT 7-2A</b>	<b>KNIK ARM UNIT KING SALMON</b>	7 - 6
<b>EXHIBIT 7-2B</b>	<b>KNIK ARM UNIT SOCKEYE SALMON</b>	7 - 10
<b>EXHIBIT 7-2C</b>	<b>KNIK ARM UNIT COHO SALMON</b>	7 - 14
<b>EXHIBIT 7-2D</b>	<b>KNIK ARM UNIT PINK SALMON</b>	7 - 18
<b>EXHIBIT 7-2E</b>	<b>KNIK ARM UNIT CHUM SALMON</b>	7 - 22
<b>EXHIBIT 7-3</b>	<b>SIGNIFICANT STOCKS</b>	7 - 26
<b>EXHIBIT 8-1</b>	<b>TURNAGAIN ARM UNIT MAP</b>	8 - 2
<b>EXHIBIT 8-2A</b>	<b>TURNAGAIN ARM UNIT KING SALMON</b>	8 - 6
<b>EXHIBIT 8-2B</b>	<b>TURNAGAIN ARM UNIT SOCKEYE SALMON</b>	8 - 9
<b>EXHIBIT 8-2C</b>	<b>TURNAGAIN ARM UNIT COHO SALMON</b>	8 - 12
<b>EXHIBIT 8-2D</b>	<b>TURNAGAIN ARM UNIT PINK SALMON</b>	8 - 15
<b>EXHIBIT 8-2E</b>	<b>TURNAGAIN ARM UNIT CHUM SALMON</b>	8 - 18
<b>EXHIBIT 8-3</b>	<b>SIGNIFICANT STOCKS</b>	8 - 21

<b>EXHIBIT 9-1</b>	<b>UPPER PENINSULA / KENAI RIVER UNIT MAP</b>	<b>9 - 2</b>
<b>EXHIBIT 9-2A</b>	<b>UPPER PENINSULA / KENAI RIVER UNIT KING SALMON</b>	<b>9 - 6</b>
<b>EXHIBIT 9-2B</b>	<b>UPPER PENINSULA / KENAI RIVER UNIT SOCKEYE SALMON</b>	<b>9 - 11</b>
<b>EXHIBIT 9-2C</b>	<b>UPPER PENINSULA / KENAI RIVER UNIT COHO SALMON</b>	<b>9 - 16</b>
<b>EXHIBIT 9-2D</b>	<b>UPPER PENINSULA / KENAI RIVER UNIT PINK SALMON</b>	<b>9 - 21</b>
<b>EXHIBIT 9-2E</b>	<b>UPPER PENINSULA / KENAI RIVER UNIT CHUM SALMON</b>	<b>9 - 26</b>
<b>EXHIBIT 9-3</b>	<b>SIGNIFICANT STOCKS</b>	<b>9 - 31</b>
<b>EXHIBIT 10-1</b>	<b>KASILOF RIVER / MID-PENINSULA UNIT MAP</b>	<b>10 - 2</b>
<b>EXHIBIT 10-2A</b>	<b>KASILOF RIVER / MID-PENINSULA UNIT KING SALMON</b>	<b>10 - 6</b>
<b>EXHIBIT 10-2B</b>	<b>KASILOF RIVER / MID-PENINSULA UNIT SOCKEYE SALMON</b>	<b>10 - 9</b>
<b>EXHIBIT 10-2C</b>	<b>KASILOF RIVER / MID-PENINSULA UNIT COHO SALMON</b>	<b>10 - 12</b>
<b>EXHIBIT 10-2D</b>	<b>KASILOF RIVER / MID-PENINSULA UNIT PINK SALMON</b>	<b>10 - 15</b>
<b>EXHIBIT 10-2E</b>	<b>KASILOF RIVER / MID-PENINSULA UNIT CHUM SALMON</b>	<b>10 - 18</b>
<b>EXHIBIT 10-3</b>	<b>SIGNIFICANT STOCKS</b>	<b>10 - 21</b>
<b>EXHIBIT 11-1</b>	<b>KACHEMAK BAY UNIT MAP</b>	<b>11 - 2</b>
<b>EXHIBIT 11-2A</b>	<b>KACHEMAK BAY UNIT KING SALMON</b>	<b>11 - 6</b>
<b>EXHIBIT 11-2B</b>	<b>KACHEMAK BAY UNIT SOCKEYE SALMON</b>	<b>11 - 9</b>
<b>EXHIBIT 11-2C</b>	<b>KACHEMAK BAY UNIT COHO SALMON</b>	<b>11 - 12</b>
<b>EXHIBIT 11-2D</b>	<b>KACHEMAK BAY UNIT PINK SALMON</b>	<b>11 - 15</b>
<b>EXHIBIT 11-2E</b>	<b>KACHEMAK BAY UNIT CHUM SALMON</b>	<b>11 - 18</b>
<b>EXHIBIT 11-3</b>	<b>SIGNIFICANT STOCKS</b>	<b>11 - 21</b>
<b>EXHIBIT 12-1</b>	<b>GULF COAST UNIT MAP</b>	<b>12 - 2</b>
<b>EXHIBIT 12-2A</b>	<b>GULF COAST UNIT KING SALMON</b>	<b>12 - 5</b>
<b>EXHIBIT 12-2B</b>	<b>GULF COAST UNIT SOCKEYE SALMON</b>	<b>12 - 12</b>
<b>EXHIBIT 12-2C</b>	<b>GULF COAST UNIT COHO SALMON</b>	<b>12 - 19</b>
<b>EXHIBIT 12-2D</b>	<b>GULF COAST UNIT PINK SALMON</b>	<b>12 - 26</b>
<b>EXHIBIT 12-2E</b>	<b>GULF COAST UNIT CHUM SALMON</b>	<b>12 - 33</b>
<b>EXHIBIT 12-3</b>	<b>SIGNIFICANT STOCKS</b>	<b>12 - 40</b>
<b>EXHIBIT 13-1</b>	<b>GREATER RESURRECTION BAY UNIT MAP</b>	<b>13 - 2</b>
<b>EXHIBIT 13-2A</b>	<b>GREATER RESURRECTION BAY UNIT KING SALMON</b>	<b>13 - 5</b>
<b>EXHIBIT 13-2B</b>	<b>GREATER RESURRECTION BAY UNIT SOCKEYE SALMON</b>	<b>13 - 9</b>
<b>EXHIBIT 13-2C</b>	<b>GREATER RESURRECTION BAY UNIT COHO SALMON</b>	<b>13 - 13</b>
<b>EXHIBIT 13-2D</b>	<b>GREATER RESURRECTION BAY UNIT PINK SALMON</b>	<b>13 - 17</b>
<b>EXHIBIT 13-2E</b>	<b>GREATER RESURRECTION BAY UNIT CHUM SALMON</b>	<b>13 - 21</b>
<b>EXHIBIT 13-3</b>	<b>SIGNIFICANT STOCKS</b>	<b>13 - 25</b>
<b>EXHIBIT 14-1</b>	<b>SIGNIFICANT KING SALMON STOCKS</b>	<b>14 - 2</b>
<b>EXHIBIT 14-2</b>	<b>SIGNIFICANT SOCKEYE SALMON STOCKS</b>	<b>14 - 4</b>
<b>EXHIBIT 14-3</b>	<b>SIGNIFICANT COHO SALMON STOCKS</b>	<b>14 - 6</b>
<b>EXHIBIT 14-4</b>	<b>SIGNIFICANT PINK SALMON STOCKS</b>	<b>14 - 8</b>
<b>EXHIBIT 14-5</b>	<b>SIGNIFICANT CHUM SALMON STOCKS</b>	<b>14 - 10</b>
<b>EXHIBIT 14-6</b>	<b>WILD STOCK SANCTUARY / STOCK RESERVE DESIGNATION SUMMARY</b>	<b>14 - 12</b>
<b>EXHIBIT 14-7</b>	<b>SALMON RUNS TO BE EVALUATED</b>	<b>14 - 13</b>
<b>EXHIBIT 14-8</b>	<b>HABITAT ISSUES</b>	<b>14 - 14</b>
<b>EXHIBIT 14-9</b>	<b>INACTIVE SALMON PROJECTS</b>	<b>14 - 16</b>
<b>EXHIBIT 14-10</b>	<b>ACTIVE SALMON PROJECTS</b>	<b>14 - 21</b>
<b>EXHIBIT 14-11</b>	<b>PROPOSED SALMON PROJECTS</b>	<b>14 - 25</b>

## CHAPTER 1.0

### INTRODUCTION TO THE PHASE II PLAN 2006 – 2025 PLANNING PROCESS

#### 1.1 INTRODUCTION TO THE MANDATED PLANNING STRUCTURE

##### 1.1.1 Overview

To understand this planning process several steps are necessary. There must be awareness of the legislative process that brought such planning into existence and who the designated participants are. The planning should be an ongoing process, and so it becomes necessary to understand the changes that have taken place since the Phase I Plan 1981 - 2000 was published. Finally there must be an understanding of the overall structure of this effort and its relationship to what has happened before.

##### 1.1.2 Legislative Background

There has been recognition of the value of the salmon resource by the people for centuries and officially by the State since statehood in 1959. The recognition granted in the constitution was reinforced by the creation of the Department of Fish and Game and its Divisions of Sport Fish and Commercial Fisheries. Still further recognition came with the legislative creation of the Division of Fisheries Rehabilitation, Enhancement and Development (FRED). It was part of the responsibility of this new division “to develop and continually maintain a comprehensive, coordinated long-range plan for the orderly present and long-range rehabilitation ... of all aspects of the state’s fishery.”

In 1976 and 1977 the legislature acted to (1) authorize the designation of regions for the purpose of enhancing salmon production, (2) provide for the establishment of regional associations, and (3) create and amend comprehensive regional salmon enhancement plans through the use of regional planning teams made up of Alaska Department of Fish and Game personnel and representatives of the regional associations.

The Phase I Plan 1981 - 2000 for the Cook Inlet region – the coastal areas and freshwater drainages from Cape Fairfield on the east to Cape Douglas on the west - covered the period 1981 through 2000. The updating of that plan achieved by this Phase II document is consistent with the legislative charge to “continually maintain a comprehensive, coordinated long-range plan”.

Preceding the identification of a need for the Phase I Plan 1981 - 2000 there was public support and considerable private enthusiasm for the concept of supplemental production.

The public support was evidenced by the legislature in 1971 when it authorized the creation of a separate division within the Department of Fish and Game that was identified as the Division of Fisheries Rehabilitation, Enhancement and Development, FRED.

Between 1974 and 1980 Alaska voters overwhelmingly passed general obligation bonds totaling \$63.4 million to fund construction and operation of FRED supplemental production facilities.

In 1974 the legislature created the Private Non-Profit (PNP) hatchery program providing the means for fishing groups and regional aquaculture associations to directly participate in salmon rehabilitation and enhancement.

These efforts led to the following concrete actions in the Cook Inlet region.

A PNP organization called the Cook Inlet Aquaculture Association (CIAA) was formed in 1976.

The Cook Inlet Regional Planning Team (CIRPT) was formed and prepared the Cook Inlet Regional Salmon Enhancement Plan 1981 – 2000 (the Phase I Plan 1981 - 2000) that was approved by the Commissioner of the Alaska Department of Fish and Game in 1982.

### 1.1.3 Alaska Department of Fish and Game

The Alaska Department of Fish and Game now has two principal divisions that are directly involved in the maintenance and management of the anadromous salmon resources of the Cook Inlet region as contrasted with the three divisions that existed at the time the Phase I Plan 1981 - 2000 was written in the early 1980's. The Division of Sport Fish remains; but the Division of Fisheries Rehabilitation, Enhancement and Development has been merged into the Division of Commercial Fisheries.

### 1.1.4 Cook Inlet Aquaculture Association

The Cook Inlet Aquaculture Association was formed in 1976 under AS 16.10.380. Regional Associations that says in part,

“(a) The commissioner shall assist in and encourage the formation of qualified regional associations for the purpose of enhancing salmon production. A regional association is qualified if the commissioner determines that it (1) is composed of associations representative of commercial fishermen in the region; (2) includes representatives of other user groups interested in fisheries within the region who wish to belong; and (3) possesses a board of directors that includes no less than one representative of each user group that belongs to the association. (b) In this section, “user group” includes, but is not limited to, sport fishermen, processors, commercial fishermen, subsistence fishermen, and representatives of local communities. ...”

The current board of directors has twenty-nine seats with one or more designated for representatives of each of the following entities.

- City of Homer
- City of Kachemak
- City of Seward
- Commercial Fishermen of Cook's Inlet
- Cook Inlet Fishermen's Fund
- Cook Inlet Region, Inc.
- Cook Inlet Seiners Association
- Individual Commercial Fishermen
- Kenai Peninsula Borough
- Kenai Peninsula Fisherman's Association
- Matanuska-Susitna Borough
- Municipality of Anchorage
- Ninilchik Village Council



North Pacific Fisheries Association  
Northern District Set Netters of Cook Inlet  
United Cook Inlet Drift Association  
Salmon Processors

The Association continues the salmon enhancement and rehabilitation work it has been carrying on for the past 29 years. One of the major sources of annual revenue to fund this work for the past three decades has been the two percent salmon enhancement tax the commercial salmon fishermen of this region imposed on themselves.

#### 1.1.5 The Regional Planning Team

The Cook Inlet Regional Planning Team (CIRPT) is made up of six voting members, three representing the Cook Inlet Aquaculture Association and three representing the State of Alaska Department of Fish and Game. In the case of the latter three there are two representatives from the Division of Commercial Fisheries and one from the Division of Sport Fish. In addition the non-voting position of chairman is currently held by a representative of ADF&G.

Members were appointed to this team from the CIAA shortly after the official formation of the Association and have been active in the planning process since 1977.

In 1979 additional support was sought for the team's activities, and through a state grant to the Association a consultant was retained to aid in putting the Phase I Plan 1981 - 2000 together.

The Team developed a group of *ex officio* members who received all of the material given to the CIRPT members but who did not have voting rights. Those *ex officio* members represented the National Park Service; the U.S. Forest Service; the U.S. Fish and Wildlife Service; the Alaska Department of Natural Resources; and the Alaska Department of Fish and Game, Division of Wildlife Conservation.

The team met on a reasonably regular basis, which in the latter stages of the development of the Phase I Plan 1981 - 2000 was approximately monthly. These team meetings were regularly attended by additional representatives of involved state and federal agencies and staff and members of the CIAA. Additionally the CIAA RPT members interacted with the CIAA Board of Directors at the monthly meetings of the Board.

After approval of the Phase I Plan 1981 - 2000, that consulting function was supplanted by a planner attached to the team itself and funded by the Association from the mid-1980's to the mid-1990's. Budget constraints on CIAA became more severe; and on November 27, 1996 it became necessary to ask the State to assume responsibility for staffing the Team.

For about the last decade the Team has met on a once-a-year or less schedule primarily for the purpose of reviewing and approving the annual management plans for hatcheries within the Cook Inlet region. During this period there has been no long-range planning work done by the Cook Inlet Regional Planning Team.

The Cook Inlet Aquaculture Association secured funding to update the Phase I Plan 1981 - 2000 and a commitment from the office of the commissioner of the Alaska Department of Fish and Game to participate in and support that updating process.

## 1.2 SIGNIFICANT CHANGES IN CONTEXT SINCE APPROVAL OF THE PHASE I PLAN 1981 - 2000

### 1.2.1 Overview

The circumstances surrounding anadromous salmon rehabilitation and/or enhancement work involving the stocking of supplementally produced fish has changed markedly in the last two decades.

When the Phase I Plan 1981 - 2000 was adopted, all of the hatcheries within Cook Inlet were state-owned and state-operated and provided all of the fish for the various stocking programs throughout the region. The only such anadromous salmon stocking that the State now carries out is for projects designed to benefit recreational fishermen in relatively localized contexts and involving relatively small numbers of king and coho salmon. The State presently operates only two such hatcheries in Cook Inlet – Elmendorf and Ft. Richardson.

The larger scale Cook Inlet projects and those involving sockeye and/or pink salmon are being implemented exclusively by the private sector. The private sector also does some coho salmon stocking.

In addition to this general trend there have been some specific actions and developments that should strongly influence long-range planning for future rehabilitation and/or enhancement work in the Cook Inlet region.

### 1.2.2 Dissolution of the FRED Division of ADF&G

The existence of the FRED Division within ADF&G gave a physical presence to the idea of anadromous salmon rehabilitation and enhancement. The Division did not have a “harvest constituency”, and it did have a professed bias for the overall wellbeing of the resource.

The two remaining divisions are identified by reference to a harvest group. Although the Division of Commercial Fisheries is charged with employing management measures that allow adequate passage of salmon into river systems for both escapement and other in-river uses, it is not charged with implementing any salmon resource rehabilitation or enhancement other than what can be achieved by altering management actions. The Division of Sport Fish also influences escapement levels through management measures intended to affect harvest levels and patterns. Although this Division operates two Cook Inlet hatcheries that give it the ability to implement limited salmon rehabilitation or enhancement work, supplemental production from these facilities is directed at providing additional recreational harvests.

### 1.2.3 Closure of Hatcheries

At the time the Phase I Plan 1981 - 2000 was developed and approved the State was committed to the construction and use of hatcheries as a vehicle to support supplemental salmon production to increase the resource base. CIAA as the designated regional aquaculture association had also constructed its own hatchery. In addition there were periodic inquiries by individuals investigating sites for yet additional hatcheries.

As can be seen in the EXHIBIT 1-1, the greatest number of hatcheries – eight - were in operation for only two years, 1991 and 1992. By 1999 Cook Inlet was back to having the same number of facilities in operation as it had in 1981. The two significant distinctions between the 1981 scenario and that present in 1991 were production and funding.

**EXHIBIT 1 - 1 HATCHERY OPERATION AND PRODUCTION**

YEAR	HATCHERIES IN OPERATION								TOTAL ANNUAL RELEASES	
									each increment equals 4 million fish - bars rounded to the nearest 4 million	
1981	1	2	3	4	5					27,076,131
1982	1	2	3	4	5	6	7			38,604,041
1983	1	2	3	4	5	6	7			49,023,246
1984	1	2	3	4	5	6	7			53,706,911
1985	1	2	3	4	5	6	7			63,108,898
1986	1	2	3	4	5	6	7			67,995,430
1987	1	2	3	4	5	6	7			68,892,045
1988	1	2	3	4	5	6	7			65,639,547
1989	1	2	3	4	5	6	7			80,763,870
1990	1	2	3	4	5	6	7			72,633,361
1991	1	2	3	4	5	6	7	8		64,171,354
1992	1	2	3	4	5	6	7	8		66,254,982
1993	1	2	3	4	5	6	7			72,922,360
1994	1	2	3	4	5	6	7			77,786,700
1995	1	2	3	4	5	6	7			92,334,003
1996	1	2	3	4	5	6	7			133,993,638
1997	1	2	3	4	5	6				110,479,200
1998	1	2	3	4	5	6				107,911,000
1999	1	2	3	4	5					76,334,500
2000	1	2	3	4	5					80,461,000
2001	1	2	3	4	5					128,186,000
2002	1	2	3	4	5					127,695,000
2003	1	2	3	4	5					142,709,000
2004	1	2	3	4	5					84,297,000
2005	1	2	3	4						41,084,532

State-funded operation			
Privately-funded operation			

Highest release years by species			
King	1984	1,699,500	
Sockeye	1989	34,080,000	
Coho	1988	6,903,367	
Pink	2001	126,635,000	
Chum	1989	6,120,000	

Supplemental production as expressed by the number of juvenile fish released each year grew at a somewhat faster rate than the number of operating hatcheries during this 1981 – 1991 interval. The number of hatcheries increased 60 percent from five to eight, while production more than doubled with the 1991 releases amounting to about 137 percent of the 1981 releases.

By the latter half of the 1980's, a reduced ADF&G budget forced the State to begin the process of discontinuing supplemental production programs that were of primary benefit to commercial fisheries. The posture the State took was to designate facilities it was operating and either close them or allow the regional aquaculture associations to take over their operation and provide the requisite staffing and funding. This policy led to the gradual reduction in the total number of hatcheries operating in Cook Inlet and an increase in the amount of the supplemental production funded through private sources (see EXHIBIT 1-2).

There was a rudimentary hatchery operation in Halibut Cove Lagoon in the early 1970's that evolved into a remote release location later in the decade. The state continues to utilize the site as a remote release site for king salmon intended to benefit a popular recreational fishery,

but the last period of use for releases of juvenile salmon intended to benefit the commercial fishery was between 1986 and 1993, after which the location was abandoned for that purpose.

**EXHIBIT 1-2 OPERATIONAL HISTORY OF COOK INLET HATCHERIES**

HATCHERY	CONSTRUCTED	OPERATIONAL CONTROL TRANSFERRED ADF&G TO CIAA	CURRENT OPERATIONAL STATUS
FT. RICHARDSON	1958	NO	IN OPERATION
FIRE LAKE	1965	NO	CLOSED 1979
CROOKED CREEK	1973	YES - 1993	CLOSED 1997
BIG LAKE	1975	NO	CLOSED 1993
TUTKA BAY	1975	YES - 1991	OPERATION SUSPENDED - 2004
ELMENDORF	1976	NO	IN OPERATION
TRAIL LAKES	1981	YES - 1988	IN OPERATION
EKLUTNA	1982	NO - CIAA OWNED	OPERATION SUSPENDED - 1998
PORT GRAHAM	1992	NO - PGHC OWNED	IN OPERATION

1.2.4 Development of New Fisheries

Participation in the recreational fisheries has expanded significantly since the approval of the Phase I Plan 1981 - 2000. The limited supplemental salmon production the State still conducts in Cook Inlet is entirely directed to benefit recreational fisheries.

Since the approval of the Phase I Plan 1981 - 2000 dip net fisheries at the mouths of the Kasilof and Kenai Rivers, at China Poot Bay and Fish Creek have been instituted and grown significantly in both participation and harvest.

The commercial drift gill net fishery in Upper Cook Inlet (UCI) has been substantially reduced in both fishing time and area. The major geographic restriction has been to a narrow corridor along the eastern shore of the Kenai Peninsula. The UCI commercial set net fishery has been substantially reduced in fishing time.

In Lower Cook Inlet (LCI), a different pattern emerged in the years since the Phase I Plan 1981 - 2000 was approved. Supplemental pink and sockeye salmon production from state-owned hatchery facilities resulted in increased fishing time and area for the common property commercial seine and, to a lesser extent, the commercial set gillnet gear groups during the 1980's. However, as these facilities transitioned into PNP ownership/operation in the late 1980's and early 1990's, common property seine fishing time fell as the new operators began to harvest and sell a portion of the returning hatchery-produced fish in order to recoup facility operating expenses. Such cost recovery had not been an issue when the facilities were owned and subsidized by the state. In the late 1990's, as salmon markets tumbled and values declined sharply, PNP operators were forced to harvest an even greater percentage of hatchery-produced fish for cost recovery, further reducing fishing time and area for common property seiners.

### 1.2.5 Land Use Policy Changes

A recent reinterpretation of the compatibility of the Tustumena Lake sockeye salmon stocking project with the land use policies governing the Andy Simon Wilderness in the Kenai National Wildlife Refuge resulted in the cessation of the project that had been operational since 1974.

At the time of the construction of the Paint River fish ladder in 1991 the State of Alaska created the McNeil River State Game Refuge in the area north of and abutting the McNeil River State Game Sanctuary. This area included the site of the fish ladder and a major portion of the Paint River and Chenik Creek watersheds.

### 1.2.6 Policy for the Management of Sustainable Salmon Fisheries

The Board of Fisheries (BOF) became more directly involved in salmon resource rehabilitation and enhancement with the passage of **5 AAC 39.222 Policy for the Management of Sustainable Salmon Fisheries** that was passed with an effective date in 2000. In its opening paragraphs that policy states

*“(a) The Board of Fisheries (board) and Department of Fish and Game (department) recognize that*

- (1) while, in the aggregate, Alaska’s salmon fisheries are healthy and sustainable largely because of abundant pristine habitat and the application of sound, precautionary, conservation management practices, there is a need for a comprehensive policy for the regulation and management of sustainable salmon fisheries;*
- (2) in formulating fishery management plans designed to achieve maximum or optimum salmon production, the board and the department must consider factors including environmental change, habitat loss or degradation, data uncertainty, limited funding for research and management programs, existing harvest patterns, and new fisheries or expanding fisheries;*
- (3) to effectively assure sustained yield and habitat protection for wild salmon stocks, fishery management plans and programs require specific guiding principles and criteria, and the framework for their application contained in this policy.*

*(b) The goal of the policy under this section is to ensure conservation of salmon and salmon’s required marine and aquatic habitats, protection of customary and traditional subsistence uses and other uses, and the sustained economic health of Alaska’s fishing communities.”*

The policy further discusses guidelines for harvest management decisions, and at several points the policy speaks to the need for habitat protection and additional research. These are concerns relevant to the role of the Regional Planning Team and in the Phase I Plan 1981 - 2000 two of the five broad strategies identified were “Research and Evaluation” and “Habitat Protection”.

One of the major functions of the Board of Fisheries is the allocation of the resource among user groups through the management of harvest methods and means, and by directing the department to implement management measures that affect salmon harvest patterns by controlling locations and seasons of harvest. These are important functions, but they differ significantly from the functions of the Regional Planning Teams.

Recognizing and giving due consideration to the areas where the concerns of the two groups diverge and where they overlap is essential. The following excerpts from the policy seem particularly germane to the concerns of the Regional Planning Team.

- “...(c)(1)(D) *effects and interactions of introduced or enhanced salmon stocks on wild salmon stocks should be assessed; wild salmon stocks and fisheries on those stocks should be protected from adverse impacts from artificial propagation and enhancement efforts;*
- (E) *degraded salmon spawning, incubating, rearing, and migratory habitats should be restored to natural levels of productivity where known and desirable;”...*
- “...(c)(1)(G) *depleted salmon stocks should be allowed to recover or, where appropriate, should be actively restored; diversity should be maintained to the maximum extent possible, at the genetic, population, species, and ecosystem levels;”...*
- “...(c)(3)(C) *when wild salmon stocks are fully allocated, new fisheries or expanding fisheries should be restricted, unless provided for by management plans or by application of the board’s allocation criteria;”...*
- “... (d) *The principles and criteria for sustainable salmon fisheries shall be applied, by the department and the board using the best available information, as follows:*
- (d)(1) *at regular meetings of the board, the department will, to the extent practicable, provide the board with reports on the status of salmon stocks and salmon fisheries under consideration for regulatory changes, which should include*
- (d)(1)(A) *a stock-by-stock assessment of the extent to which management of salmon stocks and fisheries is consistent with the principles and criteria contained in the policy under this section;*
- (d)(1)(B) *descriptions of habitat status and any habitat concerns;*
- (d)(1)(C) *identification of healthy salmon stocks and sustainable salmon fisheries;*
- (d)(1)(D) *identification of any existing salmon escapement goals, or management actions needed to achieve these goals, that may have allocative consequences such as the*
- (d)(1)(D)(i) *identification of a new fishery or expanding fishery;*
- (d)(1)(D)(ii) *identification of any salmon stocks, or populations within stocks, that present a concern related to yield, management, or conservation; and*
- (d)(1)(D)(iii) *description of management and research options to address salmon stock or habitat concerns:”...*
- “...(d) (4) *in association with the appropriate management plan, the department and the board will, as appropriate, collaborate in the development and periodic review of an action plan for any new or expanding salmon fisheries, or stocks of concern; action plans should contain goals, measurable and implementable objectives, and provisions, including*
- (d)(4)(A) *measures required to restore and protect salmon habitat, including necessary coordination with other agencies and organizations;*
- (d)(4)(B) *identification of salmon stock or population rebuilding goals and objectives;*
- (d)(4)(C) *fishery management actions needed to achieve rebuilding goals and objectives, in proportion to each fishery’s use of, and hazards posed to, a salmon stock;*
- (d)(4)(D) *descriptions of new or expanding salmon fisheries, management concern, yield concern, or conservation concern; and*

(d)(4)(E) performance measures appropriate for monitoring and gauging the effectiveness of the action plan that are derived from the principles and criteria contained in this policy:"...

### 1.3 APPROACH TO THE PHASE II PLAN 2006 - 2025

#### 1.3.1 Development of the Phase I Plan 1981 - 2000

The broad thrust of the Phase I Plan 1981 - 2000 planning effort was to organize the existing resource information; identify information gaps; identify appropriate strategies and tactics; and project how strong the resource base might become. The general approach to development of the Phase I Plan 1981 - 2000 was to identify all of the various projects that had been proposed throughout the region at one time or another and the number of fish they reasonably might be able to produce. It also included an examination of what the sustained production of the indigenous stocks could be expected to be.

#### 1.3.2 Identification of Potential Project Implementers

There are several different agencies and organizations that can and do conduct fisheries rehabilitation, enhancement and/or research, or can have an impact on such work.

At the federal level there are the National Park Service, the U.S. Fish and Wildlife Service and the U.S. Forest Service. Each of these agencies manages large land holdings within the Cook Inlet region.

At the state level the most obvious potential implementers are the ADF&G Division of Sport Fish and Division of Commercial Fisheries.

Within the region CIAA is the only regional aquaculture association and has the longest and most extensive history of salmon rehabilitation and enhancement work of any private entity in the region.

Other individuals and organizations have proposed projects including, in some instances, something as complex as a hatchery; and some of those projects are functioning today. Among those projects are the Port Graham Hatchery, the Nanwalek sockeye salmon lake stocking project and proposals for development of a salmon run at the Alaska Sea Life Center in Seward.

#### 1.3.3 Phase II Plan 2006 – 2025 Planning Process

While the Phase I Plan 1981 - 2000 had certain quite clearly defined objectives and a generally accepted product outline, the continuation of the planning process and its resulting products were less clearly articulated. An evaluation of the concepts and projects identified in the Phase I Plan 1981 - 2000 was conducted in 2003-2004. It is the intent of this document to examine the current climate and need for enhancement and or rehabilitation efforts in the Cook Inlet region with an eye to creating an approved framework in which new proposals may be assessed.

## 1.4 EFFECTIVE LIFE OF THE PLAN

As was the case with the *Phase I Plan 1981 - 2000*, this Phase II portion is intended to cover a twenty-year period, 2006 through 2025. However, it is the intent of the CIRPT that the contents of the plan be reviewed annually through an updating of the various summary tables found in Chapter 14.0.

## 1.5 PUBLIC PARTICIPATION

### 1.5.1 Preparation of Working Draft Plan

The Cook Inlet Regional Planning Team developed a general outline for the *Phase II Plan 2006 – 2025* and proceeded to draft working versions of the contents of the fourteen chapters the outline identified. That “working draft” was completed in the first week of August 2006. The Team recognized that the working draft contained statements about the policies and projects of agencies and groups other than the Alaska Department of Fish and Game and the Cook Inlet Aquaculture Association.

### 1.5.2 Verification of Contents of the Working Draft

In addition to the Team members and alternates, the ADF&G Geneticist and the Private Non-Profit Program Coordinator received copies of the “working draft”. In order to be sure that the public review draft contained accurate representations of agency policies and project work being carried out by others the Team distributed copies of the “working draft” to the following agencies and groups.

National Park Service  
U.S. Forest Service  
U.S. Fish and Wildlife Service

Alaska Department of Natural Resources  
Alaska Department of Fish and Game – Division of Wildlife Conservation

Matanuska-Susitna Borough  
Municipality of Anchorage  
Kenai Peninsula Borough

Kachemak Bay Research Reserve  
Seward Sealife Center  
Port Graham Hatchery Corporation  
Nanwalek Salmon Enhancement Project  
Native Village of Eklutna  
Mat-Su Basin Salmon Conservation Partnership  
City of Seward Enhancement Committee  
City of Homer  
City of Seldovia

They were asked to review the draft material for its accuracy and completeness; and they were invited to send a representative, if they chose to, to the next CIRPT meeting to offer any suggested additions or corrections to the text they had received. That meeting was originally scheduled for September 26, 2006 but was rescheduled for October 24, 2006.



### 1.5.3 Preparation and Circulation of Public Review Draft

The CIRPT considered all of the comments it had received and made all of the text adjustments it felt were necessary or warranted. This resulted in the completion of the “public review draft”. This public review draft of Phase II Plan 2006 - 2025 was then made available for public comment in the following ways.

There was a news release from the Alaska Department of Fish and Game indicating that the draft plan existed and the various ways in which the public could access the document and offer comment.

The draft was posted on the websites of the Alaska Department of Fish and Game and the Cook Inlet Aquaculture Association. Those postings also directed people to an “electronic” comment form that could be used at the reviewer’s option. Finally, the websites identified how hard copies or electronic copies could be requested.

Hard copies were placed in the regional and area offices of ADF&G in Homer, Soldotna, Anchorage and Palmer and at the headquarters of CIAA in Kenai. In addition they were placed at the borough offices in Palmer, Anchorage and Soldotna.

This public review period was originally scheduled to last from November 1, 2006 through November 30, 2006; however, the review period was re-announced and extended through January 5, 2007.

### 1.5.4 Consideration of Public Comments

The CIRPT met January 12, 2007 to consider all of the public comments that were received. The Team addressed each comment and made those adjustments to the document that it felt were warranted and constructive. It also identified those comments that did not cause a change in the document and the reasons for that. The end result of this process was the creation of the completed Phase II Plan 2006 - 2025 that was unanimously approved by the Cook Inlet Regional Planning Team on January 12, 2007.

### 1.5.5 Submission to the Commissioner of the Alaska Department of Fish and Game for Approval

The CIRPT officially submitted the Phase II Plan 2006 – 2025 to Commissioner of the Alaska Department of Fish and Game for approval on January 17, 2007.

## 1.6 APPROVAL AND AUTHORITY OF THE PLAN

The responsibility for and authority to develop the Phase I Plan 1981 - 2000 and any of its subsequent refinements is vested by the Commissioner of Fish and Game in the CIRPT directly and, therefore, in the Department of Fish and Game and the CIAA indirectly.

When the CIRPT completed the draft document to its satisfaction, the Phase I Plan 1981 - 2000 was widely circulated for review and comment. With due note taken of the comments which were received, the revised draft was forwarded to the Commissioner for review and approval. It was not until the document had received the approval of the Commissioner that the Phase I Plan 1981 - 2000 was printed in final form and distributed.

The final *Phase I Plan 1981 - 2000* was then transmitted to the legislature by the Commissioner as the response to his charge to develop such regional plans, and the *Phase I Plan 1981 - 2000* became the official guideline for all salmon enhancement efforts in Cook Inlet.

The CIRPT anticipates the same general pattern of review and approval to flow from the submission of the final version of this *Phase II Plan 2006 - 2025*.

## CHAPTER 2.0

### **STATUS OF PREVIOUSLY IDENTIFIED STRATEGIES, TACTICS AND PROJECTS**

#### 2.1 OVERVIEW

To develop this document as the Phase II Plan 2006 – 2025 it is necessary to identify what occurred with the proposals put forward in that Phase I Plan 1981 – 2000. The previous chapter identified significant changes that have taken place in the environment in which salmon rehabilitation and enhancement work is done. In this chapter we will examine the strategies that were put forward and the fate of each of the specifically identified projects in the Phase I Plan 1981 – 2000.

#### 2.2 INTRODUCTION

##### 2.2.1 Previously Identified Strategies, Tactics and Projects

The Phase I Plan 1981 - 2000 identified five broad strategies that encompassed the types of things that might be undertaken in the process of assessing the strengths and weaknesses of the salmon resources of Cook Inlet. Under each strategy, various tactics with which the strategy might be implemented were listed. Finally, any and all existing or potential projects were named and described in as much detail as was available or instructive.

Those strategies, tactics and projects are summarized in the following sections.

##### 2.2.2 The Evaluation Process

If the project was relatively short-term and quite specific in its goals, it may have been completed. If it was more long-term with the goal of starting a new program, the program may have been implemented. Some of these projects were not pursued because the agency with control of the project site, the National Park Service, indicated its policies precluded such activity. Some projects were removed from further consideration because initial investigations disclosed they did not have the potential to warrant additional effort.

#### 2.3 RESEARCH / EVALUATION STRATEGY, TACTICS AND PROJECTS

##### 2.3.1 Strategy

The purpose of the research and evaluation strategy was and is to provide effective tools for resource management. It was and is an indirect and supportive strategy as compared with strategies such as harvest management. It is a long-term strategy that demands a dedication of funding and staff and a consistency of approach to derive useful results. Those results may lead to additional required research or may be directly applied in some other strategy.

<b>EXHIBIT 2 -1 RESEARCH / EVALUATION STRATEGY PROJECTS</b>			
	ORIGINAL PROJECT IDENTIFICATION	COMMENT	ADDITIONAL REFERENCE
1	Spawning Ground Survey	ongoing	Chapters 5, 6, 9, 10
2	Upper Cook Inlet Run Modeling	ongoing - not unit specific	Chapters 5, 6, 9, 10
3	Evaluation of Hatchery Stocked Fry Survival - Kenai Lake	described project never undertaken	Chapter 9
4	Hidden Lake Assessment	described project completed	Chapter 9
5	Quartz Creek Broodstock Evaluation	described project completed	Chapter 9
6	Kasilof Hatchery Evaluation	described project completed	Chapter 10
7	Crooked Creek King Salmon Enhancement	described project modified and ongoing	Chapter 10
8	Homer Area Salmon Smolt Stocking Program	described project modified and ongoing	Chapter 11
9	Tutka Hatchery Evaluation	described project completed	Chapter 11
10	Halibut Cover Lagoon Saltwater Rearing Evaluation	described project completed	Chapter 11
11	Evaluation of Responses to Sockeye Fry Stocking in a Lake with Naturally Reproducing Stocks - Tustumena Lake	described project completed	Chapter 10
12	Marking Effectiveness on Sockeye Salmon	described project completed	NONE
13	Deshka River Coho Salmon Study	described project partially completed	Chapter 6
14	Anchor River King Salmon Study	described project never undertaken	Chapter 10
15	Sixmile Creek King Salmon and Coho Salmon Study	described project partially completed	Chapter 8
16	Kenai River Spawning and Rearing Study	described project completed	Chapter 9
17	Genetics of Russian River Sockeye Salmon	described project completed	Chapter 9
18	Susitna River Radio Tagging Study	described project completed	Chapter 3
19	Preliminary Site Investigations for Potential Hatchery, Lake Stocking and Habitat Improvement Sites	described project never undertaken	Chapters 11, 12, 13

2.3.2 Tactics

The principal tactics employed under this strategy are:

- field surveys
- computer modeling
- data gathering
- data analysis
- qualitative sampling
- fish enumeration

Although these tactics do not include any form of supplemental production of salmon, they do help to set the stage for decisions about whether or not supplemental production is a reasonable and effective response to a given situation.

### 2.3.3 Status of Identified Research / Evaluation Projects

EXHIBIT 2-1 lists the projects identified in the original plan under this strategy. The commentary column indicates the general status of each project; and if this document contains additional information about the project, the location of that information is cited in the last column.

## 2.4 REHABILITATION / ENHANCEMENT STRATEGY, TACTICS AND PROJECTS

### 2.4.1 Strategy

This strategy is designed to rebuild depressed stocks or increase the number of self-sustaining salmon beyond levels that they would naturally maintain. In most cases a sequence of tactics is necessary to achieve the desired results. They are procedures applied to the fish and/or the various habitats in which they are or could be present. After appropriate consultation with ADF&G, any one of several associations and agencies that are interested in salmon enhancement might actually carry out the work.

### 2.4.2 Tactics

The following tactics can be used alone or in combination under this strategy.

- hatchery development
- stream clearance
- fish pass construction
- lake fertilization
- Spawning channel construction
- water flow control
- lake stocking
- stream stocking

### 2.4.3 Status of Identified Rehabilitation / Enhancement Projects

EXHIBIT 2-2 lists the projects identified in the Phase I Plan 1981 - 2000 under this strategy. The commentary column indicates the general status of each project; and if this document contains additional information about the project, the location of that information is cited in the last column.

## 2.5 DISTRIBUTION / ACCESS STRATEGY, TACTICS AND PROJECTS

### 2.5.1 Strategy

In the Phase I Plan 1981 - 2000 there were several ADF&G projects for sport fish enhancement which involve stocks already accounted for in other previously discussed projects, and these additional projects concerned themselves with the distribution of those stocks and angler access to them. These projects dealt with new harvest opportunities, not additional fish.

**EXHIBIT 2 - 2****REHABILITATION / ENHANCEMENT STRATEGY  
PROJECTS**

	ORIGINAL PROJECT IDENTIFICATION	COMMENT	ADDITIONAL REFERENCE
1	Kasilof (Crooked Creek) Hatchery	described project closed	Chapter 10
2	Trail Lakes Hatchery	described project modified and ongoing	Chapter 9
3	Big Lake Hatchery	described project closed	Chapter 7
4	Anchorage Hatchery Complex	described project modified and ongoing	Chapter 7
5	Tutka Hatchery	described project closed	Chapter 11
6	Eklutna Hatchery	described project closed	Chapter 7
7	English Bay Lakes Hatchery	described project never undertaken	Chapter 11
8	Paint River System	described project partially completed	Chapter 4
9	Scurvy Creek	described project partially completed	Chapter 12
10	Big River Lakes	described project completed	Chapter 5
11	Ptarmigan Lake	described project never undertaken	Chapter 9
12	Chenik Lake	described project modified; then suspended	Chapter 4
13	Delight and Desire Lakes	described project never undertaken	Chapter 11
14	Crescent River	described project never undertaken	Chapter 5
15	Larson Lake	described project never undertaken	Chapter 6
16	Byers Lake	described project never undertaken	Chapter 6
17	Shell Lake	described project never undertaken	Chapter 6
18	Bear Lake	described project modified and ongoing	Chapter 13
19	Finger, Delyndia and Butterfly Lakes	described project never undertaken	Chapter 6
20	Packers Lake Development	project not described but work done	Chapter 5
21	Portage Ponds Development	project not described but work done	Chapter 8
22	Sixmile Creek Run Development	project not described but work done	Chapter 8
23	Bull Dog Cove Clearance	potential benefit deemed insufficient	Chapter 13
24	Leisure Lake Fishpass	described project modified and ongoing	Chapter 10
25	Resurrection Bay Rearing Ponds	project not described but work done	Chapter 13
26	Island Creek Clearance	project not described and no work done	Chapter 12
27	Dog Fish Bay Creek Clearance	project not described and no work done	Chapter 12
28	Windy Right Creek Clearance	project not described and no work done	Section 12
29	Porcupine Cove Clearance	potential benefit deemed insufficient	Chapter 13
30	Two Arm Bay Clearance	potential benefit deemed insufficient	Chapter 12
31	Port Dick (Middle) Creek Clearance	project not described; only survey work done	Chapter 12
32	Gore Point Lake Clearance	project not described but work done	Chapter 12
33	Rocky River Clearance	project not described and no work done	Chapter 12
34	Anderson Beach Clearance	project not described and no work done	Chapter 12
35	Nuka Island Clearance	project not described and no work done	Chapter 12
36	Russian River Flow Bypass	project not described and no work done	Chapter 9
37	Kirschner Lake Stream Rechannelization	described project modified and ongoing	Chapter 4
38	Strike Creek Fish Ladder	project not described and no work done	Chapter 4
39	Birch Hill Hatchery	project not described and no work done	Chapter 9
40	Resurrection Bay Odd-year Pink / Chum Development	project not described but work done	Chapter 13
41	Ninilchik Native Association Hatchery	project not described and no work done	Chapter 10
42	Bradley Lake Hatchery	project not described and no work done	Chapter 11
43	Delight Lake Hatchery	project not described and no work done	Chapter 12
44	Nuka Bay Hatchery	project not described and no work done	Chapter 12
45	Port Dick (Middle) Creek Development	project not described and no work done	Chapter 12
46	Port Chatham Fish Pass	project not described and no work done	Chapter 12

2.5.2 Tactics

The tactics used in this strategy are:

- research local conditions to confirm need for action and that use of the intended strategy is appropriate
- identify, improve or procure harvest site access
- stock

2.5.3 Status of Identified Distribution / Access Projects

EXHIBIT 2-3 lists the projects identified in the *Phase I Plan 1981 - 2000* under this strategy. The commentary column indicates the general status of each project; and if this document contains additional information about the project, the location of that information is cited in the last column.

<b>EXHIBIT 2 - 3 DISTRIBUTION / ACCESS STRATEGY PROJECTS</b>			
	ORIGINAL PROJECT IDENTIFICATION	COMMENT	ADDITIONAL REFERENCE
1	Little Susitna River Coho Salmon Enhancement	described project goals achieved and enhancement no longer conducted	Chapter 7
2	Little Susitna River King Salmon Enhancement	described project never undertaken	Chapter 7
3	Early Russian River Sockeye Salmon Enhancement	described project never undertaken	Chapter 9
4	Willow Creek Coho Salmon Enhancement	described project goals achieved and enhancement no longer conducted	Chapter 6
5	Willow Creek King Salmon Enhancement	described project goals achieved and enhancement ongoing	Chapter 6
6	Caswell Creek Coho Salmon Enhancement	described project never undertaken	Chapter 6
7	Resurrection Bay Coho Salmon Enhancement	described project goals achieved and enhancement ongoing	Chapter 13
8	Early Kenai River King Salmon Enhancement	preliminary project work undertaken but cancelled before first stocking	Chapter 9
9	Knik Arm Tributaries Coho Salmon Enhancement	described project modified and enhancement ongoing	Chapter 7
10	Late Kenai River Coho Salmon Enhancement	some described project work done but enhancement no longer conducted	Chapter 9

**2.6 HARVEST MANAGEMENT STRATEGY, TACTICS AND PROJECTS**

2.6.1 Strategy

The principal salmon harvest management strategy is to allow adequate passage of wild stock fish into river systems for escapement and other in-river uses and to take actions that allow for the orderly harvest of any identifiable surpluses.

One of the distinguishing characteristics of the harvest management strategy is that it is directed at the user rather than at the salmon. Secondly, of all of the strategies it is the only

one that is the sole province of the Department of Fish and Game. However, it should be noted that the Department's authority in harvest management is limited strictly to modifications of time area and bag limits, i.e. changing the allowable amount of time and/or area open to harvesters or modifying the amount of fish harvesters are allowed to retain. Authority beyond these measures such as gear specifications, user licensing and limited entry into the fisheries is vested in other entities such as the Alaska Board of Fisheries and the Commercial Fisheries Entry Commission.

### 2.6.2 Tactics

The most prominent tactics employed in the harvest management strategy in Cook Inlet are:

- modification of allowable fishing time and area
- invocation of emergency closures
- invocation of emergency openings
- escapement monitoring
- implementation of test fishing
- establishment or modification of bag limits
- establishment of user licensing
- limitation of entry into the fishery
- imposition of gear specifications
- closing of open areas
- opening of closed areas

In some forms these tactics may be applied over a long period of time as in the case of restricting certain types of gear to certain fishing districts, or they may be very specific and immediate as in the case of emergency openings or closures.

There is a very direct relationship between the harvest management tactics and the extent of specific knowledge about the salmon stocks that are being targeted. The greater the knowledge the more precise the application of these measures can become.

### 2.6.3 Status of Identified Harvest Management Projects

EXHIBIT 2-4 lists the projects identified in the *Phase I Plan 1981 - 2000* under this strategy. The commentary column indicates the general status of each project; and if this document contains additional information about the project, the location of that information is cited in the last column.



<b>EXHIBIT 2 - 4 HARVEST MANAGEMENT STRATEGY PROJECTS</b>			
	ORIGINAL PROJECT IDENTIFICATION	COMMENT	ADDITIONAL REFERENCE
1	Escapement Monitoring	described project ongoing	Chapters 5,6,9,10
2	In-season Effort and Catch Monitoring	described project ongoing	NONE
3	Upper Cook Inlet Central District Test Fishing	described project implemented and subsequently discontinued	Chapters 5,6,7,8 9, 10
4	Upper Cook Inlet Stock Separation	described project modified and ongoing	Chapters 5,6,9,10
5	Off-shore Test Fishing	described project modified and ongoing	Chapters 5,6,9,10
6	Humpy Creek Weir	described project implemented and subsequently discontinued	Chapter 11
7	Kachemak Bay Salmon and Shellfish Subsistence Catch Monitoring	described project modified and ongoing	Chapter 11
8	English Bay - Port Graham Monitoring	described project modified and ongoing	Chapter 11

**2.7 HABITAT PROTECTION STRATEGY, TACTICS AND PROJECTS**

2.7.1 Strategy

The strategy to achieve habitat protection may appear to be the most removed from dealing directly with the salmon stocks; but, in fact, it is one of the most important keys to the long-term health of the resource. It involves the systematic and long-term concern for the preservation of the quality and quantity of the required supporting habitat based on the premise that suitable habitat is an essential component of stable salmon production. At the core of the success of this strategy is a screening mechanism that detects habitat changes or the potential for them, evaluates the impact of those changes and suggests the appropriate response to remedy the negative effects.

2.7.2 Tactics

All tactics involved in support of this strategy are variations of one of the following:

- acquisition of the habitat
- categorization of the habitat for purposes of setting use conditions e.g. wetlands or critical habitat
- invocation of a special protective status e.g. refuge
- institution of public awareness programs
- increase regulatory enforcement
- conservation of existing habitat through project review and permitting
- increased monitoring of ongoing developmental activities

2.7.3 Status of Identified Harvest Management Projects

The Phase I Plan 1981 - 2000 did not specify any particular projects under this strategy.

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## CHAPTER 3.0

### FRAMEWORK FOR LOCALIZED UNIT ANALYSES

#### 3.1 OVERVIEW

Ten smaller units within the Cook Inlet region have been identified to make the analysis more particular. There are certain broad assumptions that form the backdrop for this analysis and certain key terms that will be used in the analysis. An understanding of both is critical to understanding the recommendations of this plan and its usefulness. The objectives of these analyses and this overall plan update are set out at the conclusion of this chapter.

#### 3.2 IDENTIFICATION OF THE TEN LOCALIZED UNITS

For the purpose of making the Phase II plan as specific and useful as possible the Cook Inlet / Resurrection Bay drainages were divided into ten smaller units as shown in EXHIBIT 3-1.

Under the legislation establishing the region to be covered by the plan, the combined area is known as Area H. Although Area H is used as the Commercial Fisheries Entry Commission (CFEC) designation for commercial salmon fishery licensing purposes, the area is further divided into Upper Cook Inlet (UCI) and Lower Cook Inlet (LCI) for commercial fishery management purposes with the demarcation between the two located at the latitude of Anchor Point. Management of the former occurs from the Soldotna ADF&G Office while the latter is managed from the Homer ADF&G Office.

The Division of Sport Fish reports on this same combined area as five sub-units identified as areas K, L, M, N and P.

The Team has identified the ten units based not on where the fish are harvested but rather on the systems that produce them.

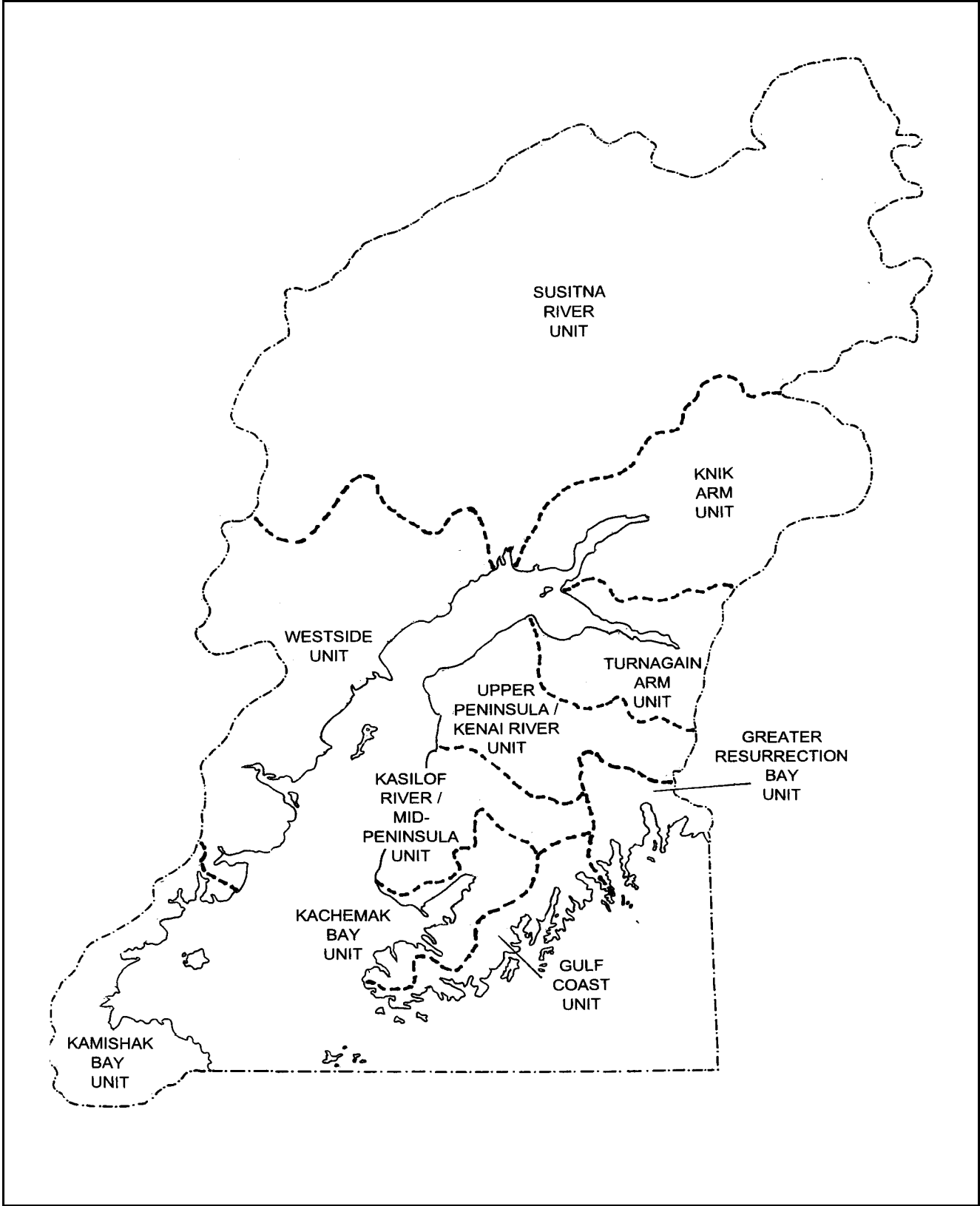
##### 3.2.1 Kamishak Bay Unit

This unit begins at Cape Douglas on the south and ends at Chinitna Point on the north.

The shoreline is marked by numerous bays and coves among which the more prominent are Akumvarik Bay, McNeil Cove, Bruin Bay, Ursus Cove, Iliamna Bay and Iniskin Bay.

The larger river systems feeding the marine environment of Kamishak Bay are the Douglas River, the Kamishak River, the Little Kamishak River, the McNeil River and the Paint River. Other smaller systems that maintain importance in the commercial fishery include Chenik Lake, Kirschner Lake, Bruin Bay River, Cottonwood Creek and Iniskin River.

**EXHIBIT 3-1 TEN UNITS DESIGNATED FOR ANALYSIS**



### 3.2.2 Westside Unit

This unit begins at Chinitna Point on the south and ends at the western bank of the mouth of the Susitna River. Kalgin Island has been included in this unit even though it rests about ten miles east of the western shore of Cook Inlet.

The shoreline is marked by four large bays, Chinitna Bay, Tuxedni Bay, Redoubt Bay and Trading Bay.

The larger river systems connecting directly to the marine environment along the western shore of Cook Inlet include West Glacier Creek, Johnson River, Tuxedni River, Crescent River, Drift River, Big River, Kustatan River, McArthur River, Chakachatna River, Chuitna River and Beluga River.

### 3.2.3 Susitna River Unit

The Cook Inlet shoreline of this unit is comprised of only the mouth of the Susitna River. However, the immense expanse of the watershed of the Susitna River to the north and the many sizable sub-systems within it make it worthy of consideration as a separate unit.

Notable major components of the Susitna River system include the Yentna River and its tributary system, the Talkeetna River and its tributary system, the Chulitna River and its tributary system and the portion of the Susitna River system upstream of Devil's Canyon.

### 3.2.4 Knik Arm Unit

The shoreline of this unit stretches from the eastern bank of the mouth of the Susitna River around the Knik Arm and ends at Point Campbell in Anchorage.

The most prominent anadromous salmon producing systems connecting directly to the marine environment of the Knik Arm are the Little Susitna River, Fish Creek, Matanuska River, Knik River, Eagle River, Sixmile Creek (Elmendorf) and Ship Creek.

### 3.2.5 Turnagain Arm Unit

The shoreline of this unit reaches from Point Campbell in Anchorage around the Turnagain Arm to Point Possession on the Kenai Peninsula.

The most prominent anadromous salmon producing systems within this unit are Campbell Creek, Rabbit Creek (Potter Marsh), Bird Creek, Glacier Creek, Twentymile River, Portage Creek, Placer River, Sixmile Creek, Resurrection Creek and the Chickaloon River.

### 3.2.6 Upper Peninsula / Kenai River Unit

The shoreline of this unit reaches from Point Possession south along the peninsula to a point along Kalifornsky Beach about six miles south of the mouth of the Kenai River.

The two most prominent salmon producing streams in this unit are the Swanson River and the Kenai River

3.2.7 Kasilof River / Mid-Peninsula Unit

The shoreline of this unit reaches from a point along Kalifornsky Beach about six miles south of the mouth of the Kenai River to Anchor Point just south of the mouth of the Anchor River.

The most prominent salmon producing systems within this unit are the Kasilof River, Ninilchik River, Deep Creek, Stariski Creek and the Anchor River.

3.2.8 Kachemak Bay Unit

The shoreline of this unit reaches from Anchor Point just south of the mouth of the Anchor River around Kachemak Bay to Point Bede south of English Bay.

The most prominent salmon producing systems within this unit are Fox River, Humpy Creek, Seldovia River, Port Graham River and English Bay River. Leisure and Hazel Lakes, both sites of a sockeye salmon stocking program for many years, are also important to the commercial salmon fishery. Several Chinook and coho salmon remote release sites important to the recreational fishery are also found in this unit.

3.2.9 Gulf Coast Unit

The shoreline of this unit reaches from Point Bede south of English Bay eastward along the Gulf of Alaska to Aligo Point on the western edge of Aialik Bay.

The most prominent salmon producing systems within this unit are those draining into Windy Bay / Rocky Bay, the West Arm Port Dick and Nuka Bay.

3.2.10 Greater Resurrection Bay Unit

The shoreline of this unit reaches from Aligo Point on the western edge of Aialik Bay eastward through Resurrection Bay to Cape Fairfield at the eastern edge of Whidbey Bay.

The most prominent salmon producing systems within this unit are Aialik Lake, Tonsina Creek, Bear Lake, Resurrection River and Salmon Creek.

**3.3 DEFINITION OF TERMS**

3.3.1 Context

There are certain terms that are recurring in discussions of salmon enhancement and rehabilitation; and they have been identified by three general sources that are relevant to this document. Those sources are (1) the Alaska Board of Fisheries "Sustainable Salmon Fisheries Policy", (2) Alaska Department of Fish and Game's "Genetic Policy" and (3) the Cook Inlet Regional Planning Team's prior work.

3.3.2 Cook Inlet Regional Planning Team and the Alaska Board of Fisheries

The charge to the regional planning teams to plan for the beneficial use of salmon enhancement and rehabilitation in the context of the overall wellbeing of the salmon resource brings into play

numerous terms related to both the fish themselves and the human activities related to work with the fish. The Cook Inlet Regional Planning Team understood this and the need to have its planning work described in well-defined terms.

Subsequently, in a relatively unrelated action the Alaska Board of Fisheries developed and published the Sustainable Salmon Fisheries Policy. In that document they dealt with many of the same issues the regional planning teams were charged with addressing and developed yet another set of definitions for terms that were used by both groups.

These terms can be broadly separated into two groups. The first group has only two terms, "rehabilitation" and "enhancement", and deals with human activities carried out in support of the resource. The second group is made up of twelve terms that describe the character or condition of the resource itself.

### 3.3.2.1 Rehabilitation and Enhancement

#### (a) Rehabilitation

"Rehabilitation" means efforts applied to a salmon stock to restore it to an otherwise natural level of productivity; "rehabilitation" does not include an enhancement, which is intended to augment production above otherwise natural levels.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT. Extensive work that the CIRPT had completed before to identify the appropriate application of these terms is added here in the form of the following comments and EXHIBIT 3-2.*

*An action (project) is rehabilitation when it seeks to improve the condition of a stock that has been below naturally sustainable productive capacity for at least five years.*

*Rehabilitation can only occur when the subject stock is judged to be of "conservation concern" or "yield concern".*

*If the proposed action (project) is or includes stocking, the stocking must utilize indigenous stocks.*

*If the proposed action (project) is or includes stocking, the stocking must be only short-term (start-up) stocking.*

*The restoration of habitat, creation of new habitat, improvement of habitat, opening of access to habitat and/or short-term stocking with indigenous stocks may each be designated rehabilitation when it conforms to the stipulations set out above.*

*Rehabilitation is the more narrowly defined of the two terms.]*

#### (b) Enhancement

"Enhancement" means efforts applied to a stock of salmon in the form of specific manipulation, such as hatchery augmentation or lake fertilization, to enhance its productivity above the levels that would naturally occur; "enhanced salmon stock" includes an introduced stock, where no wild salmon stock had occurred before, or a wild salmon stock undergoing manipulation, but does not include a salmon stock

undergoing rehabilitation, which is intended to restore a salmon stock's productivity to a higher natural level.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT. Extensive work that the CIRPT had completed before to identify the appropriate application of these terms is added here in the form of the following comments and EXHIBIT 3-2.*

*An action (project) is enhancement when it establishes a new stock; improves the condition of a stock which is at naturally sustainable productive capacity - and has been for at least five years - by augmenting the stock's naturally sustainable productive levels.*

*Enhancement can occur whatever the condition of the subject stock is judged to be.*

*If a stock is "non-existent" or "healthy", the action (project) is by definition enhancement.*

*If the proposed action (project) is or includes long-term (annual) stocking, the action (project) is by definition enhancement.*

*The restoration of habitat, creation of new habitat, improvement of habitat, opening of access to habitat and/or long-term stocking may each be designated enhancement when it conforms to the stipulations outlined above.]*

### (c) Use of the Terms Rehabilitation and Enhancement

As the CIRPT uses the terms "rehabilitation" and "enhancement" in discussion of work with the salmon resource of Cook Inlet there are certain key assumptions that must be understood.

For purposes of this document the use of either one of these terms is determined by the impact or result of the proposed action (project) on the relevant stock of fish, not on the habitat.

The stock of fish is understood to be the identifiable unit of fish of the appropriate species most closely associated with the proposed project site and character.

In the process of determining which designation to give a particular action (project) the CIRPT first attempts to assess the condition of the stock, then the cause for that condition and, finally, the type of action (project) proposed. The matrix presented in EXHIBIT 3-2 shows all of the possible combinations of stock condition and type of action (project) and provides the CIRPT's designation of either rehabilitation or enhancement.

#### 3.3.2.2 Terms Related to the Character or Condition of the Resource

There are thirteen terms that are used in this document or may be employed in various references to or descriptions of the character of a segment of the salmon resource. Understanding the way in which the CIRPT applies these terms is essential to understanding the CIRPT's assessments and recommendations. The terms are set out in this section in alphabetical order.



**EXHIBIT 3-2  
REHABILITATION AND ENHANCEMENT MATRIX**

		THE STOCK IS NON-EXISTENT			THERE IS A CONSERVATION CONCERN ABOUT THE STOCK				THERE IS A YIELD CONCERN ABOUT THE STOCK				THE STOCK IS HEALTHY		1			
		WHERE NON-EXISTENT MEANS NO MEMBERS OF THE TARGET SPECIES HAVE BEEN OBSERVED IN THE SYSTEM			WHERE "AT RISK" MEANS THE TARGET STOCK HAS SHOWN FOR FOUR OR MORE CONSECUTIVE YEARS AN INABILITY TO MAINTAIN ESCAPEMENTS ABOVE THE MINIMUM LEVELS AT WHICH IT COULD BE EXPECTED TO MAINTAIN ITSELF OVER TIME.				WHERE "LOW" MEANS THE STOCK HAS BEEN BELOW NATURALLY SUSTAINABLE PRODUCTIVE CAPACITY FOR A CONSIDERABLE TIME.				WHERE "HEALTHY" MEANS THE STOCK HAS BEEN AT NATURALLY SUSTAINABLE PRODUCTIVE CAPACITY FOR A CONSIDERABLE TIME					
		BECAUSE OF:			BECAUSE OF:				BECAUSE OF:				BECAUSE OF:		2			
		BARRIERED SYSTEM	UNSUITABLE HABITAT	UNIDENTIFIED CAUSE	HARVEST MGT. POLICY OR REGULATION	NATURAL HABITAT LOSS OR DEGRADATION	MAN-INDUCED HABITAT LOSS OR DEGRADATION	UNIDENTIFIED CAUSE	HARVEST MGT. POLICY OR REGULATION	NATURAL HABITAT LOSS OR DEGRADATION	MAN-INDUCED HABITAT LOSS OR DEGRADATION	UNIDENTIFIED CAUSE	HARVEST MGT. POLICY OR REGULATION	UNIDENTIFIED CAUSE		3		
A PROJECT TO IMPROVE STOCK STATUS THROUGH		BARRIER(S) PHYSICALLY ISOLATE THE SYSTEM FROM ANADROMOUS FISH	THE HABITAT IS APPARENTLY UNSUITABLE FOR SPAWNING AND/OR REARING	SEVERAL CAUSES MAY BE KNOWN OR SUSPECTED. NO ONE CAUSE IS EVIDENT AS THE DOMINANT CAUSE	WHERE PROJECT WORK AFTER ALTERATION OF THE POLICY OR REGULATION CAUSING THE CONDITION IS NEEDED	EXAMPLES: NATURAL MATURATION OF THE SYSTEM, FLOODING, EARTHQUAKE, ETC.	EXAMPLES: FILLING, TOXIC SPILL, EROSION, ETC.	SEVERAL CAUSES MAY BE KNOWN OR SUSPECTED. NO ONE CAUSE IS EVIDENT AS THE DOMINANT CAUSE	WHERE PROJECT WORK AFTER ALTERATION OF THE POLICY OR REGULATION CAUSING THE CONDITION IS NEEDED	EXAMPLES: NATURAL MATURATION OF THE SYSTEM, FLOODING, EARTHQUAKE, ETC.	EXAMPLES: FILLING, TOXIC SPILL, EROSION, ETC.	SEVERAL CAUSES MAY BE KNOWN OR SUSPECTED. NO ONE CAUSE IS EVIDENT AS THE DOMINANT CAUSE	WHERE PROJECT WORK AFTER ALTERATION OF THE POLICY OR REGULATION CAUSING THE CONDITION IS NEEDED	SEVERAL CAUSES MAY BE KNOWN OR SUSPECTED. NO ONE CAUSE IS EVIDENT AS THE DOMINANT CAUSE	4			
<b>RESTORATION OF HABITAT</b>  TO RECREATE PRIOR HABITAT CONDITIONS IN APPROXIMATELY THE SAME LOCATION, QUANTITY AND QUALITY AS EXISTED BEFORE SOME DESTRUCTIVE EVENT OR PROCESS.  A SINGLE PROJECT MAY BE ONLY RESOTRATION OF HABITAT(ROW 3) OR IT MAY INCLUDE SOME FORM OF STOCKING (ROWS 4-7).	NO STOCKING (NATURAL COLONIZATION)		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT		ENHANCEMENT	ENHANCEMENT	5
	SHORT-TERM STOCKING (START-UP)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	6
		NON-INDIGENOUS STOCKS	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	7
	LONG-TERM STOCKING (ANNUAL)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	8
NON-INDIGENOUS STOCKS		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	9	
<b>IMPROVEMENT OF HABITAT</b>  TO IMPROVE EXISTING HABITAT CONDITIONS WITHIN THE PHYSICAL CONFINES (SHORELINE) OF THE STREAM OR LAKE, FOR EXAMPLE FLOW CONTROL STRUCTURES, LAKE FERTILIZATION, STREAM CLEARANCE.  A SINGLE PROJECT MAY BE ONLY IMPROVING HABITAT (ROW 8) OR IT MAY INCLUDE SOME FORM OF STOCKING (ROWS 9-12).	NO STOCKING (NATURAL COLONIZATION)		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	10	
	SHORT-TERM STOCKING (START-UP)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	11
		NON-INDIGENOUS STOCKS	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	12
	LONG-TERM STOCKING (ANNUAL)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	13
NON-INDIGENOUS STOCKS		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	14	
<b>CREATION OF NEW HABITAT</b>  TO INCREASE THE AMOUNT OF USEFUL HABITAT BY CONSTRUCTING HABITAT WHERE IT DOES NOT EXIST. FOR EXAMPLE, SPAWNING CHANNELS, REARING PONDS. A SINGLE PROJECT MAY BE ONLY CREATING NEW HABITAT (ROW 13) OR IT MAY INCLUDE SOME FORM OF STOCKING (ROWS 14-17).	NO STOCKING (NATURAL COLONIZATION)		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	15	
	SHORT-TERM STOCKING (START-UP)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	16
		NON-INDIGENOUS STOCKS	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	17
	LONG-TERM STOCKING (ANNUAL)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	18
NON-INDIGENOUS STOCKS		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	19	
<b>OPENING / IMPROVING ACCESS TO HABITAT</b>  TO EXPAND USEFUL HABITAT BY PROVIDING / IMPROVING ACCESS FROM PRODUCTIVE HABITAT TO SUITABLE HABITAT WHICH IS FULLY OR PARTIALLY ISOLATED BY SOME TYPE OF BARRIER, FOR EXAMPLE, FISHWAYS. A SINGLE PROJECT MAY BE ONLY OPENING / IMPROVING ACCESS TO HABITAT (ROW 18) OR IT MAY INCLUDE SOME FORM OF STOCKING (ROWS 19-22).	NO STOCKING (NATURAL COLONIZATION)		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	20	
	SHORT-TERM STOCKING (START-UP)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	21
		NON-INDIGENOUS STOCKS	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	22
	LONG-TERM STOCKING (ANNUAL)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	23
NON-INDIGENOUS STOCKS		ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	24	
<b>STOCKING</b>  TO INITIATE OR INCREASE FISH PRODUCTION BY INTRODUCING ADDITIONAL FISH WITHOUT ALTERING ANY OF THE HABITAT CHARACTERISTICS. FOR EXAMPLE STOCKING BARRIERED LAKES, STOCKING SPAWNING-GROUND LIMITED SYSTEMS. A SINGLE PROJECT IS ONLY STOCKING (ROWS 23-26)	SHORT-TERM STOCKING (START-UP)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	REHABILITATION	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	25	
		NON-INDIGENOUS STOCKS	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	26
	LONG-TERM STOCKING (ANNUAL)	INDIGENOUS STOCKS	INDIGENOUS STOCKS DO NOT EXIST			ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	27
		NON-INDIGENOUS STOCKS	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	ENHANCEMENT	28
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>O</b>	<b>P</b>			

NOTE 1: "STOCK" AS USED HERE IS THE UNIT OF THE APPROPRIATE SPECIES MOST CLOSELY ASSOCIATED WITH THE PROJECT SITE AND CHARACTER, E.G. A COHO SALMON PROJECT ON QUARTZ CREEK WOULD BE DESCRIBED AND CATEGORIZED AS REHABILITATION OR ENHANCEMENT BASED ON THE STATUS OF THE QUARTZ CREEK STOCK OF COHO SALMON NOT THE KENAI RIVER STOCK OF COHO SALMON.

NOTE 2: ALL REHABILITATION / ENHANCEMENT DESIGNATIONS ARE MADE WITH RESPECT TO THE PROJECT'S AFFECT ON THE STOCK OF FISH, NOT THE HABITAT.

NOTE 3: THE REFERENCES TO STOCKING, PARTICULARLY IN COLUMN "C", DO NOT DISTINGUISH BETWEEN THE VARIOUS TYPES OF STOCKING (SEEDING ADULTS, PLANTING EGGS, STOCKING FRY, STOCKING FINGERLINGS, AND STOCKING SMOLTS) FOR PURPOSES OF DESIGNATING AN ACTION REHABILITATION OR ENHANCEMENT.

NOTE 4: THE STOCK CONDITION CATEGORIES ARE ESTABLISHED WITH THE UNDERSTANDING THAT FOR MANY COOK INLET SYSTEMS THERE IS LITTLE, IF ANY, HARD DATA ON STOCK LEVELS AND HABITAT PRODUCTION CAPACITY. IN THE ABSENCE OF SUCH DATA, CATEGORIZATION WILL BE ACCOMPLISHED THROUGH PROFESSIONAL CONSENSUS.

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## (a) Anadromous

“Anadromous” fish are species such as salmon that are born in fresh water, migrate and feed in a marine environment, and return to natal freshwater systems to spawn.

## (b) Chronic Inability

“Chronic inability” means the continuing or anticipated inability to meet escapement thresholds over a four to five year period, which is approximately the generation time of most salmon species.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (c) Conservation Concern

“Conservation concern” means concern arising from a chronic inability, despite the use of specific management measures, to maintain escapements for a stock above a sustained escapement threshold (SET); a conservation concern is more severe than a yield concern.

*[Supplementary notes: This definition results from a CIRPT modification to the definition set out in Alaska Board of Fisheries “Sustainable Salmon Fisheries Policy”. In previous work the CIRPT had used the phrase “at risk” to describe such stocks.]*

## (d) Genetic

“Genetic” means those characteristics (genotypic) of an individual or group of salmon that are expressed genetically, such as allele frequencies or other genetic markers.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (e) Habitat Concern

“Habitat concern” means the degradation of salmon habitat that results in, or can be anticipated to result in, impacts leading to yield, management, or conservation concerns.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (f) Healthy Salmon Stock

“Healthy salmon stock” means a stock of salmon that has annual runs typically of a size to meet both escapement and a potential harvestable surplus to support optimum or maximum sustained yield.

*[Supplementary notes: This definition results from a CIRPT modification to the definition set out in Alaska Board of Fisheries “Sustainable Salmon Fisheries Policy”. In previous work the CIRPT had also used the phrase “healthy” to describe such stocks.]*

## (g) Introduced Stock

“Introduced stock” means a stock of salmon that has been introduced to an area where that stock had not previously occurred and a salmon stock undergoing continued enhancement.

*[Supplementary notes: This definition results from a CIRPT modification to the definition set out in Alaska Board of Fisheries “Sustainable Salmon Fisheries Policy”.]*

## (h) Phenotypic Characteristics

“Phenotypic characteristics” means those characteristics of an individual or group of salmon that are expressed physically, such as body size and length at age.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (i) Return

“Return” means the total number of salmon in a stock from a single brood (spawning) year surviving to adulthood; because the ages of adult salmon (except pink salmon) returning to spawn varies, the total return from a brood year will occur over several calendar years; the total return generally includes those mature salmon from a single brood year that are harvested in fisheries plus those that compose the salmon stock’s spawning escapement; “return” does not include a run, which is the number of mature salmon in a stock during a single calendar year.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (j) Run

“Run” means the total number of salmon in a stock surviving to adulthood and returning to the vicinity of the natal stream in any calendar year, composed of both the harvest of adult salmon plus the escapement; the annual run in any calendar year, except for pink salmon, is composed of several age classes of mature fish from the stock, derived from the spawning of a number of previous brood years.

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (k) Sustained Escapement Threshold

“Sustained escapement threshold” is a level of escapement, below which the ability of the salmon stock to sustain itself is jeopardized; in practice, SET can be estimated based on lower ranges of historical escapement levels, for which the salmon stock has consistently demonstrated the ability to sustain itself and is established by the Department in consultation with the board, as needed, for salmon stocks of management or conservation concern.”

*[Supplementary notes: This definition was developed and adopted by the Alaska Board of Fisheries and subsequently adopted by the CIRPT.]*

## (l) Wild Salmon Stock

“Wild salmon stock” means a stock of salmon that originates in a specific location under natural conditions; “wild salmon stock” may include an enhanced or rehabilitated stock if its productivity is augmented by supplemental means, such as lake fertilization or rehabilitative stocking.

*[Supplementary notes: This definition results from a CIRPT modification to the definition set out in Alaska Board of Fisheries “Sustainable Salmon Fisheries Policy”.]*

## (m) Yield Concern

“Yield concern” means a concern arising from a chronic inability, despite use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock’s escapement needs; a yield concern is less severe than a conservation concern.

*[Supplementary notes: This definition results from a CIRPT modification to the definition set out in Alaska Board of Fisheries “Sustainable Salmon Fisheries Policy”. In previous work the CIRPT had used the phrase “low” to describe such stocks.*

## 3.3.3 Alaska Department of Fish and Game's "Genetic Policy"

The Alaska Department of Fish and Game's "Genetic Policy" uses five pivotal terms which are loosely defined and strongly suggests the regional planning team as the body which will apply these terms to regional considerations. The terms are "stock", "genetic variability", "significant stock", "unique stock" (atypical stock), and "wild stock sanctuaries" (stock reserve).

The CIRPT supports use of the concepts these terms represent in project planning and implementation, and in the following paragraphs the CIRPT presents its understanding of these terms. This is obviously not the only interpretation possible, but it does define the terms in a fashion which makes the concepts they represent functional in this salmon enhancement planning effort.

## 3.3.3.1 Salmon Stock

“Salmon stock” means a locally interbreeding group of salmon that is distinguished by a distinct combination of genetic, phenotypic, life history, and habitat characteristics.

*[Supplementary notes: This definition results from a CIRPT modification to the definition set out in Alaska Board of Fisheries “Sustainable Salmon Fisheries Policy”. The level of data available at this time does not allow the CIRPT to deal with the concept of stocks, if stock is defined in a too narrow or technical fashion. In this planning effort “stock” will be used most often to refer to a group of fish of a given species that is identified not by examination of individual members but rather by characteristics such as its run timing and the river system in which it spawns. This concept is generally applicable to enhancement or rehabilitation project planning and review in all areas. It does not require a particular set of qualifiers for each planning unit.]*

## 3.3.3.2 Genetic Variability

“Genetic variability”, referred to in some quarters as “genetic integrity”, for purposes of this planning effort can be thought of as maintenance - in "an unimpaired condition" - of

that interaction of genes within a given gene pool which allows the stock to maintain a high level of natural adaptability.

*[Supplementary notes: This definition was developed and adopted by the CIRPT in the absence of any other suggested definition. Although for virtually all salmon stocks under consideration that genetic composition and interaction has not been identified, it is assumed to exist, to be in a continual state of evolution and to have a positive value. This evolutionary process includes the influences of the naturally occurring, year-to-year differential survival and reproductive success of specific portions of the stock and the effects of natural straying into and out of the stock. Components of proposed enhancement projects must be evaluated with caution to maintain such a grossly identified genetic variability given the current level of information one can only be cautious about certain categories of enhancement projects. One such component involves the rapid and relatively large scale introductions of new and obviously different genetic material. Another category involves projects where new genetic material is not being introduced, but one segment (spatial or temporal) of the existing stock is being disproportionately affected by the enhancement, e.g. eggs taken only from the early part of the run. This concept is generally applicable to enhancement or rehabilitation project planning and review in all areas. It does not require a particular set of qualifiers for each planning unit.]*

#### 3.3.3.3 Significant Stock

“Significant stocks” are being identified by size, and that size varies by species. For purposes of planning the CIRPT has set the following minimum size criteria for significant stocks in Cook Inlet: king salmon – 400 fish; coho salmon and chum salmon – 800 fish; sockeye salmon – 2,000 fish and pink salmon – 5,000 fish.

*[Supplementary notes: This definition was developed and adopted by the CIRPT in the absence of any other suggested definition. Stocks that are to be designated "significant" must be of a sufficient size to maintain themselves. In this case what is being identified is a stock that can continue to successfully survive even though it may be at a level well below what users would judge to be the optimum level or what the habitat could probably support. This definition should not be construed to devalue the collective importance of the many smaller or "non-significant" stocks. Applying this designation amounts to identifying the major discrete components of the total salmon resource of the planning unit being considered.]*

#### 3.3.3.4 Unique Stock

For these planning purposes it is useful to define a "unique stock" as an "atypical stock" that can be identified by exhibiting gross characteristics that are noticeably different from the prevailing regional patterns for that species.

*[Supplementary notes: This definition was developed and adopted by the CIRPT in the absence of any other suggested definition. The term "unique stocks", as it seems to be most commonly used, implies an undefined level of discrimination among stocks and varying degrees of positive connotation associated with the word "unique". In the most absolute sense each individual fish is "unique", but this level of discrimination is beyond practical ability to recognize or act on the "uniqueness". In addition the level of "uniqueness" is regularly and continuously subjected to alteration through such natural phenomena as were discussed in the concept of genetic integrity. For the purposes of this type of planning and for day-to-day management such a use of the "uniqueness" concept is not functional. The degree to which such a difference or "uniqueness" has a particular value (positive or negative) must be judged on a case- by-case basis.]*

### 3.3.3.5 Wild Stock Sanctuary / Stock Reserve

A "wild stock sanctuary / stock reserve" is defined by four conditions: (1) it must have no previous history of enhancement and is precluded from future enhancement; (2) it must be of a size sufficient to allow for substantial egg takes without posing serious threat to the viability of the stock; (3) it must be believed to be representative of the stocks of the area; and (4) it must be so designated by the CIRPT.

*[Supplementary notes: This definition was developed and adopted by the CIRPT based on the concept suggested in the ADF&G "Genetics Policy". Overall planning and prudence dictates the identification of safeguards which would provide at least a minimum level of protection in the event of unanticipated adverse conditions. It is in this vein the "Genetic Policy" employs the term "wild stock sanctuary" to which the CIRPT has chosen to add the complementary term "stock reserve" because of the function this concept serves in this planning work. The "wild stock sanctuary" tends to make a more geographic reference, while the term "stock reserve" emphasizes the group of fish situated in that location. The Policy states:*

*"Drainages should be established as wild stock sanctuaries on a regional and species basis. These sanctuaries will be areas in which no enhancement activity is permitted except gamete removal for brood stock development. Use of such reservoirs for brood stock development should be considered on a case-by-case basis, and sliding egg take removal schedules applied to such systems should be conservative."*

*The primary reason for giving the special consideration associated with designation as a "wild stock sanctuary / stock reserve" to specific stocks is to assure there will be, at least, a nominal number of stocks which are not known to have experienced any potential genetic alteration resulting from enhancement. The practical value of such a reserve is that there will always be a reservoir of naturally adapting fish available to serve as brood stock should they be needed.*

*In each planning unit the CIRPT considered in the Cook Inlet drainage, all stocks were reviewed to determine if one or more of them was suitable to function as a "wild stock sanctuary / stock reserve". It was not mandatory that there be a "wild stock sanctuary / stock reserve" for each of the five species in each planning unit. It was the CIRPT's intent that with the completion of all ten planning unit analyses, several wild stock sanctuaries / stock reserves for each of the five species would have been established within Cook Inlet.*

*This application of the concept recognized that in a given enhancement project proposal the first brood stock choice will probably always be the stock identified as needing enhancement. Should the target stock not be a suitable source of eggs for any reason, other local stocks including the nearest "wild stock sanctuary / stock reserve" will be examined for their suitability.]*

### 3.3.4 Relationships Between Concepts

The concept of genetic variability as defined in this planning process is generally applicable to all proposed projects. It is one of the underlying concepts supporting the idea of wild stock sanctuaries and stock reserves.

The concept of significance as defined here has a direct relationship to the concepts of wild stock sanctuaries and stock reserves. For a stock to be suitable as a reserve it must exhibit the size to be self-sustaining (significant).

The concept of stock reserves also has a relationship to the concept of unique stocks. One of the characteristics of a stock reserve is the degree to which it is representative of local stocks. By definition then a unique stock will not be designated as a stock reserve.

Should a unique stock be deemed to merit special protection that protection must be afforded on a case-by-case basis apart from the protection afforded by the stock reserve status.

### 3.4 ASSUMPTIONS

#### 3.4.1 Changing Times

Since the creation of the *Phase I Plan 1981 – 2000*, factors influencing all facets of the salmon industry have experienced a great deal of change as have the problems facing the salmon themselves. During the 1980's, markets for commercially harvested salmon were strong, but plummeted in the 1990's before rising again to more acceptable levels in recent years. This period of cyclical pricing for each species coincided with a significant increase in salmon farming worldwide. Such factors forced marketing strategies for Alaskan salmon to become progressively more dynamic. Higher quality product delivered to an increasingly domestic market is recapturing some of the value for the demand side of the industry. Refinement of management plans and techniques will help to maintain a strong resource on the supply side. The State has largely divested itself of hatchery facilities that benefit commercial salmon fisheries, while retaining those that promote additional recreational fishing opportunities. Because of these numerous influences, overall support for commercial fisheries related enhancement activities throughout the state in general, and in Cook Inlet in particular, has waned in recent years, resulting in a reduction in State funding for supplemental production projects. Given this general trend, it is difficult to predict what the long-term future will bring to the salmon industry. However, the short-term outlook is expected to be one of continued adjustment and adaptation directed at building a healthy and abundant resource and establishing a stable and productive niche for the industry.

#### 3.4.2 Availability of Support Facilities

The rise and subsequent decline in the number of hatcheries available in Cook Inlet to support rehabilitation or enhancement projects was discussed and illustrated in Chapter 1.0, section 1.2.2. At this writing there are only four hatcheries operating in Cook Inlet. Two of those are operated by the State and dedicated to providing increased opportunities for recreational harvest of salmon. The remaining two are funded privately and are tasked with providing additional salmon to rehabilitate depressed stocks, utilize unrealized habitat potential and/or for harvest.

If the financial resources and public support were available today to start work on an entirely new facility in Cook Inlet, more than a decade would likely be required before site selection, design, permitting, construction and program build-up could be completed. There is no indication that those resources and that support will be present in the foreseeable future; therefore, this plan update will not predicate any new supplemental production arising from a new hatchery being constructed in Cook Inlet.



### 3.4.3 Recurring Demands for Rehabilitation or Enhancement Projects

The notion of a need for localized “intervention” to save or strengthen a particular segment of the Cook Inlet salmon resource, whether real or perceived, has historically persisted in Cook Inlet. If that “intervention” is to allocate or reallocate the harvest of that resource rather than to protect or preserve the resource base, it is a matter for the Board of Fisheries rather than the Regional Planning Team. If, however, as is frequently the case, the “intervention” is to strengthen the resource base through a rehabilitation or enhancement project, the matter then becomes of direct concern to the Regional Planning Team.

The cyclical nature of these demands is well documented, as is the sense of “crisis” or urgency that accompanies them. It is appropriate for the Regional Planning Team to attempt to anticipate these situations and to establish a procedural framework in which they can be evaluated and acted upon in a rational, expedient and effective way.

### 3.4.4 The Status of Baseline Information

Despite the lengthy history of exploitation of the salmon resources of the Cook Inlet region, there remain significant gaps in baseline fishery information. Efforts that are not directly connected to the more attention-getting issues such as harvest opportunities do not generally elicit either financial support or broadly based public interest.

There are less than a dozen counting weirs, video projects or sonar efforts to assess adult salmon returns annually on average in the entire region covered by this plan, while less than a half-dozen efforts to count outmigrating juvenile salmon are usually in place. The only supplement to this data collection is “snapshot” information collected by aerial and ground surveys. This leaves significant gaps in the baseline information regarding the distribution of adult salmon and even greater data gaps in the knowledge of the year-to-year productivity of many components of the major Cook Inlet systems.

The detailed genetic investigations required to adequately evaluate the genetic considerations applicable to proposed enhancement or rehabilitation projects are minimal at best, and this is not expected to change in the near-term. Therefore, genetic decisions are primarily based on the best available information, which in many cases amounts to the implied genetic differences reflected in such gross characteristics as average size of fish, run-timing and preferred spawning habitat. This general deficiency of information on which genetic decisions are made is critical to understanding the subsequent findings and recommendations about salmon enhancement. Nonetheless, the best available baseline information of necessity must be utilized in an attempt to anticipate critical changes and formulate a timely and reasoned response.

### 3.4.5 Policy Position of the National Park Service

In response to a review draft of the Cook Inlet Regional Salmon Enhancement Plan 1981 - 2000 (the Phase I Plan 1981 - 2000) and stream clearance, lake fertilization and fishpass construction projects proposed therein, the National Park Service advised that such work would “constitute an inappropriate and unacceptable change to National Park Service lands and waters and are directly contrary to both law and policy.”

In subsequent correspondence which the CIRPT has received from the National Park Service, the agency has further explained, “Service management ... is guided by the National Park Service (NPS) Organic Act of 1916, its amendment in 1978, the Alaska National Interest Lands

Conservation Act (ANILCA) of 1980, and Senate Report 96-413 which details the Congressional intent of ANILCA.

Fishery enhancement activities, for the purpose of maximizing the productivity of fish and wildlife, are clearly contrary to Congressional mandates and Service policies for the management of national parks in Alaska. Pursuant to Congressional intent and NPS policy, and in keeping with the memorandum of understanding between NPS and ADF&G, in general the NPS cannot employ or permit methods that artificially manipulate natural fish and wildlife habitats or populations. Park lands ... subunit will, instead, serve as benchmarks for evaluating the effects of human activities on salmon resources and aquatic habitats elsewhere."

It is reasonable to assume that this general policy is still in effect and will remain so for the indefinite future.

#### 3.4.6 Unique Stocks

The CIRPT consider the concept of unique stocks as it considered the resources in each unit. It reached the conclusion there were no stocks it could designate as unique; and, therefore, discussion of unique stocks does not occur in each individual unit chapter.

#### 3.4.7 Genetic Compatibility

Specific decisions about the genetic compatibility of stocks on a stream-specific basis to assure compliance with the established genetic guidelines for the protection of natural stocks should be made by the technical staff of the Alaska Department of Fish and Game through the standard procedure including the Fish Transport Permit process.

### 3.5 OBJECTIVES

#### 3.5.1 Adopt Common Language

There are at least five federal agencies, three state agencies, numerous non-governmental organizations and municipal governments as well as the general public that may have an interest in any proposed salmon enhancement or rehabilitation project. The accurate assessment of any proposal depends directly on a common understanding of the language in which the proposed project is described.

#### 3.5.2 Understand Salmon Enhancement and Rehabilitation in the Context of Management of the Overall Resource

There are several ways in which rehabilitation or enhancement of anadromous salmon runs can and should be integrated into management of the overall salmon resource. In the broadest terms they can be divided into projects that do not involve stocking and those that do.

In-season management of the fisheries attempts to assure that adequate escapements of returning salmon are realized in all freshwater systems. Within some of these systems there may be further attempts to achieve identified escapements into various tributary systems. These efforts involve restricting the times, locations and means of harvest. However, there are other non-harvest related issues that may prevent these "numerically successful" escapements from being "reproductively successful". For instance, in-stream barriers such as

beaver dams, logs or eroding stream beds may prevent the fish that have passed an escapement enumeration mechanism from reaching their preferred spawning grounds. In such cases enhancement in the form of improving access to habitat is a complement to harvest management in the overall goal of maintaining a healthy resource base.

Investigation of the condition of the resource beyond enumerating harvest and escapement may reveal that some more direct biological rehabilitation or enhancement effort is warranted. Among the choices that fall into this category are actions as passive as lake fertilization to efforts as active as supplemental fry or smolt stocking. The key to making decisions about the selection and implementation of such techniques rests on thorough assessments of both the targeted stock of fish, the habitat in which it reproduces and rears and the potential impacts of the project on non-targeted stocks. If stocking is involved, then close coordination with the managers is essential to provide for any prudent adjustments in the harvest management strategy. Once again the goal of both types of work is the maintenance of a healthy resource base.

### 3.5.3 Identifying Opportunities for Organizational Cooperation

Cooperative efforts between multiple agencies and organizations often represent the most effective means of positively influencing the salmon resource. The involvement of such groups may be in the form of control of the land use policies governing the salmon or it may be an organizational mission to work with the specific resource wherever it may occur. In some cases an agency or organization can make a valuable contribution of funds, skills or materials, but cannot provide all of the resources necessary to entirely complete a project. Through integration of efforts, the salmon resource theoretically receives the maximum benefit available to it.

If all contributing organizations clearly understand the same set of overall priorities and the strengths and limitations of the other potential participants, cooperation will be substantially enhanced. This type of planning process should strive to facilitate that common understanding.

### 3.5.4 Anticipating Issues

Rehabilitation and enhancement projects are most often considered quite long-term since results of an action may not be clear for at least a life cycle of the species which may be as long as six or seven years. Therefore, waiting until a situation has reached an obviously compelling character before beginning a response reduces the effectiveness of the response and the timeliness of the resolution.

A regular review of baseline conditions and the identification of anomalies in given systems in the context of their historic patterns offer the best opportunity for a reasoned and effective response. Prior consideration of the best specific opportunities for salmon rehabilitation or enhancement projects within each system will facilitate that response even further. Finally, a conservative approach from the onset of any enhancement project, by beginning below what is perceived as the maximum level for that project, and subsequently evaluating the results, will frequently avoid the mistake of potentially overtaxing the long-term sustainability of the resource in question.

### 3.5.5 Improving Public Understanding of the Benefits and Limitations of Salmon Rehabilitation and Enhancement Projects

Salmon rehabilitation or enhancement projects can seldom be implemented quickly or have their benefits realized in the short term. The removal or modification of instream barriers preventing the upstream migration of adult salmon provides one of the exceptions to this general rule.

The more common case begins with the identification of a potential problem deemed worthy of additional investigative effort followed by the commitment of staff time and financial resources on the part of some agency or organization. Given the seasonal nature of the salmon resource and the budgeting cycles of organizations, the commitment for the initial assessment work may consume a year or more, while the work itself takes an additional year or more. Thus, a minimum of two years frequently passes from the initial time of problem identification until completion of the remedial action. Given the cyclical nature of the salmon resource it may yet be several more years before the results are obtained.

If the chosen action involves stocking of juvenile salmon, another time element is added. Such stocking is normally preceded by at least three years of study of the potential receiving system. During this time a potential brood source would have to be identified and incubation space secured. Once the egg collection has actually begun, it will probably be at least one full life cycle of the species involved (two to seven years) before any benefit is realized.

It is important for the public to understand that while such efforts have a role in the overall well being of the salmon resource, the decision to undertake such work is not hasty nor are the benefits instantaneous.

### 3.5.6 Standardized Evaluation

All rehabilitation or enhancement projects should be evaluated according to a standardized checklist of important considerations. That checklist is incorporated into this document as EXHIBIT 3-3. These recommendations speak to the approach that should be taken both when making a proposal for a rehabilitation or enhancement project and when evaluating such a proposal regardless of its location in Cook Inlet.

**EXHIBIT 3-3 PROJECT REVIEW CHECKLIST**

**THE PROJECT**

- 1 The project location is \_\_\_\_\_
- 2 The project's target species is \_\_\_\_\_
- 3 The project sponsor is \_\_\_\_\_
- 4 What is the reason for proposing the implementation of the project?
  - a. a stock at reduced production levels? .....  YES  NO
  - b. a perceived user need? .....  YES  NO
  - c. a site-specific habitat opportunity? .....  YES  NO
  - d. a particular management issue? .....  YES  NO
  - e. partial fulfillment of a land use plan? *plan:* \_\_\_\_\_  YES  NO
  - f. other \_\_\_\_\_

**IMPLEMENTATION ISSUES**

- 5 Is the project technically feasible (appropriate land use, manageable, etc.)?
  - a. Are the land use policies of the public landholder compatible with fisheries enhancement and harvest? .....  YES  NO  
The landholder is \_\_\_\_\_
  - b. Could an enhancement project be implemented at the proposed site without conflicting with an existing social, cultural, commercial or recreational non-fishing use ( viewing, urban parkland, etc.)? .....  YES  NO  
Current uses are \_\_\_\_\_
- 6 Is the project biologically sound (suitable habitat, appropriate species selection, etc.)?  YES  NO
  - a. Is the system physically suitable for any enhancement project other than a smolt release? .....  YES  NO
  - b. Does the system have more than a nominal amount of the lake rearing area necessary for successful sockeye salmon fry stocking? .....  YES  NO
  - c. Does the system have more than a nominal amount of the slough/beaver pond and/or appropriate flow regime rearing area necessary for successful coho or king salmon fry stocking? .....  YES  NO
  - d. Does the project allow for continued protection of indigneous stocks? .....  YES  NO
- 7 Will the project require involvement of entities other than the project sponsor?  YES  NO  
If so, does it have the commitment of that entity? .....  YES  NO  
Name the entity \_\_\_\_\_
- 8 Will the project require annual input (manpower, permitting, commitment of facility space)?  YES  NO  
If so, does the proposal contain the mechanism and budget for that annual program?  YES  NO

(CONTINUED ON THE NEXT PAGE)

**EXHIBIT 3-3** (CONTINUED) **PROJECT REVIEW CHECKLIST**

**IMPLEMENTATION ISSUES (continued)**

- 9 Will the project be apt to cause indirect costs to be incurred by other entities?  YES  NO  
 Name the entity \_\_\_\_\_
- 10 Are evaluation mechanisms that will assess the degree to which the project performs as anticipated provided for in the project proposal?  YES  NO
  - Hydroacoustic surveys  YES  NO
  - Smolt enumeration  YES  NO
  - Mark and recapture  YES  NO
  - Adult enumeration  YES  NO
  - Straying surveys  YES  NO
  - Other \_\_\_\_\_
- 11 Does the project conflict with existing enhancement plans that have not been implemented?  YES  NO
- 12 Does the proposed project fully utilize the site's potetnial?  YES  NO

**HARVEST ISSUES**

- 13 What user groups are expected to benefit, and what is the magnitude of that benefit?  
 \_\_\_\_\_  
 \_\_\_\_\_
- 14 Is there a loss of harvest opportunity to existing users?  YES  NO  
 If so, what is the magnitude of the loss? \_\_\_\_\_
  - a. If there is a measurable loss of harvest opportunity projected, is there an alternative project available that does not cause such a loss?  YES  NO
  - b. If there is a measurable loss of harvest opportunity projected, what are the mitigation options proposed for displaced users?  
 \_\_\_\_\_  
 \_\_\_\_\_
- 15 Have the most probable harvest scenarios for fish produced by the project been considered?  YES  NO
  - a. Is the stream system transected by the road system (single contact with the system)?  YES  NO
  - b. Do portions of the road parallel (in proximity) substantial portions of the stream system (multiple contact opportunities)?  YES  NO
  - c. Is there existing physical access (trail, etc.) from the road to the potentially fishable portions of the stream?  YES  NO
  - d. Is access over public land or could it be developed over currently-owned public land?  YES  NO
  - e. Are there existing, publicly-owned recreational harvest support facilities at the site (primarily off-road parking)?  YES  NO
  - f. Is there publicly-owned space to create or expand recreational harvest support facilities?  YES  NO

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## CHAPTER 4.0

### KAMISHAK BAY UNIT ANALYSIS

#### 4.1 OVERVIEW

Kamishak Bay is on the southwestern corner of Cook Inlet and is not accessible by road. Frequently severe weather limits accessibility by boat or plane. Large public land holdings and very little private development characterize the area. The remote nature of this unit has direct bearing on the ability to monitor, manage, rehabilitate, enhance and harvest the salmon resources. The distance involved makes it costly to transport material and staff and to provide the requisite support for any type of project activity. The limitations imposed by unfavorable weather frequently make both management and harvest less precise than it would be in more accessible locations. Under the current regimen there is a limited recreational fishery focused on streams in the Katmai National Park and Preserve in the southern most portion of the unit and a commercial purse seine salmon fishery throughout the unit. (see EXHIBIT 4-1)

#### 4.2 RELEVANT LAND USE POLICIES

Substantial parts of the drainage have been the subjects planning efforts of one type or another. It is important to identify what affect those plans and the recommendations they include may have on fish production and fishery operation.

##### 4.2.1 National Park Service:

The Katmai National Park and Preserve includes the majority of each of the Kamishak Bay tributary systems entering the Bay between Cape Douglas and the Little Kamishak River. This fact places significant limitations on the rehabilitation or enhancement work that can be carried out. (See section 3.4.5)

##### 4.2.2 Alaska Department of Fish and Game:

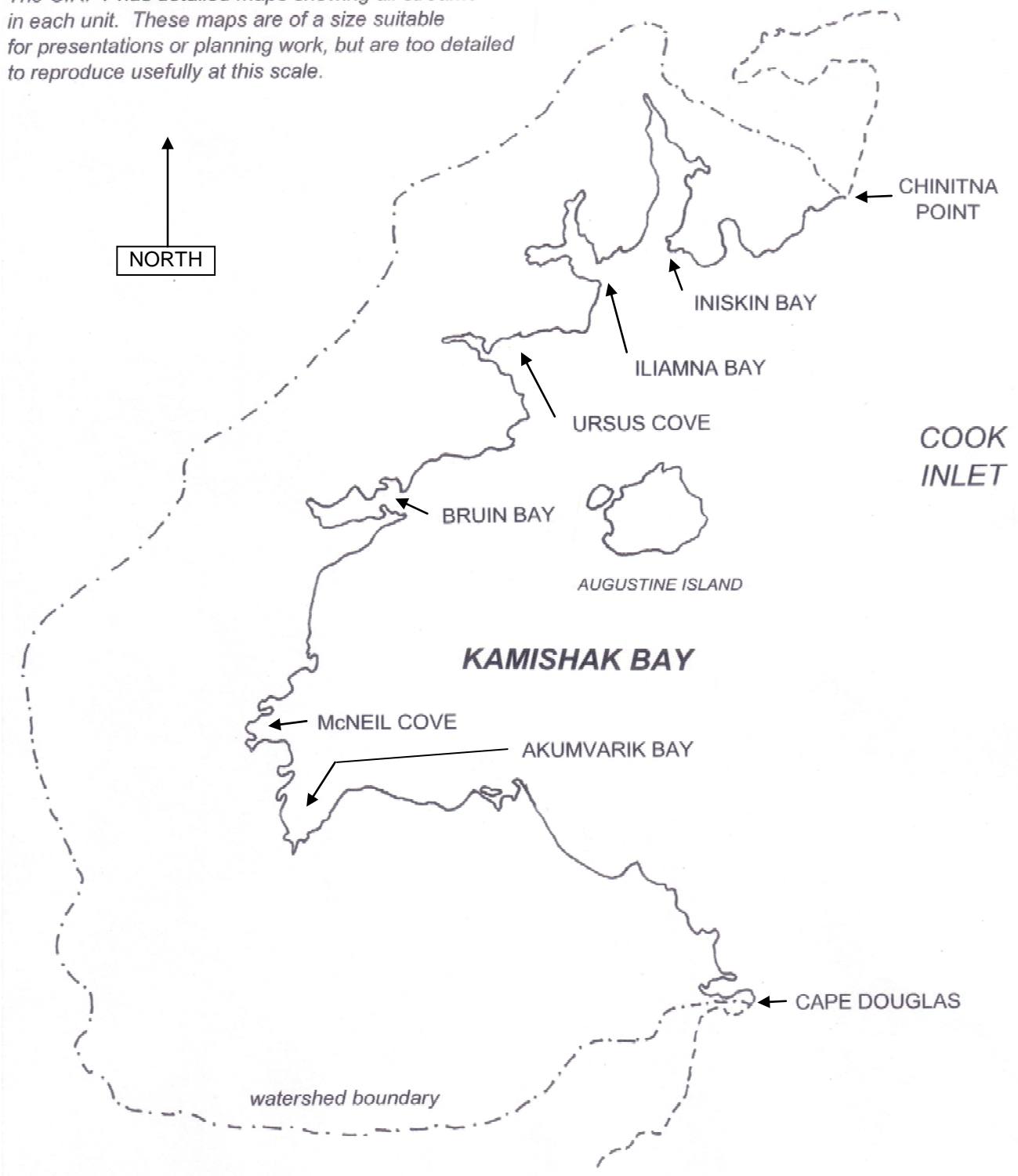
The Alaska Department of Fish and Game, through its Division of Wildlife Conservation, oversees both the McNeil River State Game Sanctuary and the McNeil River State Game Refuge. Notable among the watersheds either partially or totally within the boundaries of one or both of these landholdings are the Kamishak River, Little Kamishak River, Mikfik Creek and Lake, McNeil River, Paint River and Chenik Creek and Lake.

Legislation passed in 1991 and effective January 1, 1993 expanded the McNeil River State Game Sanctuary by adding a parcel to the southeast including the mouth of the Kamishak River and a parcel to the north including a substantial portion of the mainstem of the Paint River. The legislation contained the following statements of purpose.

**EXHIBIT 4-1**

**KAMISHAK BAY UNIT MAP**

The CIRPT has detailed maps showing all streams in each unit. These maps are of a size suitable for presentations or planning work, but are too detailed to reproduce usefully at this scale.



scale is approximately 1 inch = 10.6 miles

"... The McNeil River State Game Sanctuary is established to

- (1) provide permanent protection for brown bear and other fish and wildlife populations and their habitats, so that these resources may be preserved for scientific, aesthetic, and educational purposes;
- (2) manage human use and activities in a way that is compatible with (1) of this subsection and to maintain and enhance the unique bear viewing opportunities in the McNeil River State Game Sanctuary established under AS 16.20.160;
- (3) provide opportunities that are compatible with (1) of this subsection for wildlife viewing, fisheries enhancement, fishing, for temporary safe anchorage, and for other activities."

"... The McNeil River State Game Refuge is established to

- (1) provide permanent protection for brown bear and other fish and wildlife populations and their habitats, so that these resources may be preserved for scientific, aesthetic, and educational purposes;
- (2) manage human use and activities in a way that is compatible with (1) of this subsection and to maintain and enhance the unique bear viewing opportunities in the McNeil River State Game Sanctuary established under AS 16.20.160;
- (3) provide opportunities that are compatible with (1) of this subsection for wildlife viewing, fisheries enhancement, fishing, hunting, and trapping, for temporary safe anchorage, and for other activities."

In September 1993 ADF&G promulgated the McNeil River State Game Sanctuary and Refuge Draft Operational Management Plan. "This management plan provides detailed guidelines in accordance with the statutes of the McNeil River State Game Sanctuary and Refuge ..., the Commissioner's Title 16 permitting and other authorities, the authorities of the Boards of Fisheries and Game, and sanctuary access regulations ..., and hunting and fishing regulations."

"... Because of the diverse authorities of the Boards and Commissioner, this management plan will be implemented in several ways.

- 1) Guidelines that require Board of Game approval (primarily sanctuary access, all hunting regulations, and use of off-road vehicles for hunting) will be submitted as proposals by the Commissioner, after coordinated review by the appropriate resource management divisions.
- 2) Guidelines that require Board of Fisheries approval (e.g., in-river escapement goal modifications, sport fishing regulations) will be submitted as proposals by the Commissioner, after coordinated review by the appropriate resource management divisions.
- 3) Guidelines that require regulations adopted under the Commissioner's authority (primarily refuge regulations and permits) will be adopted by the Commissioner after fulfilling the public notice requirements of the Administrative Procedures Act.

- 4) Guidelines that are within the authority of the Commissioner (e.g., wildlife research and management activities, fish stocking permits, some salmon escapement goals) will be implemented according to the management plan (and pertinent appendices) after the management plan is reviewed by the Boards and adopted by the Commissioner."

ADF&G is currently in the process of updating the McNeil River State Game Sanctuary and Refuge Draft Operational Management Plan. The projected completion date for this plan is the first half of 2007.

4.2.3 Alaska Department of Natural Resources:

In addition to its general responsibilities for State lands the Alaska Department of Natural Resources (ADNR) has created the Kamishak Special Use Area and Site Specific Plan in 1991. The intent of this action was to implement management guidelines for two parcels of State land between Katmai National Park and Preserve and the McNeil River State Game Sanctuary. The management guidelines were in response to a growing demand for the use of these lands, mainly by "commercial recreational users". ADNR felt that management of commercial recreational uses of these areas was important in order to minimize contact between humans and the brown bear population of the area and impacts on valuable bear habitat. Although the primary objective of this site specific plan and special use area designation is to regulate commercial recreational users to reduce the high potential for conflict/habituation problems with brown bears, it also recognizes the importance of the area for its remote character, fishery resources habitat and harvest potential.

4.2.4 Kenai Peninsula Borough:

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation.

In addition the Borough conducts consistency reviews to evaluate a proposed project's compatibility with the Coastal Management Program.

**4.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 4-2A through 4-2-E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G's historical escapement counts.

**KEY FOR EXHIBITS 4A THROUGH 4E**

In the following exhibits there are numbers of fish cited under two headings, "*Highest Number of Fish Reported for the System*" (column 3) and "*Most Recent Number of Fish Reported for the System*" (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey

EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 4-2A KAMISHAK BAY UNIT KING SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
<b>CAPE DOUGLAS SOUTH SIDE OF SUKAI BAY</b>						
<i>south-to-north geographic reference:</i>						
Unnamed Tributary	248-40-10150	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Tributary	248-40-10120	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Tributary	248-40-10105	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Douglas River	248-40-10100	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Tributary	243-10-10150	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Tributary	243-10-10075	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Tributary	243-10-10070	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Tributary	243-10-10050	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Kamishak River	243-10-10040	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2021	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2031	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2041	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2059	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2069	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2073	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
South Fork Kamishak R.	243-10-10040-2087	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2125	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-10-10040-2141	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Little Kamishak River	243-10-10030	UNKNOWN	2	PC 2005		
Strike C.	243-10-10030-2015	UNKNOWN	UNKNOWN			
Mikfik Creek	243-20-10050	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
McNeil River	243-20-10035	UNKNOWN	UNKNOWN			
Paint River	243-20-10020	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Chenik Creek	243-30-10200	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Amakdadori Creek	243-40-10010	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
Unnamed Trib.	243-40-10010-2008	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT		
<i>[ continued on following page ]</i>						

EXHIBIT 4-2A [ continued from preceding page ]						
KAMISHAK BAY UNIT KING SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
<b>south-to-north geographic reference:</b>						
Unnamed Tributary [ Bruin Bay River ]	243-50-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	CONTACT POINT SOUTH SIDE OF BRUIN BAY			
Unnamed Trib.	243-50-10050-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-50-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-50-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-60-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-60-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Sunday Creek	248-10-10002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-10-10008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-10-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Ursus Cove River ]	248-10-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Brown's Peak Creek ]	248-10-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>south-to-north geographic reference:</b>						
Unnamed Tributary	248-20-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	COTTONWOOD BAY			
Unnamed Tributary [ Cottonwood Creek ]	248-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	248-20-10040-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ North Head Creek ]	248-20-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-20-10067	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Sugarloaf Creek ]	248-20-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Inskin River	248-20-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Portage Creek	248-20-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Right Arm Creek	248-20-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Bowser Creek	248-30-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Brown Creek	248-30-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>south-to-north geographic reference:</b>						
			CHINITNA POINT			

EXHIBIT 4-2B KAMISHAK BAY UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<b>south-to-north geographic reference:</b>									
Unnamed Tributary	248-40-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	248-40-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	248-40-10105	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Douglas River	248-40-10100	4,200 PC 1982	400 PC 2000						
Unnamed Tributary	243-10-10150	UNKNOWN	UNKNOWN						
Unnamed Tributary	243-10-10075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	243-10-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	243-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Kamishak River	243-10-10040	5,000 PC 1986	3,900 PC 2005						
Unnamed Trib.	243-10-10040-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2059	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2069	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2073	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
South Fork Kamishak R.	243-10-10040-2087	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Kamishak River	243-10-10030	UNKNOWN	10 PC 2005						
Strike C.	243-10-10030-2015	UNKNOWN	10 PC 2005						
Mikfik Creek	243-20-10050	35,000 PC 1982	6,000 PC 2005						
McNeil River	243-20-10035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Paint River	243-20-10020	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Chenik Creek	243-30-10200	17,000 PC 2004	14,500 WC/VC 2005						
Amakdedori Creek	243-40-10010	11,800 PC 2003	1,700 PC 2005						
Unnamed Trib.	243-40-10010-2008	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

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EXHIBIT 4-2B		KAMISHAK BAY UNIT SOCKEYE SALMON						
[ continued from preceding page ]								
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	
							SEPT.	
<i>south-to-north geographic reference:</i>								
Unnamed Tributary [ Bruin Bay River ]	243-50-10050	UNKNOWN	20 PC 2005					
Unnamed Trib.	243-50-10050-2014			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-50-10040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-50-10010	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	243-60-10180			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-60-10190			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Sunday Creek	248-10-10002			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-10-10008			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-10-10010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Ursus Cove River ]	248-10-10020	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	248-10-10030			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Brown's Peak Creek ]	248-10-10040	UNKNOWN	UNKNOWN					
Unnamed Tributary	248-10-10050			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<i>south-to-north geographic reference:</i>								
Unnamed Tributary	248-20-10030			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Cottonwood Creek ]	248-20-10040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	248-20-10040-2015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ North Head Creek ]	248-20-10060			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-20-10067			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary [ Sugarloaf Creek ]	248-20-10070			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Iniskin River	248-20-10080			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Portage Creek	248-20-10090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Right Arm Creek	248-20-10100			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Bowser Creek	248-30-10010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Brown Creek	248-30-10020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<i>south-to-north geographic reference:</i>								
				CHINITNA POINT				

KAMISHAK BAY UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<b>south-to-north geographic reference:</b>									
Unnamed Tributary	248-40-10150			<b>CAPE DOUGLAS SOUTH SIDE OF SUKAI BAY</b>					
Unnamed Tributary	248-40-10120			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	248-40-10105			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Douglas River	248-40-10100	UNKNOWN	UNKNOWN						
Unnamed Tributary	243-10-10150	UNKNOWN	UNKNOWN						
Unnamed Tributary	243-10-10075			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	243-10-10070			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	243-10-10050			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Kamishak River	243-10-10040	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2021	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2031	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2041	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2059	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2069	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2073	UNKNOWN	UNKNOWN						
South Fork Kamishak R.	243-10-10040-2087	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2125	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2141	UNKNOWN	UNKNOWN						
Little Kamishak River	243-10-10030	UNKNOWN	UNKNOWN						
Strike C.	243-10-10030-2015	UNKNOWN	UNKNOWN						
Mikfik Creek	243-20-10050	UNKNOWN	UNKNOWN						
McNeil River	243-20-10035	UNKNOWN	UNKNOWN						
Paint River	243-20-10020			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Chenik Creek	243-30-10200			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Amakodori Creek	243-40-10010	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-40-10010-2008	UNKNOWN	UNKNOWN						

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EXHIBIT 4-2C							KAMISHAK BAY UNIT COHO SALMON			
[ continued from preceding page ]										
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
<b>south-to-north geographic reference:</b>										
Unnamed Tributary [ Bruin Bay River ]	243-50-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Trib.	243-50-10050-2014		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	243-50-10040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	243-50-10010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	243-60-10180		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	243-60-10190		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Sunday Creek	248-10-10002		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	248-10-10008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	248-10-10010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary [ Ursus Cove River ]	248-10-10020	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	248-10-10030	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary [ Brown's Peak Creek ]	248-10-10040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	248-10-10050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
<b>south-to-north geographic reference:</b>										
Unnamed Tributary	248-20-10030		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary [ Cottonwood Creek ]	248-20-10040	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Trib.	248-20-10040-2015	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary [ North Head Creek ]	248-20-10060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	248-20-10067		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary [ Sugarloaf Creek ]	248-20-10070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Inskin River	248-20-10080	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Portage Creek	248-20-10090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Right Arm Creek	248-20-10100		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bowser Creek	248-30-10010	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Brown Creek	248-30-10020	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
<b>south-to-north geographic reference:</b>										
			CHINITNA POINT							

EXHIBIT 4-2D KAMISHAK BAY UNIT PINK SALMON									
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<b>south-to-north geographic reference:</b>									
Unnamed Tributary	248-40-10150	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	248-40-10120	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	248-40-10105	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Douglas River	248-40-10100	UNKNOWN	UNKNOWN						
Unnamed Tributary	243-10-10150	UNKNOWN	UNKNOWN						
Unnamed Tributary	243-10-10075	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	243-10-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	243-10-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Kamishak River	243-10-10040	100,000 EE 1962	14,900 EE 2000						
Unnamed Trib.	243-10-10040-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2059	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2069	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2073	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
South Fork Kamishak R.	243-10-10040-2087	UNKNOWN	UNKNOWN						
Unnamed Trib.	243-10-10040-2125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Trib.	243-10-10040-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Kamishak River	243-10-10030	100,000 EE 1962	3,400 EE 2002						
Strike C.	243-10-10030-2015	UNKNOWN	UNKNOWN						
Mikfik Creek	243-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
McNeil River	243-20-10035	UNKNOWN	UNKNOWN						
Paint River	243-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Chenik Creek	243-30-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Amakdedori Creek	243-40-10010	80,000 EE 1962	900 EE 2002						
Unnamed Trib.	243-40-10010-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 4-2D [ continued from preceding page ] KAMISHAK BAY UNIT PINK SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<b>south-to-north geographic reference:</b>									
Unnamed Tributary [ Bruin Bay River ]	243-50-10050	1,598,500 EE 2002	98,300 EE 2005						
Unnamed Trib.	243-50-10050-2014	UNKNOWN	UNKNOWN						
<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	243-50-10040								
<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	243-50-10010								
Unnamed Tributary	243-60-10180	UNKNOWN	UNKNOWN						
Unnamed Tributary	243-60-10190	UNKNOWN	UNKNOWN						
Sunday Creek	248-10-10002	346,700 EE 2003	116,200 EE 2005						
Unnamed Tributary	248-10-10008	UNKNOWN	UNKNOWN						
Unnamed Tributary	248-10-10010	UNKNOWN	UNKNOWN						
Unnamed Tributary [ Ursus Cove River ]	248-10-10020	UNKNOWN	UNKNOWN						
Unnamed Tributary	248-10-10030	UNKNOWN	UNKNOWN						
Unnamed Tributary [ Brown's Peak Creek ]	248-10-10040	285,000 EE 2003	61,000 EE 2005						
Unnamed Tributary	248-10-10050	UNKNOWN	UNKNOWN						
<b>south-to-north geographic reference:</b>									
<b>COTTONWOOD BAY</b>									
<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	248-20-10030								
Unnamed Tributary [ Cottonwood Creek ]	248-20-10040	UNKNOWN	UNKNOWN						
Unnamed Trib.	248-20-10040-2015	UNKNOWN	UNKNOWN						
Unnamed Tributary [ North Head Creek ]	248-20-10060	UNKNOWN	14,200 EE 2005						
Unnamed Tributary	248-20-10067	UNKNOWN	UNKNOWN						
Unnamed Tributary [ Sugarloaf Creek ]	248-20-10070	UNKNOWN	UNKNOWN						
Iniskin River	248-20-10080	UNKNOWN	UNKNOWN						
Portage Creek	248-20-10090	UNKNOWN	UNKNOWN						
Right Arm Creek	248-20-10100	UNKNOWN	UNKNOWN						
Bowser Creek	248-30-10010	UNKNOWN	UNKNOWN						
Brown Creek	248-30-10020	UNKNOWN	UNKNOWN						
<b>south-to-north geographic reference:</b>									
<b>CHINITNA POINT</b>									

KAMISHAK BAY UNIT CHUM SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
<b>south-to-north geographic reference:</b>						
Unnamed Tributary	248-40-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-40-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	248-40-10105	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Douglas River	248-40-10100	UNKNOWN	UNKNOWN			
Unnamed Tributary	243-10-10150	UNKNOWN	UNKNOWN			
Unnamed Tributary	243-10-10075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	243-10-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	243-10-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Kamishak River	243-10-10040	57,900 EE 2004	25,700 EE 2005			
Unnamed Trib.	243-10-10040-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	243-10-10040-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	243-10-10040-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	243-10-10040-2059	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	243-10-10040-2069	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	243-10-10040-2073	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
South Fork Kamishak R.	243-10-10040-2087	UNKNOWN	UNKNOWN			
Unnamed Trib.	243-10-10040-2125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Trib.	243-10-10040-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Little Kamishak River	243-10-10030	45,300 EE 2004	12,100 EE 2005			
Strike C.	243-10-10030-2015	UNKNOWN	UNKNOWN			
Mikfik Creek	243-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
McNeil River	243-20-10035	49,000 EE 1988	17,400 EE 2005			
Paint River	243-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Chenik Creek	243-30-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Amakdedori Creek	243-40-10010	UNKNOWN	UNKNOWN			
Unnamed Trib.	243-40-10010-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				

[ continued on following page ]

EXHIBIT 4-2E		KAMISHAK BAY UNIT CHUM SALMON								
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
						MAY	JUNE	JULY	AUG.	SEPT.
<b>south-to-north geographic reference:</b>										
	Unnamed Tributary [ Bruin Bay River ]	243-50-10050	21,800 EE 2001	21,200 EE 2005						
	Unnamed Trib.	243-50-10050-2014	UNKNOWN	UNKNOWN						
	Unnamed Tributary	243-50-10040	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	243-50-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	243-60-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	243-60-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Sunday Creek	248-10-10002	UNKNOWN	500 PC 2005						
	Unnamed Tributary	248-10-10008	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	248-10-10010	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary [ Ursus Cove River ]	248-10-10020	41,700 EE 2000	12,200 EE 2005						
	Unnamed Tributary	248-10-10030	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary [ Brown's Peak Creek ]	248-10-10040	UNKNOWN	600 PC 2005						
	Unnamed Tributary	248-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
<b>south-to-north geographic reference:</b>										
	Unnamed Tributary	248-20-10030	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary [ Cottonwood Creek ]	248-20-10040	72,800 EE 2003	17,900 EE 2005						
	Unnamed Trib.	248-20-10040-2015	UNKNOWN	UNKNOWN						
	Unnamed Tributary [ North Head Creek ]	248-20-10060	UNKNOWN	4,500 EE 2005						
	Unnamed Tributary	248-20-10067	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary [ Sugarloaf Creek ]	248-20-10070	UNKNOWN	2,200 EE 2005						
	Iniskin River	248-20-10080	28,500 EE 2002	16,500 EE 2005						
	Portage Creek	248-20-10090	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Right Arm Creek	248-20-10100	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Bowser Creek	248-30-10010	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Brown Creek	248-30-10020	UNKNOWN	UNKNOWN						TIMING UNKNOWN
<b>south-to-north geographic reference:</b>										
										CHINITNA POINT

**4.4 SIGNIFICANT STOCKS**

Based on the available data, the following stocks are known to fit the size criterion for local significance as discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0 of this document. The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

<b>EXHIBIT 4-3</b>		<b>SIGNIFICANT STOCKS</b>				
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM
Douglas River	248-40-10100		significant			
Kamishak River	243-10-10040		significant		significant	significant
Little Kamishak River	243-10-10030				significant	significant
Mikfik Creek	243-20-10050		significant			
McNeil River	243-20-10035					significant
Chenik Creek	243-30-10200		significant			
Amakdedori Creek	243-40-10010		significant		significant	
<i>Bruin Bay River</i>	243-50-10050				significant	significant
Sunday Creek	248-10-10002				significant	
<i>Ursus Cove River</i>	248-10-10020					significant
<i>Brown's Peak Creek</i>	248-10-10040				significant	
<i>Cottonwood Creek</i>	248-20-10040					significant
<i>North Head Creek</i>	248-20-10060				significant	significant
<i>Sugarloaf Creek</i>	248-20-10070					significant
Iniskin River	248-20-10080					significant

Non-italics = stream name appearing on USGS maps    *Italics = Unnamed on USGS map but identified by its locally-used name*

AWC = Anadromous Waters Catalog

significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.
significant	Historic count meets minimum size criteria, but the most recent count does not.

	Minimum significant stock size criteria:	Generalized period for two life cycles:
King Salmon	400 fish	12 years
Sockeye Salmon	2,000 fish	10 years
Coho Salmon	800 fish	8 years
Pink Salmon	5,000 fish	4 years
Chum Salmon	800 fish	8 years

**4.5 WILD STOCK SANCTUARIES / STOCK RESERVES**

A review of the various stocks of salmon found in the Kamishak Bay Unit leads the CIRPT to make the following determinations with respect to the designation of "wild stock sanctuaries / stock reserves" in the Kamishak Bay system. This concept is described and recommended for adoption in the ADF&G *Genetics Policy* where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0, section 3.3.3.5 of this document as it is applied in Cook Inlet.



4.5.1 King Salmon

Stock identified: None

Rationale: There are no known stocks of sufficient size in the Kamishak Bay Unit to be functionally effective as a wild stock sanctuary / stock reserve.

4.5.2 Sockeye Salmon

Stock identified: None

Rationale: The CIRPT had a sufficient number of sockeye salmon stocks declared as wild stock sanctuaries / stock reserves in the overall Inlet drainage. It was felt that Kamishak Bay did not offer any special circumstances which dictated the need for a sanctuary / reserve in this drainage.

4.5.3 Coho Salmon

Stock identified: None

Rationale: The CIRPT had a sufficient number of coho salmon stocks already declared as wild stock sanctuaries / stock reserves in the overall Inlet drainage. It was felt that Kamishak Bay did not offer any special circumstances which dictated the need for a sanctuary / reserve in this drainage.

4.5.4 Pink Salmon

Stock identified: Bruin Bay River stock [AWC 243-50-10050]

Rationale: The CIRPT had only a limited number of pink salmon stocks in the overall Inlet drainage from which to choose, and a number of those were in Kamishak Bay. Bruin Bay River represents one of the historically most productive pink salmon systems in the Kamishak Bay Unit.

4.5.5 Chum Salmon

Stock identified: Cottonwood Creek stock [AWC 248-20-10040]

Rationale: The CIRPT had only a limited number of chum salmon stocks in the overall Inlet drainage from which to choose, and a number of those were in Kamishak Bay. Cottonwood Creek represents one of the historically most productive chum salmon systems in the Kamishak Bay Unit.

## 4.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT

### 4.6.1 Projects Identified in the Phase I Plan 1981 – 2000

#### 4.6.1.1 Paint River System [AWC 243-20-10020]

This project was described in the Phase I Plan 1981 – 2000 in the following way.

*“Work has already been undertaken on the Paint River as a result of cooperative efforts between FRED Division and CIAA. Both are expected to continue involvement in the project and will probably be joined in an increasing fashion by the Commercial Fish Division in the later stages of the project. Three basic tactics may be involved in this effort. First, salmon have already been planted in the system; but a large falls near the mouth of the river prevents returning salmon from reaching the upper portions of the river system. Thus, the second tactic which may be funded in FY 82 is feasibility planning which will examine construction of a fish pass. Finally, once the fish pass is complete and the runs have been established, it is possible that the system will be a suitable candidate for fertilization. Once established the production of this system would be sufficiently discrete to be the subject of a terminal harvest. That production could number 100,000 adult sockeye, 900,000 adult pink, and 600,000 adult chum salmon annually.”*

#### Subsequent Developments:

Apart from the initial limited test stocking of pink salmon, sockeye salmon were stocked into this system in 1986, 1988 – 1993, 1995, 1996 and 2002. The fish ladder was designed, and construction was completed in the fall of 1991. Returns from these sockeye salmon stockings have indicated that the original projection of an annual production of 100,000 sockeye salmon was overly optimistic. The largest run of sockeye salmon adults resulting from the aforementioned plants was estimated at 2,000 fish in 2005. These were the product of the 2002 experimental release of pre-smolts in the Paint River Lakes system.

The detailed projections for potential returns of pink and chum salmon to the Paint River system have not yet been developed.

At the time the stocking programs and operational plans for the fish ladder were being developed rather dramatic changes were taking place in the salmon enhancement programs in Cook Inlet. With the State’s reduction of its role in these activities, a greater financial burden was taken on by the Cook Inlet Aquaculture Association simply to maintain existing projects. This was graphically represented in CIAA’s assumption of operational responsibility for Trail Lakes Hatchery, Crooked Creek Hatchery, Tutka Bay Lagoon Hatchery and the programs of the Big Lake Hatchery. This redirection of resources at least temporarily has suspended further development efforts at Paint River.

This project could have significant potential and should be viewed as worthy of additional study if and when the financial resources to do so can be gathered.

#### 4.6.1.2 Chenik Lake [AWC 243-30-10200]

This project was described in the Phase I Plan 1981 – 2000 in the following way.

*“Chenik Lake is a 292 acre lake located just west of Kamishak Bay and is the object of an as yet unfunded FRED Division project involving several tactics. The lake has an historic escapement of about 50,000 sockeye salmon. However, it is felt that with channel improvement in the area of the rock sills near the mouth, stocking and fertilization the system could annually produce 95,000 adult sockeyes. The system was stocked with fry from Tustumena Lake in 1978 and 1979.”*

#### Subsequent Developments:

The following information is drawn, in large part, from “2004 Lower Cook Inlet Annual Finfish Management Report”. The historic high escapements of 50,000 were a part of runs that numbered up to 150,000 fish prior to the 1940’s. A dramatic and lengthy decline led to runs in the mid-1970’s that numbered less than 500 fish, approximating the conditions found at the lake when the original plan was drafted. To facilitate fish passage into fresh water, a series of step pools was cut into the rock sill near the mouth of the creek in 1986 and refined in 1987. The lake was stocked with non-indigenous fry from 1986 -1993 and 1995 -1996; and for those ten stockings the average was 1.962 million fry, with a high of 3.500 million fry in 1989. In 1987, 1989, 1990 and 1991 the lake was fertilized in an attempt to promote primary productivity and provide an increased food source for the greater fry densities. These measures, coupled with tight limitations on commercial fishing and the resulting increased escapements, produced adult returns similar to those documented prior to the 1940’s. However, beginning in 1989, and for reasons that were not immediately apparent, returns to the lake began another steady decline. From 1991 through 1996 the outmigrations of sockeye salmon smolt from Chenik Lake were monitored with a weir and live trap. Infectious Hematopoietic Necrosis Virus (IHNV), a disease commonly affecting both juvenile salmon and trout, was documented in outmigrating Chenik Lake sockeye smolt during 1991, 1992 and 1993. It should be noted that IHNV is naturally present in all Cook Inlet sockeye salmon populations but does not necessarily cause high mortality. High-mortality outbreaks in hatcheries and in the wild are thought to be associated with stress from factors such as crowding. The situation at Chenik Lake was studied in 1992 and 1993, and that study led to the conclusion that if the decreased runs were caused entirely or in part by increased juvenile mortality associated of IHNV, it might be constructive to reduce adult escapement and juvenile stocking levels. Small returns accounted for lower escapements even though there was no directed commercial fishery between 1994 and 2002, and stocking ceased after 1996. A sustainable escapement goal (SEG) of 1,880 – 9,300 was set for the Chenik system beginning in 2002. Between 1994 and 1996, the numbers of outmigrating smolt were very small in relation to the stocking levels, likely a result of continuing high mortality from the IHN outbreak. There was no readily apparent increase in run sizes resulting from the “corrective measures” that had been taken, and the project was suspended in 1996. ADF&G installed a camera system to monitor adult escapement into the system during 2005, while CIAA concurrently operated a counting weir to provide daily in-season escapement counts and to confirm the effectiveness of the camera system. Estimates produced by both methods were virtually identical.

Adult sockeye runs to Chenik Lake unexpectedly began to improve beginning in 2003, with an estimate of nearly 14,000 fish returning, all of which were allowed to enter the lake as escapement. The run was even stronger in 2004, and in an effort to control escapement, commercial fishing was allowed in marine waters of Chenik Subdistrict for the first time in over a decade. The resulting harvest totaled approximately 33,000 sockeyes, while an additional estimated 17,000 fish entered the lake as escapement.

Another strong return in 2005 produced a catch of 47,000 sockeyes and an escapement of 14,500.

#### 4.6.1.3 Kirschner Lake Stream Rechannelization [no AWC number]

This project was referenced in the *Phase I Plan 1981 – 2000* in the following way.

*“One step removed from those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

##### Subsequent Developments:

This project site was investigated by CIAA staff in 1986. There was an examination of the current outlet that includes a falls which drops about forty feet to tidewater and the option of shutting off the current outlet and forcing the flow down a remnant channel to the north of the current outlet to avoid a waterfall barrier. No salmon were able to access the lake, so there was no indigenous anadromous salmon population.

Ultimately the lake was chosen as a remote barriered rearing location, with complete harvest of the adult returns desired. Stocking began in 1987, and with the exception of 2001 continued through 2005. Stocking over the 18 years has averaged 310,000 fry, and annual harvests from these stockings through 2005 averaged about 30,000 fish.

Although the broodstock for the stocking program changed from Tustumena Lake to Hidden Lake in 2005, CIAA plans to continue the program.

#### 4.6.1.4 Strike Creek Fish Ladder [AWC 243-10-10030-2015]

This project was referenced in the *Phase I Plan 1981 – 2000* in the following way.

*“One step removed from those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

*“... The Regional Planning Team has been advised by the National Park Service that the ... Strike Creek project would require actions which would ‘constitute an inappropriate and unacceptable change to National Park Service lands and waters and are directly contrary to both law and policy.’ The Team understands this present limitation but will continue to carry the projects representing potential resources which would be available for realization should law and policy change during the life of the Plan.”*

##### Subsequent Developments:

The Team believes the same policies to be in effect today, but still recognizes a significant potential opportunity to strengthen the resource base should the relevant law and policy change.

#### 4.6.2 Projects Identified and Implemented After Publication of the Phase I Plan 1981 – 2000

Two projects were identified and implemented since the publication of the Phase I Plan 1981 – 2000, and both involved the utilization of barriered lakes as remote rearing locations.

##### 4.6.2.1 Bruin Lake [AWC 243-50-10050]

There is an officially unnamed lake on an unnamed tributary to Bruin Bay, and this tributary enters the Bay on the north side near the mouth of the Bay. The lake was stocked with sockeye salmon fry from Tustumena Lake in 1990 through 1993 and in 1995 and 1996. Approximately 0.500 million were stocked in 1990, but the remainder of the annual stockings were at the 0.250 million level.

Adult returns resulting from these stockings were considerably lower than anticipated, and the project was suspended following the 1996 stocking. Currently, and there are no plans to resume this project.

##### 4.6.2.2 Ursus Lake [AWC 248-10-10020]

There is an officially unnamed lake on an unnamed tributary to Ursus Cove. This tributary bearing Anadromous Waters Catalog number 248-10-10020 enters the Cove at its most westerly point and is unofficially known as Ursus Cove Lagoon Creek. The lake was annually stocked with 0.250 million sockeye salmon fry from Tustumena Lake in 1992 and 1993 and in 1995 and 1996.

Adult returns resulting from these stockings were considerably lower than anticipated, and the project was suspended following the 1996 stocking. Currently, and there are no plans to resume this project.

### 4.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

#### 4.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

##### 4.7.1.1 Potential Secondary Impacts of Pebble Mine Development

As plans continue to develop for the Pebble Mine proposal in the Bristol Bay watershed, numerous associated proposals affecting the Kamishak Bay Unit continue to proliferate. The primary focus on Kamishak Bay centers on delivery of mined product to transportation vessels via the construction of a port facility.

#### 4.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength

of the base. The CIRPT has been made aware of several anadromous salmon runs in this unit for which there is insufficient data to make informed decisions.

4.7.2.1 Chenik Lake Sockeye Salmon [AWC 243-30-10200]

The disappointing history of the sockeye salmon enhancement program at Chenik Lake, coupled with the encouraging sockeye salmon returns to Chenik Lake during the 2003 through 2005 seasons (resulting entirely from natural spawning), has led ADF&G staff to reevaluate the productive potential of the Chenik Lake system as it relates to enhancement activities. Given the system's apparent susceptibility to IHN virus outbreaks and the deleterious effects this can have on sockeye salmon production, ADF&G believes that Chenik Lake can only be expected to naturally produce *and maintain* moderate annual runs (perhaps up to 80,000) as long as adult escapement and fry density levels do not encourage conditions favoring another viral outbreak. Clearly, the justification for stocking additional sockeye juveniles into a system with the documented disease history of Chenik Lake remains questionable, and significant new information would be required in order to consider further enhancement proposals for this system. The CIRPT recommends that no further enhancement activity be planned for Chenik Lake, but that the system remain open to investigation of new methods or technology that might alleviate problems encountered in the past.

4.7.2.2 McNeil River Chum Salmon [AWC 243-20-10035]

Chum salmon returns to McNeil River are considered important for both human and wildlife uses. ADF&G currently believes the area of McNeil River upstream of the McNeil Falls presents a significant amount of productive but currently underutilized chum salmon habitat. No plans for enhancement activities are currently under consideration for McNeil River. However, the system's potential productivity could undoubtedly benefit from easier upstream access for migrating adult salmon. Studies of ways to improve this access must understandably include the caveat of minimizing impact to the high-profile bear-viewing program presently in place. CIRPT supports investigation of proposals to improve salmon access to upstream areas of McNeil River.

4.7.2.3 Douglas River Coho Salmon [AWC 248-40-10100]

Historic and recent commercial harvests combined with notable recreational activity suggest that the coho salmon runs into this system may be of sufficient size to be classified as significant, but specific in-river counts are not available to make that designation. Such counts would strengthen the data base on salmon resources in this unit.

4.7.2.4 Unnamed Tributary (old Douglas River channel) Coho Salmon [AWC 243-10-10150]

Historic and recent commercial harvests combined with notable recreational activity suggest that the coho salmon runs into this system may be of sufficient size to be classified as significant, but specific in-river counts are not available to make that designation. Such counts would strengthen the data base on salmon resources in this unit.

## 4.7.2.5 Kamishak River Coho Salmon [AWC 243-10-10040]

Historic and recent commercial harvests combined with notable recreational activity suggest that the coho salmon runs into this system may be of sufficient size to be classified as significant, but specific in-river counts are not available to make that designation. Such counts would strengthen the data base on salmon resources in this unit.

## 4.7.2.6 Amakdedori Creek Coho Salmon [AWC 243-40-10010]

Historic and recent commercial harvests combined with notable recreational activity suggest that the coho salmon runs into this system may be of sufficient size to be classified as significant, but specific in-river counts are not available to make that designation. Such counts would strengthen the data base on salmon resources in this unit.

## 4.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

4.7.3.1 **ADF&G** Aerial And Ground Surveys To Monitor Salmon Systems With Escapement Goals

ADF&G annually monitors the salmon systems in this unit for which escapement goals have been established and plans to continue to do so. Understanding the current stock status in the various salmon producing systems is critical to long-range planning for the wellbeing of the resource.

4.7.3.2 **ADF&G** Mikfik Lake Video Sockeye Salmon Escapement Enumeration

Monitoring the sockeye salmon escape up Mikfik Creek through the use of remote video equipment is a specific extension of the broader escapement monitoring discussed in section 4.7.3.1. ADF&G conducts this project and plans to continue the work.

4.7.3.3 **ADF&G** Chenik Lake Video Sockeye Salmon Escapement Enumeration

Monitoring the sockeye salmon escape up Chenik Creek through the use of remote video equipment is a specific extension of the broader escapement monitoring discussed in section 4.7.3.1. In this case there is also an onsite weir staffed by CIAA. The onsite component of the project allows for verification of the video counts. ADF&G plans to continue the work its portion of this project. (see section 4.7.3.4)

4.7.3.4 **CIAA** Chenik Lake Sockeye Salmon Escapement Enumeration

Monitoring the sockeye salmon escape by means of a weir at the outlet of Chenik Lake has been a CIAA project in recent years. This work is coordinated with ADF&G and the video escapement monitoring they are conducting. The onsite component of the

project allows for verification of the video counts. CIAA will continue to consult with ADF&G about the need for this type of onsite staffing. (see section 4.7.3.3)

4.7.3.5 **CIAA** Kirschner Lake Sockeye Salmon Stocking

This sockeye salmon stocking project has been operating for almost twenty years, and CIAA plans to continue the annual stocking even though the broodstock is in a transition phase. (see section 4.6.1.3)

4.7.3.6 **CIAA** Paint River Stocking Evaluations

Although the annual stocking program at Paint River has been suspended, CIAA plans to continue investigation to evaluate the potential of this system for future enhancement activities. (see section 4.6.1.1)

4.7.3.7 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

4.7.4 Proposed New Anadromous Salmon Projects

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit other than those mentioned in previous sections.



## **CHAPTER 5.0**

### **WESTSIDE UNIT ANALYSIS**

#### **5.1 OVERVIEW**

The Westside Unit is not accessible by road, and the Unit as designated here includes Kalgin Island. The southern two-thirds of the unit is dominated by state and federal landholdings. With the exception of the northern-most eight miles of shoreline the entire unit is within the Kenai Peninsula Borough. There are numerous overlapping plans by federal, state and borough agencies that together cover this entire unit.

The Westside Unit contains both Mt. Spurr and Mt. Redoubt, active volcanoes that have the ability to dramatically alter the landscape and the salmon habitat it contains. The rerouting of Cannery Creek and the resulting migrational barrier problems in the northern part of the unit is an example of the type and duration of impact a nearby volcanic eruption can have.

Public landholdings in the form of the Lake Clark National Park and Preserve, the Redoubt Bay Critical Habitat Area and the Trading Bay State Game Refuge dominate the southern two thirds of the unit from Nikolai Creek on the north to the head of Chinitna Bay on the south.

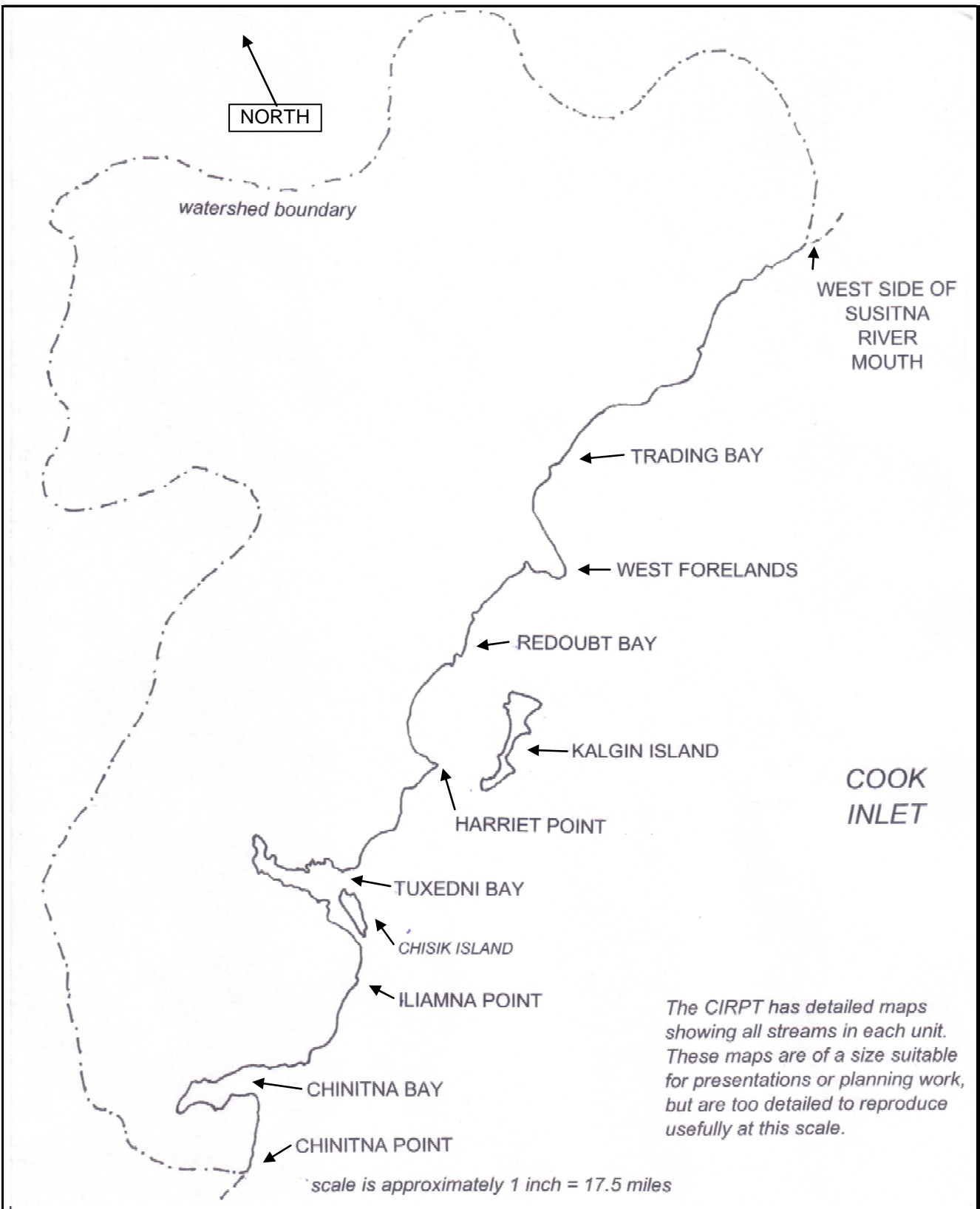
Private landholdings as in the case of the Moquawkie (Tyonek) Reservation may significantly affect the types of salmon rehabilitation or enhancement activities that can be carried out and by whom.

Established development occurs in several forms throughout the northern part of this unit. The "tank farm" at Shirleyville on the northern edge of Trading Bay stores petroleum product. The Drift River terminal receives and dispenses the production from the oil platforms in Cook Inlet. The Village of Tyonek is a permanent developed community with all of the attendant support facilities. The Beluga area contains developed natural gas fields and a Chugach Electric Association power plant. Several relatively developed airstrips, individual recreational cabins and various fishing sites are also present. These are only some of the more prominent features through which established salmon streams now pass and to which they are vulnerable.

The other natural resources that are present in addition to the salmon have made the northern part of this unit the focus of still more potential development. In 1983 the Alaska Power Authority published the Chakachamna Hydroelectric Project Interim Feasibility Assessment Report dealing with the development of another substantial project in the area. In 1988 the Kenai Peninsula Borough published the Chuitna Area Resource Development Plan in which they expressed "...a keen interest in potential large scale development of coal and possible development of a variety of other resources in the Chuitna area." The document's purpose was "...to guide public policy and investment as well as facilitate private economic development opportunities." There are coal leases on about 46,000 acres this area, and they are largely held by Diamond Shamrock/Chuitna Coal Joint Venture and Beluga Coal Company. This type of interest in the area's potential has continued.

**EXHIBIT 5-1**

**WESTSIDE UNIT MAP**



**5.2 RELEVANT LAND USE POLICIES**

Substantial parts of the drainage have been the subjects planning efforts of one type or another. It is important to identify what affect those plans and the recommendations they include may have on fish production and fishery operation.

5.2.1 National Park Service:

The Lake Clark National Park and Preserve contains the drainages of the several Westside Unit streams; and, therefore, these streams are effectively eliminated from consideration for any salmon rehabilitation or enhancement projects under the conditions previously set out in Chapter 3.0, section 3.4.5. The streams thus affected for their entire drainages are as follows.

Fitz Creek	245-10-10010
Trail Creek	245-10-10020
Chinitna River	245-10-10030
Marsh Creek	245-10-10040
Silver Salmon Creek	245-10-10050
West Glacier Creek	245-10-10060
Middle Glacier Creek	no AWC number
East Glacier Creek	245-20-10270
Shelter Creek	245-20-10250
Unnamed Tributary	245-20-10190
Johnson River	245-20-10170
Bear Creek	245-30-10130
Hungryman Creek	245-30-10120
Difficult Creek	245-30-10110
Unnamed Tributary	245-30-10100
Open Creek	245-30-10090
Tuxedni River	245-30-10080
Unnamed Tributary	245-30-10070
Unnamed Tributary	245-30-10060
Crescent River	245-30-10010
Unnamed Tributary	245-40-10065
Polly Creek	245-40-10060

The streams that are affected in substantial upper portions of their drainages are as follows.

Redoubt Creek	245-40-10020
Harriet Creek	245-40-10010
Drift River	245-50-10085
North Fork Big River	245-50-10050-2016
Chakachatna River	247-10-10080-2010

In 1982 the National Park Service published a General Management Plan / Development Concept Plan and Environmental Assessment setting out its perspectives on the management of this portion of the Westside Unit.

5.2.2 Alaska Department of Fish and Game:

The Alaska Department of Fish and Game (ADF&G) in joint authority with the Alaska Department of Natural Resources (ADNR) oversees both the Trading Bay State Game Refuge

and the Redoubt Bay Critical Habitat Area. The Trading Bay State Game Refuge and Redoubt Bay Critical Habitat Area Draft Management Plan prepared in 1993 contains the following statements of purpose.

“The Trading Bay State Game Refuge was established in 1976 to protect fish and wildlife populations; waterfowl nesting, feeding, and migration; moose calving areas; spring and fall bear feeding areas; salmon spawning and rearing habitats; public use of fish and wildlife (waterfowl, moose, and bear hunting); viewing; photography; and general recreation in a high quality environment.”

The Redoubt Bay Critical Habitat Area was established in 1989 to ensure the protection and enhancement of fish and wildlife habitat and populations, especially Tule geese; the continuation of fish and wildlife harvest; and public use and enjoyment of the area in a high quality environment.”

“The purpose of the Trading Bay State Game Refuge and Redoubt Bay Critical Habitat Area Management Plan is to provide consistent long-range guidance to the Alaska Department of Fish and Game and other agencies involved in managing the refuge and critical habitat area.”

In the same plan the cited portions of the statement of goals for both the Trading Bay State Game Refuge and the Redoubt Bay Critical Habitat Area are the same except for the name and read as follows.

“Activities which occur within the Trading Bay State Game Refuge will reflect the following goals in accordance with the purpose for which the area was established (AS 16.30.038). All department management decisions in the Trading Bay State Game Refuge, whether affecting activities undertaken by the department, other agencies, or the public, will be in accordance with these goals.

“... C. Maintain, protect, and where appropriate, enhance salmon spawning, rearing and overwintering habitat.”

Notable among the streams either partially or totally within the boundaries of one or both of these landholdings are the following.

Drift River	245-50-10085
Montana Bill Creek	245-50-10070
Seal River	245-50-10060
Big River	245-50-10050
Unnamed Tributary	245-50-10040
Johnson Slough	245-50-10020
Kustatan River	245-50-10010
McArthur River	247-10-10080
Middle River	247-10-10070
Nikolai Creek	247-10-10200

In addition ADF&G and ADNR oversee the Kalgin Island Critical Habitat Area.

5.2.3 Alaska Department of Natural Resources:

As pointed out in the previous section the Alaska Department of Natural Resources has joint responsibility with ADF&G for the Trading Bay State Game Refuge, the Redoubt Bay Critical Habitat Area and the Kalgin Island Critical Habitat Area.

In conjunction with its general responsibilities for State lands the Alaska Department of Natural Resources (ADNR) published the Kenai Area Plan (KAP) in 2000. The boundaries of the area covered by this plan are coincidental with the boundaries of the Kenai Peninsula Borough; therefore, all but a very small northeast-most portion of the Westside Unit is covered by the ADNR plan. The KAP is probably the best consolidated reference for land ownership patterns in the Westside Unit.

The plan directs how ADNR will manage state uplands, tidelands, and submerged lands within the area it covers. In addition to its general management intent and management guidelines the KAP specifically addresses the Westside Unit in the section designated Region 11 – West side Cook Inlet – North of Redoubt Bay and the northern portion of Region 12 – West side Cook Inlet –South of Redoubt Bay.

The Susitna Area Plan (SAP) published in 1985 also deals with a portion of the Chakachatna, Beluga and Chuitna River drainages. The guidance contained in it for this area has been superceded by the Region 11 material in the KAP.

The Chuitna Area Meriting Special Attention (AMSA) includes the coastal areas top the 1,000 foot contour from the Matanuska-Susitna Borough boundary to the Trading Bay State Game Refuge.

#### 5.2.4 Kenai Peninsula Borough:

Although almost all of the Westside Unit is within the Kenai Peninsula Borough, only a very small portion of the land is actually owned by the Borough. The Borough does, however, plan for the development and use of resources within the Borough boundaries on land held by others. The previously mentioned Chuitna Area Resource Development Plan is a case in point

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation.

In addition it makes consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program.

### 5.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT

The tables that constitute EXHIBITS 5-2A through 5-2-E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G's historical escapement counts.

#### KEY FOR EXHIBITS 5A THROUGH 5E

In the following exhibits there are numbers of fish cited under two headings, "*Highest Number of Fish Reported for the System*" (column 3) and "*Most Recent Number of Fish Reported for the System*" (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 5-2A		WESTSIDE UNIT KING SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
<i>south-to-north geographic reference:</i>								
Fitz C.	245-10-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	CHINITNA POINT					
Trail C.	245-10-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Chinitna R.	245-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Cleawater C.	245-10-10030-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Roscoe C.	245-10-10030-2007-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Marsh C.	245-10-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Silver Salmon C.	245-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
West Glacier C.	245-10-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Middle Glacier C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
East Glacier C.	245-20-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Shelter C.	245-20-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-20-10190	24 RH 2003	24 RH 2003					TIMING UNKNOWN
Johnson R.	245-20-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-20-10170-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-20-10170-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Red C.	245-20-10170-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<i>south-to-north geographic reference:</i>								
Bear C.	245-30-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Hungryman C.	245-30-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Difficult C.	245-30-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Open C.	245-30-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Tuxedni R.	245-30-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Crescent R.	245-30-10010	UNKNOWN	UNKNOWN					TIMING UNKNOWN

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WESTSIDE UNIT KING SALMON										
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Unnamed Tributary	245-30-10010-2060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-30-10010-2060-3036		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-30-10010-2060-3040-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-30-10010-2060-3040-4018		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
North Fork Crescent R.	245-30-10010-2098	UNKNOWN	UNKNOWN						TIMING UNKNOWN	
Lake Fork Crescent R.	245-30-10010-2099	UNKNOWN	UNKNOWN						TIMING UNKNOWN	
Unnamed Tributary	245-30-10010-2099-3013		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-30-10010-2099-3023		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-30-10010-2099-3033		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-30-10010-2099-3055		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-40-10065		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Polly C.	245-40-10050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Polly C.	245-40-10050-2002		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-40-10050-2002-3030		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-40-10050-2017		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-40-10050-2017-3004		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Redoubt C.	245-40-10020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-40-10020-2016		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
<b>south-to-north geographic reference:</b>										
				HARRIET POINT SOUTH SIDE REDDOUBT BAY						
Harriet C.	245-40-10010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-40-10010-2015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-50-10140		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-50-10120		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Jack S.	245-50-10110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Cannery C.	245-50-10090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Rust S.	245-50-10090-2004		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 5-2A		WESTSIDE UNIT KING SALMON								
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
						MAY	JUNE	JULY	AUG.	SEPT.
Drift R.	245-50-10085		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10085-2050	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10085-2056	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Montana Bill C.	245-50-10070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Seal R.	245-50-10060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Big R.	245-50-10050		UNKNOWN	UNKNOWN						
	245-50-10050-2011	South Fork Big R.	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2011-3010	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2011-3010-4008	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2011-3010-4012	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2011-3014	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2015	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016	North Fork Big R.	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3035	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3044	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3070	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3070-4010	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3090	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3090-4011	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2016-3090-4020	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2020	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2020-3005	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10050-2023	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-50-10040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Johnson S.	245-50-10020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10020-2014	Bachatna C.	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	245-50-10020-2014-3048	Unnamed Tributary	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 5-2A		WESTSIDE UNIT KING SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Kustatan R.	245-50-10010	81 RH 2003	81 RH 2003	TIMING UNKNOWN							
Unnamed Tributary Blacksand C.	245-50-10010-2040 245-50-10010-2047	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
<i>south-to-north geographic reference:</i>		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
McArthur R.	247-10-10080	1,633 TCU 1982	1,633 TCU 1982	TIMING UNKNOWN							
Chakachaina R.	247-10-10080-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Straight C.	247-10-10080-2010-3040	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2010-3040-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2034-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2034-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Noakuta S.	247-10-10080-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3029-4020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2020-3033-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2020-3033-4022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2020-3033-4026	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2051-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2051-3029-4036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-10-10080-2038	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2042	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2042-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Middle R.	247-10-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									

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EXHIBIT 5-2A		WESTSIDE UNIT KING SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Chuitkinachna C.	247-10-10070-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-10-10070-2012-3071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Nikolai C.	247-10-10200	520 TCU 1982	520 TCU 1982	TIMING UNKNOWN			
		Steadama C.	247-10-10200-2215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-10-10200-2060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-10-10200-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Old Tyonek C.	247-20-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	247-20-10050-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2083	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2093	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Tyonek C.	247-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10040-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Indian C.	247-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Chuitna R.	247-20-10010	6,500 TCU 1983	592 RH 2003	TIMING UNKNOWN			
		Lone C.	247-20-10010-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	247-20-10010-2020-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3020-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3020-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3020-4014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2030	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	247-20-10010-2030-3006	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	247-20-10010-2030-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2030-3012	UNKNOWN	UNKNOWN	TIMING UNKNOWN			

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WESTSIDE UNIT KING SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-20-10010-2030-3018	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2030-3021	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-20-10010-2040-3017	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3017-4019	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3031	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-20-10010-2040-3045	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Chuit C.	247-20-10010-2052	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2052-3060	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2052-3060-4012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Wolverine Fork	247-20-10010-2088	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Threemile C.	247-20-10002	250 TCU 1983	250 TCU 1983	TIMING UNKNOWN					
Unnamed Tributary	247-20-10002-2004	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10002-2016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-20-10002-2019	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Beluga R.	247-30-10090	8,000 AS 1984	8,000 AS 1984	TIMING UNKNOWN					
Pretty C.	247-30-10090-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2010-3015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2010-3015-4015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Olson C.	247-30-10090-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Coffee C.	247-30-10090-2040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Bishop C.	247-30-10090-2105	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Scarp C.	247-30-10090-2105-3015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2105-3015-4012	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							

[ continued on following page ]

EXHIBIT 5-2A		WESTSIDE UNIT KING SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Unnamed Tributary	247-30-10090-2109	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
	Drill C.	247-30-10090-2120	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
	Unnamed Tributary	247-30-10090-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Coal C.	247-30-10090-2150	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
	Unnamed Tributary	247-30-10090-2150-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3121	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3121-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3121-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3160	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
	Unnamed Tributary	247-30-10090-2150-3165	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
	Unnamed Tributary	247-30-10090-2180	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
	Theodore R.	247-30-10080	2,263	TCU 1977	13	RH 2003	TIMING UNKNOWN		
	Unnamed Tributary	247-30-10080-2310	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
	Lewis R.	247-30-10070	6,000	AS 1984	6,000	AS 1984	TIMING UNKNOWN		
	Unnamed Tributary	247-30-10070-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Ivan R.	247-30-10010	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
	Unnamed Tributary	247-30-10010-2023	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
	<i>south-to-north geographic reference:</i>		WEST SIDE SUSITNA RIVER MOUTH						
	<i>detached geographic reference:</i>		KALGIN ISLAND						
	Unnamed Tributary	246-20-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Packers C.	246-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	246-20-10020-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	246-20-10020-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	246-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

WESTSIDE UNIT SOCKEYE SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
<b>south-to-north geographic reference:</b>						
Fitz C.	245-10-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	CHINITNA POINT			
Trail C.	245-10-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Chinitna R.	245-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Cleanwater C.	245-10-10030-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Roscoe C.	245-10-10030-2007-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Marsh C.	245-10-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Silver Salmon C.	245-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
West Glacier C.	245-10-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Middle Glacier C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Shelter C.	245-20-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	245-20-10190	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Johnson R.	245-20-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	245-20-10170-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	245-20-10170-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Red C.	245-20-10170-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>south-to-north geographic reference:</b>						
Bear C.	245-30-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ILIAMNA POINT SOUTH SIDE TUXEDNI BAY			
Hungryman C.	245-30-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Difficult C.	245-30-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	245-30-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Open C.	245-30-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Tuxedni R.	245-30-10080	50 TCU 1980	50 TCU 1980	TIMING UNKNOWN		
Unnamed Tributary	245-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	245-30-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Crescent R.	245-30-10010	128,628 RC 1985	78,081 RC 2001	TIMING UNKNOWN		

[ continued on following page ]

EXHIBIT 5-2B		WESTSIDE UNIT SOCKEYE SALMON						
		[ continued from preceding page ]					Run Timing	
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	MAY	JUNE	JULY	AUG.	SEPT.
Unnamed Tributary	245-30-10010-2060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-30-10010-2060-3036		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-30-10010-2060-3040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-30-10010-2060-3040-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-30-10010-2060-3040-4018		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
North Fork Crescent R.	245-30-10010-2098		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Lake Fork Crescent R.	245-30-10010-2099	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-30-10010-2099-3013	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-30-10010-2099-3023	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-30-10010-2099-3033	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-30-10010-2099-3055	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-40-10065		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Polly C.	245-40-10050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Little Polly C.	245-40-10050-2002		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-40-10050-2002-3030		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-40-10050-2017		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-40-10050-2017-3004		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Redoubt C.	245-40-10020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-40-10020-2016		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
<b>south-to-north geographic reference:</b>								
Harriet C.	245-40-10010	1,200 TCU 1981	1,200 TCU 1981					
Unnamed Tributary	245-40-10010-2015	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-50-10140		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10120	UNKNOWN	UNKNOWN					
Little Jack S.	245-50-10110	13,000 AS 1985	13,000 AS 1985					
Cannery C.	245-50-10090	UNKNOWN	UNKNOWN					
Rust S.	245-50-10090-2004		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 5-2B [ continued from preceding page ] WESTSIDE UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Drift R.	245-50-10085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-50-10085-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	245-50-10085-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Montana Bill C.	245-50-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Seal R.	245-50-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Big R.	245-50-10050	120,000 TCU 1983	120,000 TCU 1983						
South Fork Big R.	245-50-10050-2011	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2011-3010	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2011-3010-4008	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2011-3010-4012	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2011-3014	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2015	UNKNOW	UNKNOW						
North Fork Big R.	245-50-10050-2016	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3035	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3044	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3070	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3070-4010	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3090	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3090-4011	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2016-3090-4020	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2020	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2020-3005	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10050-2023	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Johnson S.	245-50-10020	UNKNOW	UNKNOW						
Bachatna C.	245-50-10020-2014	UNKNOW	UNKNOW						
Unnamed Tributary	245-50-10020-2014-3048	UNKNOW	UNKNOW						

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EXHIBIT 5-2B		WESTSIDE UNIT SOCKEYE SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Kustatan R.	245-50-10010	397 RH 2003	397 RH 2003	TIMING UNKNOWN							
Unnamed Tributary Blacksand C.	245-50-10010-2040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
	245-50-10010-2047	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
<b>south-to-north geographic reference:</b>		<b>WEST FORELANDS SOUTH SIDE TRADING BAY</b>									
McArthur R.	247-10-10080	78,580 TCU 1982	78,580 TCU 1982	TIMING UNKNOWN							
Chakachaina R.	247-10-10080-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Straight C.	247-10-10080-2010-3040	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2010-3040-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2034	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	247-10-10080-2034-3005	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	247-10-10080-2034-3011	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Noakuta S.	247-10-10080-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3029-4020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033-4015	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033-4018	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033-4022	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033-4026	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3035	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2051	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2051-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2051-3029-4036	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2038	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2042	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2042-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Middle R.	247-10-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN							

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EXHIBIT 5-2B		WESTSIDE UNIT SOCKEYE SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Chuitklinachna C.	247-10-10070-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-10-10070-2012-3071	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Nikolai C.			247-10-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Steadama C.	247-10-10200-2215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-10-10200-2060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-10-10200-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Old Tyonek C.			247-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2083	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10050-2093	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Tyonek C.			247-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10040-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Indian C.			247-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Chuitna R.			247-20-10010	4,000 AS 1983	179 RH 2003	TIMING UNKNOWN			
		Lone C.	247-20-10010-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	247-20-10010-2020-3020	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	247-20-10010-2020-3020-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3020-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3020-4014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2020-3055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2030-3006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2030-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-20-10010-2030-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 5-2B [ continued from preceding page ] WESTSIDE UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-20-10010-2030-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2030-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2040-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2040-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2040-3017-4019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2040-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2040-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Chuit C.	247-20-10010-2052	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2052-3060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10010-2052-3060-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Wolverine Fork	247-20-10010-2088	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Threemile C.	247-20-10002	20,000 AS 1984	20,000 AS 1984	TIMING UNKNOWN					
Unnamed Tributary	247-20-10002-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-20-10002-2016	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10002-2019	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Beluga R.	247-30-10090	12,000 AS 1982	12,000 AS 1982	TIMING UNKNOWN					
Pretty C.	247-30-10090-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2010-3015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2010-3015-4015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Olson C.	247-30-10090-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Cooffee C.	247-30-10090-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Bishop C.	247-30-10090-2105	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Scarp C.	247-30-10090-2105-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-30-10090-2105-3015-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					

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EXHIBIT 5-2B [ continued from preceding page ] WESTSIDE UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-30-10090-2109	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Drill C.	247-30-10090-2120	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2130	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Coal C.	247-30-10090-2150	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2150-3110	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2150-3121	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2150-3121-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2150-3121-4017	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2150-3160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-30-10090-2150-3165	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-30-10090-2180	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Theodore R.	247-30-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-30-10080-2310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Lewis R.	247-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-30-10070-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Ivan R.	247-30-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-30-10010-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
<i>south-to-north geographic reference:</i>				WEST SIDE SUSITNA RIVER MOUTH					
<i>detached geographic reference:</i>				KALGIN ISLAND					
Unnamed Tributary	246-20-10010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Packers C.	246-20-10020	100,000 EE 1926	26,837 WC 2000						
Unnamed Tributary	246-20-10020-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	246-20-10020-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	246-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

**EXHIBIT 5-2C WESTSIDE UNIT COHO SALMON**

Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
<i>south-to-north geographic reference:</i>								
Fitz C.	245-10-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Trail C.	245-10-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Chinitna R.	245-10-10030	1,500 TCU 1982	1,500 TCU 1982					
Cleawater C.	245-10-10030-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Roscoe C.	245-10-10030-2007-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Marsh C.	245-10-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Silver Salmon C.	245-10-10050	1,872 RH 1983	2,269 RH 2003					
West Glacier C.	245-10-10060	400 TCU 1980	400 TCU 1980					
Middle Glacier C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
East Glacier C.	245-20-10270	UNKNOWN	UNKNOWN					
Shelter C.	245-20-10250	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-20-10190	UNKNOWN	UNKNOWN					
Johnson R.	245-20-10170	600 TCU 1980	600 TCU 1980					
Unnamed Tributary	245-20-10170-2010	UNKNOWN	UNKNOWN					
Unnamed Tributary	245-20-10170-2020	UNKNOWN	UNKNOWN					
Red C.	245-20-10170-2031	UNKNOWN	UNKNOWN					
<i>south-to-north geographic reference:</i>								
Bear C.	245-30-10130	UNKNOWN	UNKNOWN					
Hungryman C.	245-30-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Difficult C.	245-30-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Open C.	245-30-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Tuxedni R.	245-30-10080	60 TCU 1980	60 TCU 1980					
Unnamed Tributary	245-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10060	UNKNOWN	UNKNOWN					
Crescent R.	245-30-10010	538 TCU 1984	538 TCU 1984					

[ continued on following page ]

EXHIBIT 5-2C		WESTSIDE UNIT COHO SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Unnamed Tributary	245-30-10010-2060	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-30-10010-2060-3036	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-30-10010-2060-3040	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-30-10010-2060-3040-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-30-10010-2060-3040-4018	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
North Fork Crescent R.	245-30-10010-2098	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Lake Fork Crescent R.	245-30-10010-2099	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-30-10010-2099-3013	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	245-30-10010-2099-3023	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	245-30-10010-2099-3033	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	245-30-10010-2099-3055	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	245-40-10065	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Polly C.	245-40-10050	2,000 MC 1961	2,000 MC 1961	TIMING UNKNOWN							
Little Polly C.	245-40-10050-2002	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-40-10050-2002-3030	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-40-10050-2017	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	245-40-10050-2017-3004	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Redoubt C.	245-40-10020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-40-10020-2016	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
<b>south-to-north geographic reference:</b>											
Harriet C.	245-40-10010	575 TCU 1982	575 TCU 1982	TIMING UNKNOWN	<b>HARRIET POINT SOUTH SIDE REDOUBT BAY</b>						
Unnamed Tributary	245-40-10010-2015	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-50-10140	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	245-50-10120	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Little Jack S.	245-50-10110	5,500 AS 1983	5,500 AS 1983	TIMING UNKNOWN							
Cannery C.	245-50-10090	1,500 AS 1985	1,500 AS 1985	TIMING UNKNOWN							
Rust S.	245-50-10090-2004	UNKNOWN	UNKNOWN	TIMING UNKNOWN							

[ continued on following page ]

EXHIBIT 5-2C USGS Name [ locally used name ]		Stream		Anadromous Waters Catalog Number		Highest Number of Fish Reported for the System		Most Recent Number of Fish Reported for the System		WESTSIDE UNIT COHO SALMON			
										MAY	JUNE	JULY	AUG.
Drift R.		245-50-10085		822 TCU 1980		822 TCU 1980		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10085-2050		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10085-2056		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Montana Bill C.		245-50-10070		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Seal R.		245-50-10060		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Big R.		245-50-10050		1,250 TCU 1980		1,250 TCU 1980		TIMING UNKNOWN		TIMING UNKNOWN			
South Fork Big R.		245-50-10050-2011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2011-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2011-3010-4008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2011-3010-4012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2011-3014		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2015		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
North Fork Big R.		245-50-10050-2016		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10050-2016-3035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2016-3044		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2016-3070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2016-3070-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2016-3090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2016-3090-4011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2016-3090-4020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary		245-50-10050-2020		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10050-2020-3005		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10050-2023		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10040		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Johnston S.		245-50-10020		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Bachatna C.		245-50-10020-2014		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			
Unnamed Tributary		245-50-10020-2014-3048		UNKNOWN		UNKNOWN		TIMING UNKNOWN		TIMING UNKNOWN			

[ continued on following page ]

EXHIBIT 5-2C		WESTSIDE UNIT COHO SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Kustatan R.	245-50-10010	3,967 RH 2003	3,967 RH 2003	TIMING UNKNOWN							
Unnamed Tributary Blacksand C.	245-50-10010-2040 245-50-10010-2047	UNKNOWN UNKNOWN	UNKNOWN UNKNOWN	TIMING UNKNOWN							
<i>south-to-north geographic reference:</i>				<b>WEST FORELANDS SOUTH SIDE TRADING BAY</b>							
McArthur R.	247-10-10080	7,328 TCU 1982	7,328 TCU 1982	TIMING UNKNOWN							
Chakachaina R. Straight C.	247-10-10080-2010 247-10-10080-2010-3040	UNKNOWN ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	UNKNOWN ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2010-3040-4010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-10-10080-2034	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2034-3005	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2034-3011	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Noakuta S.	247-10-10080-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3029-4020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3033-4015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-10-10080-2020-3033-4018			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-10-10080-2020-3033-4022			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-10-10080-2020-3033-4026	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2020-3035			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-10-10080-2051	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2051-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2051-3029-4036			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-10-10080-2038	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2042	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10080-2042-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Middle R.	247-10-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN							

[ continued on following page ]



EXHIBIT 5-2C		WESTSIDE UNIT COHO SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Chuitkilnachna C.	247-10-10070-2012	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10070-2012-3071	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Nikolai C.	247-10-10200	500 PC 1982	500 PC 1982	TIMING UNKNOWN							
Steadama C.	247-10-10200-2215	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10200-2060	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-10-10200-2060-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Old Tyonek C.	247-20-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10050-2025	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10050-2031	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10050-2083	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10050-2093	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Tyonek C.	247-20-10040	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10040-2036	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Indian C.	247-20-10020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Chuitna R.	247-20-10010	1,800 TCU 1983	1,467 RH 2003	TIMING UNKNOWN							
Lone C.	247-20-10010-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2020-3020	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2020-3020-4012	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	247-20-10010-2020-3020-4011	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2020-3020-4014	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2020-3035	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2020-3045	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2020-3055	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2030	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2030-3006	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2030-3009	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-20-10010-2030-3012	UNKNOWN	UNKNOWN	TIMING UNKNOWN							

[ continued on following page ]

WESTSIDE UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-20-10010-2030-3018	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2030-3021	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3009	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3017	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3017-4019	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-20-10010-2040-3031	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2040-3045	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Chuit C.	247-20-10010-2052	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2052-3060	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10010-2052-3060-4012	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Wolverine Fork	247-20-10010-2088	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Threemile C.	247-20-10002	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10002-2004	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-20-10002-2016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-20-10002-2019	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Beluga R.	247-30-10090	2,000	MC 1950	2,000	MC 1950	TIMING UNKNOWN			
Pretty C.	247-30-10090-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2010-3015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2010-3015-4015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Olson C.	247-30-10090-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Coffee C.	247-30-10090-2040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Bishop C.	247-30-10090-2105	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Scarp C.	247-30-10090-2105-3015	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	247-30-10090-2105-3015-4012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

[ continued on following page ]

EXHIBIT 5-2C		WESTSIDE UNIT COHO SALMON						
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
						MAY	JUNE	JULY
	Unnamed Tributary	247-30-10090-2109	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Drill C.	247-30-10090-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10090-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Coal C.	247-30-10090-2150	UNKNOWN	UNKNOWN				TIMING UNKNOWN
	Unnamed Tributary	247-30-10090-2150-3110	UNKNOWN	UNKNOWN				TIMING UNKNOWN
	Unnamed Tributary	247-30-10090-2150-3121	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10090-2150-3121-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10090-2150-3121-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10090-2150-3160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10090-2150-3165	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10090-2180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Theodore R.		247-30-10080	1,000 PC 1982	225 RH 2003				TIMING UNKNOWN
	Unnamed Tributary	247-30-10080-2310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Lewis R.		247-30-10070	1,000 PC 1982	1,000 PC 1982				TIMING UNKNOWN
	Unnamed Tributary	247-30-10070-2120	UNKNOWN	UNKNOWN				TIMING UNKNOWN
Ivan R.		247-30-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-30-10010-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	<i>south-to-north geographic reference:</i>							WEST SIDE SUSITNA RIVER MOUTH
	<i>detached geographic reference:</i>							KALGIN ISLAND
	Unnamed Tributary	246-20-10010	UNKNOWN	UNKNOWN				TIMING UNKNOWN
Packers C.		246-20-10020	2,440 WC 1981	2,440 WC 1981				TIMING UNKNOWN
	Unnamed Tributary	246-20-10020-2010	UNKNOWN	UNKNOWN				TIMING UNKNOWN
	Unnamed Tributary	246-20-10020-2020	UNKNOWN	UNKNOWN				TIMING UNKNOWN
	Unnamed Tributary	246-10-10030	UNKNOWN	UNKNOWN				TIMING UNKNOWN

EXHIBIT 5-2D		WESTSIDE UNIT PINK SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG. SEPT.	
<b>south-to-north geographic reference:</b>								
Fitz C.	245-10-10010	200 TCU 1982	200 TCU 1982	TIMING UNKNOWN				
Trail C.	245-10-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Chinima R.	245-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Clearwater C.	245-10-10030-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Roscoe C.	245-10-10030-2007-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Marsh C.	245-10-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Silver Salmon C.	245-10-10050	200 TCU 1961	200 TCU 1961	TIMING UNKNOWN				
West Glacier C.	245-10-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Middle Glacier C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
East Glacier C.	245-20-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Shelter C.	245-20-10250	UNKNOWN						
Unnamed Tributary	245-20-10190	UNKNOWN						
Johnson R.	245-20-10170	50 TCU 1955	50 TCU 1955	TIMING UNKNOWN				
Unnamed Tributary	245-20-10170-2010	UNKNOWN						
Unnamed Tributary	245-20-10170-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Red C.	245-20-10170-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<b>south-to-north geographic reference:</b>								
Bear C.	245-30-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Hungryman C.	245-30-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Difficult C.	245-30-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Open C.	245-30-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Tuxedni R.	245-30-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	245-30-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Crescent R.	245-30-10010	UNKNOWN						
[ continued on following page ]								

EXHIBIT 5-2D		WESTSIDE UNIT PINK SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Unnamed Tributary	245-30-10010-2060	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2060-3036	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2060-3040	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2060-3040-4010	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2060-3040-4018	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		North Fork Crescent R.	245-30-10010-2098	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Lake Fork Crescent R.	245-30-10010-2099	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	245-30-10010-2099-3013	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2099-3023	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2099-3033	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-30-10010-2099-3055	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-40-10065	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Polly C.	245-40-10050	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Little Polly C.	245-40-10050-2002	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-40-10050-2002-3030	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-40-10050-2017	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-40-10050-2017-3004	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Redoubt C.	245-40-10020	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	245-40-10020-2016	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		<b><i>south-to-north geographic reference:</i></b>				<b><i>HARRIET POINT SOUTH SIDE REDDOUBT BAY</i></b>			
		Harriet C.	245-40-10010	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-40-10010-2015	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-50-10140	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Unnamed Tributary	245-50-10120	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Little Jack S.	245-50-10110	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			
		Cannery C.	245-50-10090	75 AS 1983	75 AS 1983	TIMING UNKNOWN			
		Rust S.	245-50-10090-2004	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT			

[ continued on following page ]

EXHIBIT 5-2D		WESTSIDE UNIT PINK SALMON						
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
						MAY	JUNE	JULY
Drift R.		245-50-10085	70 TCU 1983	70 TCU 1983	TIMING UNKNOWN			
Unnamed Tributary		245-50-10085-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10085-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Montana Bill C.		245-50-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Seal R.		245-50-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Big R.		245-50-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
South Fork Big R.		245-50-10050-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2011-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2011-3010-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2011-3010-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2011-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
North Fork Big R.		245-50-10050-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3044	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3070-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3090-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2016-3090-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2020-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10050-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Johnson S.		245-50-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Bachaina C.		245-50-10020-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		245-50-10020-2014-3048	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

EXHIBIT 5-2D		WESTSIDE UNIT PINK SALMON						
		[ continued from preceding page ]		[ continued from preceding page ]				
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Kustatan R.	245-50-10010	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary Blacksand C.	245-50-10010-2040 245-50-10010-2047	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
<i>south-to-north geographic reference:</i>				<i>WEST FORELANDS SOUTH SIDE TRADING BAY</i>				
McArthur R.	247-10-10080	28,040 TCU 1982	28,040 TCU 1982	TIMING UNKNOWN				
Chakachaina R.	247-10-10080-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Straight C.	247-10-10080-2010-3040	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2010-3040-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2034-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2034-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Noakuta S.	247-10-10080-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3029-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3033	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3033-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3033-4018	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3033-4022	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3033-4026	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2020-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2051-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2051-3029-4036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2038	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2042	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-10-10080-2042-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				
Middle R.	247-10-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	TIMING UNKNOWN				

[ continued on following page ]

Stream USGS Name [locally used name]		Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
					MAY	JUNE	JULY	AUG.
<b>WESTSIDE UNIT PINK SALMON</b>								
[ continued from preceding page ]								
Chuitkilnachna C.	247-10-10070-2012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-10-10070-2012-3071		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Nikolai C.	247-10-10200	10,000 PC 1982	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	10,000 PC 1982	TIMING UNKNOWN			
Steadama C.	247-10-10200-2215		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-10-10200-2060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-10-10200-2060-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Old Tyonek C.	247-20-10050		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10050-2025		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10050-2031		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10050-2083		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10050-2093		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Tyonek C.	247-20-10040		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10040-2036		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Indian C.	247-20-10020		UNKNOW	UNKNOW	TIMING UNKNOWN			
Chuitna R.	247-20-10010	20,410 TCU 1981	UNKNOW	20,410 TCU 1981	TIMING UNKNOWN			
Lone C.	247-20-10010-2020		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10010-2020-3020		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10010-2020-3020-4012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2020-3020-4011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2020-3020-4014		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2020-3035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2020-3045		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2020-3055		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2030		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10010-2030-3006		UNKNOW	UNKNOW	TIMING UNKNOWN			
Unnamed Tributary	247-20-10010-2030-3009		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-20-10010-2030-3012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
[ continued on following page ]								



WESTSIDE UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-20-10010-2030-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2030-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2040-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2040-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2040-3017-4019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2040-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2040-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Chuit C.	247-20-10010-2052	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2052-3060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10010-2052-3060-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Wolverine Fork	247-20-10010-2088	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Threemile C.	247-20-10002	5,000 PC 1982	5,000 PC 1982						TIMING UNKNOWN
Unnamed Tributary	247-20-10002-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10002-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-20-10002-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Beluga R.	247-30-10090	5,000 PC 1982	5,000 PC 1982						TIMING UNKNOWN
Pretty C.	247-30-10090-2010	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	247-30-10090-2010-3015	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	247-30-10090-2010-3015-4015	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Olson C.	247-30-10090-2020	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Coffee C.	247-30-10090-2040	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Bishop C.	247-30-10090-2105	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Scarp C.	247-30-10090-2105-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-30-10090-2105-3015-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

[ continued on following page ]

EXHIBIT 5-2D		WESTSIDE UNIT PINK SALMON						
[ continued from preceding page ]								
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Unnamed Tributary	247-30-10090-2109	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Drill C.	247-30-10090-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Coal C.	247-30-10090-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2150-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2150-3121	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2150-3121-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2150-3121-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2150-3160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2150-3165	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2180	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Theodore R.	247-30-10080	5,000 PC 1982	5,000 PC 1982	TIMING UNKNOWN				
Unnamed Tributary	247-30-10080-2310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lewis R.	247-30-10070	5,000 PC 1982	5,000 PC 1982	TIMING UNKNOWN				
Unnamed Tributary	247-30-10070-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Ivan R.	247-30-10010	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-30-10010-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<i>south-to-north geographic reference:</i>				WEST SIDE SUSITNA RIVER MOUTH				
<i>detached geographic reference:</i>				KALGIN ISLAND				
Unnamed Tributary	246-20-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Packers C.	246-20-10020	2,040 TCU 1983	2,040 TCU 1983	TIMING UNKNOWN				
Unnamed Tributary	246-20-10020-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	246-20-10020-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	246-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

EXHIBIT 5-2E		WESTSIDE UNIT CHUM SALMON							
		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
MAY	JUNE					JULY	AUG.	SEPT.	
<i>south-to-north geographic reference:</i>									
	Fitz C.	245-10-10010	11,000 EHO no date	11,000 EHO no date				TIMING UNKNOWN	
	Trail C.	245-10-10020	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Chinitna R.	245-10-10030	14,000 TCU 1982	14,000 TCU 1982				TIMING UNKNOWN	
	Clearwater C.	245-10-10030-2007	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Roscoe C.	245-10-10030-2007-3007	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Marsh C.	245-10-10040	35,000 MC 1963	35,000 MC 1963				TIMING UNKNOWN	
	Silver Salmon C.	245-10-10050	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	West Glacier C.	245-10-10060	200 TCU 1980	200 TCU 1980				TIMING UNKNOWN	
	Middle Glacier C.	no AWC number	1,000 AS 1980	1,000 AS 1980				TIMING UNKNOWN	
	East Glacier C.	245-20-10270	23 TCU 1980	23 TCU 1980				TIMING UNKNOWN	
	Shelter C.	245-20-10250	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Unnamed Tributary	245-20-10190	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Johnson R.	245-20-10170	300 TCU 1980	300 TCU 1980				TIMING UNKNOWN	
	Unnamed Tributary	245-20-10170-2010	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Unnamed Tributary	245-20-10170-2020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Red C.	245-20-10170-2031	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
<i>south-to-north geographic reference:</i>									
	Bear C.	245-30-10130	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Hungryman C.	245-30-10120	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Difficult C.	245-30-10110	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Unnamed Tributary	245-30-10100	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Open C.	245-30-10090	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Tuxedni R.	245-30-10080	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	245-30-10070	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Unnamed Tributary	245-30-10060	UNKNOWN	UNKNOWN				TIMING UNKNOWN	
	Crescent R.	245-30-10010	4,880 SC 1984	4,880 SC 1984				TIMING UNKNOWN	

[ continued on following page ]

EXHIBIT 5-2E		WESTSIDE UNIT CHUM SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Unnamed Tributary	245-30-10010-2060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2060-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2060-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2060-3040-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2060-3040-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		North Fork Crescent R.	245-30-10010-2098	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Lake Fork Crescent R.	245-30-10010-2099	UNKNOWN	UNKNOWN				
		Unnamed Tributary	245-30-10010-2099-3013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2099-3023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2099-3033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-30-10010-2099-3055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-40-10065	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Polly C.	245-40-10050	400 TCU 1983	400 TCU 1983				
		Little Polly C.	245-40-10050-2002	UNKNOWN	UNKNOWN				
		Unnamed Tributary	245-40-10050-2002-3030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-40-10050-2017	UNKNOWN	UNKNOWN				
		Unnamed Tributary	245-40-10050-2017-3004	UNKNOWN	UNKNOWN				
		Redoubt C.	245-40-10020	UNKNOWN	UNKNOWN				
		Unnamed Tributary	245-40-10020-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		<b>south-to-north geographic reference:</b>							
		Harriet C.	245-40-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-40-10010-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-50-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Unnamed Tributary	245-50-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Little Jack S.	245-50-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Cannery C.	245-50-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		Rust S.	245-50-10090-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		[ continued on following page ]							

EXHIBIT 5-2E		WESTSIDE UNIT CHUM SALMON						
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
						MAY	JUNE	JULY
Drift R.	245-50-10085		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10085-2050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10085-2056		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Montana Bill C.	245-50-10070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Seal R.	245-50-10060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Big R.	245-50-10050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
South Fork Big R.	245-50-10050-2011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2011-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2011-3010-4008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2011-3010-4012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2011-3014		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
North Fork Big R.	245-50-10050-2016		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3044		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3070-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3090-4011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2016-3090-4020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2020-3005		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10050-2023		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Johnson S.	245-50-10020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Bachaina C.	245-50-10020-2014		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	245-50-10020-2014-3048		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 5-2E		WESTSIDE UNIT CHUM SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Kustatan R.	245-50-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary Blacksand C.	245-50-10010-2040 245-50-10010-2047	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
<i>south-to-north geographic reference:</i>											
McArthur R.	247-10-10080	1,482 TCU 1982	1,482 TCU 1982							TIMING UNKNOWN	
Chakachatina R.	247-10-10080-2010	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Straight C.	247-10-10080-2010-3040	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Unnamed Tributary	247-10-10080-2010-3040-4010	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Unnamed Tributary	247-10-10080-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2034-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2034-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Noakuta S.	247-10-10080-2020	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Unnamed Tributary	247-10-10080-2020-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2020-3029-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2020-3033	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Unnamed Tributary	247-10-10080-2020-3033-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2020-3033-4018	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Unnamed Tributary	247-10-10080-2020-3033-4022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2020-3033-4026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2020-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2051-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2051-3029-4036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2038	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	247-10-10080-2042	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Unnamed Tributary	247-10-10080-2042-3010	UNKNOWN	UNKNOWN							TIMING UNKNOWN	
Middle R.	247-10-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								

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EXHIBIT 5-2E		WESTSIDE UNIT CHUM SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Chuitkilnachna C.	247-10-10070-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-10-10070-2012-3071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Nikolai C.	247-10-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Steadama C.	247-10-10200-2215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-10-10200-2060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-10-10200-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Old Tyonek C.	247-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10050-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10050-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10050-2083	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10050-2093	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Tyonek C.	247-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10040-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Indian C.	247-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Chuitna R.	247-20-10010	30 TCU 1981	30 TCU 1981	TIMING UNKNOWN				
	Lone C.	247-20-10010-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Unnamed Tributary	247-20-10010-2020-3020	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Unnamed Tributary	247-20-10010-2020-3020-4012	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Unnamed Tributary	247-20-10010-2020-3020-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2020-3020-4014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2020-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2020-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2020-3055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2030-3006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2030-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-20-10010-2030-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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WESTSIDE UNIT CHUM SALMON									
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-20-10010-2030-3018		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2030-3021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2040-3009		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2040-3017		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2040-3017-4019		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2040-3031		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2040-3045		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Chuit C.	247-20-10010-2052		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2052-3060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10010-2052-3060-4012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Wolverine Fork	247-20-10010-2088		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Threemile C.	247-20-10002	20 MC 1958	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	20 MC 1958					
Unnamed Tributary	247-20-10002-2004	UNKNOWN	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	UNKNOWN					
Unnamed Tributary	247-20-10002-2016		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-20-10002-2019		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Beluga R.	247-30-10090	25 MC 1965	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	25 MC 1965					
Pretty C.	247-30-10090-2010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2010-3015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2010-3015-4015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Olson C.	247-30-10090-2020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Cooffee C.	247-30-10090-2040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bishop C.	247-30-10090-2105		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Scarp C.	247-30-10090-2105-3015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-30-10090-2105-3015-4012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 5-2E		WESTSIDE UNIT CHUM SALMON							
[ continued from preceding page ]		Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Unnamed Tributary	247-30-10090-2109	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Drill C.	247-30-10090-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Coal C.	247-30-10090-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3121	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3121-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3121-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2150-3165	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10090-2180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Theodore R.		247-30-10080	UNKNOWN	UNKNOWN					TIMING UNKNOWN
	Unnamed Tributary	247-30-10080-2310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lewis R.		247-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10070-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Ivan R.		247-30-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-30-10010-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	<i>south-to-north geographic reference:</i>		WEST SIDE SUSITNA RIVER MOUTH						
	<i>detached geographic reference:</i>		KALGIN ISLAND						
	Unnamed Tributary	246-20-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Packers C.		246-20-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	246-20-10020-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	246-20-10020-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	246-10-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

5.4 SIGNIFICANT STOCKS

Based on the available data, the following stocks are known to fit the size criterion for local significance as discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0 of this document. The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

EXHIBIT 5-3		SIGNIFICANT STOCKS				
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM
Fitz Creek	245-10-10010					significant
Chinitna River	243-10-10030			significant		significant
Marsh Creek	245-10-10040					significant
Silver Salmon Creek	245-10-10050			significant		
West Glacier Creek	245-10-10060			significant		
Middle Glacier Creek	NO AWC					significant
Crescent River	245-30-10010		significant			significant
Polly Creek	245-40-10050			significant		
Harriet Creek	245-40-10010		significant			
Little Jack Slough	245-50-10110		significant	significant		
Cannery Creek	245-50-10010			significant		
Drift River	245-50-10085			significant		
Big River	248-20-10070		significant	significant		
Kustatan River	245-50-10010			significant		
McArthur River	247-10-10080	significant	significant	significant	significant	significant
Nikolai Creek	247-10-10200	significant			significant	
Chuitna River	247-20-10010	significant	significant	significant	significant	
Threemile Creek	247-20-10002		significant		significant	
Beluga River	247-30-10090	significant	significant	significant	significant	
Theodore River	247-30-10080	significant		significant	significant	
Lewis River	247-30-10070	significant		significant	significant	
Packers Creek	246-20-10020		significant	significant		

Non-italics = stream name appearing on USGS maps    *Italics = Unnamed on USGS map but identified by its locally-used name*

AWC = Anadromous Waters Catalog

significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.
significant	Historic count meets minimum size criteria, but the most recent count does not.

	Minimum significant stock size criteria:	Generalized period for two life cycles:
King Salmon	400 fish	12 years
Sockeye Salmon	2,000 fish	10 years
Coho Salmon	800 fish	8 years
Pink Salmon	5,000 fish	4 years
Chum Salmon	800 fish	8 years

## 5.5 WILD STOCK SANCTUARIES / STOCK RESERVES

A review of the various stocks of salmon found in the Westside Unit leads the CIRPT to make the following determinations with respect to the designation of "wild stock sanctuaries / stock reserves" in the Westside systems. This concept is described and recommended for adoption in the ADF&G Genetics Policy where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0, section 3.3.3.5 of this document as it is applied in Cook Inlet.

### 5.5.1 King Salmon

Stock identified: Theodore Creek stock [AWC 247-30-10080]

Rationale: It has no record of king salmon rehabilitation or enhancement. Based on the size of the various king salmon stocks in this unit there are a limited number of opportunities to establish a king salmon stock reserve representative of conditions on the west side of Cook Inlet. Of the possible choices Theodore Creek seems the most removed from the Beluga / Chuitna area that has a large potential for development that might threaten habitat and, thus, the fish.

### 5.5.2 Sockeye Salmon

Stock identified: Crescent River stock [AWC 245-30-10010]

Rationale: It has no record of sockeye salmon rehabilitation or enhancement. The size of the stock is more than sufficient, and it is a representative west side sockeye stock. Essentially the entire drainage falls within the Lake Clark National Park and Preserve, and this affords it a high degree of habitat protection. In addition National Park Service policy would seem to preclude any enhancement work being done on this stock.

### 5.5.3 Coho Salmon

Stock identified: Big River stock [AWC 245-50-10050]

Rationale: It has no record of coho salmon rehabilitation or enhancement. Based on the size of the various coho salmon stocks in this unit there are a number of opportunities to establish a coho salmon stock reserve representative of conditions on the west side of Cook Inlet. The Big River stock is representative of the area; and the majority of this drainage falls within the Redoubt Bay Critical Habitat Area and is, thus, afforded some habitat protection.

### 5.5.4 Pink Salmon

Stock identified: Nikolai Creek stock [AWC 247-10-10200]

Rationale: It has no record of pink salmon rehabilitation or enhancement. Based on the size of the various pink salmon stocks in this unit there are a number of opportunities to establish a pink salmon stock reserve representative of conditions on the west side of Cook Inlet. The Nikolai Creek stock is representative of the area; and much of this drainage falls within the Trading Bay State Game Refuge and is, thus, afforded some habitat protection

5.5.5 Chum Salmon

Stock identified: Crescent River stock [AWC 245-30-10010]

Rationale: It has no record of chum salmon rehabilitation or enhancement. The size of the stock is sufficient, and it is a representative west side chum stock. Essentially the entire drainage falls within the Lake Clark National Park and Preserve, and this affords it a high degree of habitat protection. In addition National Park Service policy would seem to preclude any enhancement work being done on this stock.

**5.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

5.6.1 Projects Identified in the Phase I Plan 1981 - 2000

5.6.1.1 Spawning Ground Survey

This project was described in the Phase I Plan 1981 – 2000 in the following way.

*“This project would deal with only Upper Cook Inlet and would be carried out primarily by the research arm of the Commercial Fish Division. The thrust of the project is to verify and explore the ramifications of sonar escapement counts where they exist and develop comparable monitoring where it would be useful and is not now in place. Three specific elements have now been defined within this general project. First, because of problems with migration outside the sonar counter verification of the counts on the Kasilof River is necessary. Second, there should be a program to assess the distribution of spawners in the Kenai, Kasilof and Susitna River systems. Finally, it would be useful to develop an historical perspective on previous escapements in the Susitna system where sonar has only been in operation for two years.”*

Subsequent Developments:

A large number of stream surveys were conducted in the 1980’s and early 1990’s when they were suspended for budgetary reasons. Although there are essentially continuous attempts to refine the existing sonar systems, the use of this type of apparatus to enumerate escapements has not been expanded beyond the four river systems involved in the early 1980’s.

The only specific portion of this original project that involved streams within the Westside Unit was the intent “to verify and explore the ramifications of sonar escapement counts where they exist”. The Crescent River was and is one of those sonar installation locations, but it was not specifically targeted as were the Kenai River, Kasilof River and Susitna River.

#### 5.6.1.2 Upper Cook Inlet Run Modeling

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“There are serious time constraints on the data acquisition / management decision process which is central to the effective management of the Upper Cook Inlet fisheries. The continued development and refinement of a computer simulation model for the Upper Cook Inlet salmon stocks would be of marked assistance in data compilation and analysis.*

*“The types of data to be processed include catch, escapement, off-shore test fishing results, and in-district test fishing results. A management system has been developed to make possible in-season data analysis. The simulation techniques will allow the managers to evaluate variations in run timing, stock abundance, and harvest management tactics so that there can be appropriate applications of fishing times and area schedules.”*

#### Subsequent Developments:

ADF&G has continued to examine and refine its run modeling process. The use of the off-shore test fishery and the sonar derived escapement counts continue to be the main components of this ongoing, in-season program.

#### 5.6.1.3 Big River Lakes [AWC 245-50-10050]

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This project located inland from Redoubt Bay and the West Forelands is one that has been undertaken by CIAA. Initial habitat surveys were done in 1980; and additional, more detailed, work is scheduled for 1981. The site contains six non-glacial lakes one of which has no apparent potential and four of which already have natural runs of sockeye and coho salmon. The remaining lake in the system has several barriers to migration of adult salmon. One of the tactics involved would be the clearance of those barriers. Certainly an additional tactic would be to plant fish in the lake. Further study will reveal whether the most suitable use of the complex is rearing, the establishment of annual runs, the construction of a hatchery, or some combination of these possibilities. With the clearance of the barriers and the planting of fish in the lake, it is expected annual production could be increased by 44,000 adult sockeye salmon.”*

#### Subsequent Developments:

Work was done in the Big River lakes complex over a period of several years. In 1982 and 1983 fish wheels in the mainstem of Big River were used in conjunction with adult counting weirs in Wolverine Creek to gather data on the run timing, age, size and abundance of Big River sockeye salmon. Bathymetric maps of Wolverine, Otter, Marten and Fisher lakes were prepared. Preliminary rough survey work was done to

better assess what would be required to develop a fish ladder that would allow anadromous salmon access to Fisher Lake, the one originally mentioned as having access barriers.

In 1985 CIAA constructed a low-head dam at the outlet of Marten Lake to store water for release at the time of the adult returns. Chronic low flows had hampered adult returns to the lake and therefore limited natural production of sockeye salmon. CIAA checks conditions annually and adjusts the flow accordingly as well as estimating total return to the lake.

Sockeye salmon eggs were collected from Big River in 1990, 1991 and 1992 to support the stocking of Bear Lake near Seward. It was part of the reintroduction of sockeye salmon to Bear Lake.

The only salmon rehabilitation/enhancement activity currently going on in the Big River system is the annual operation of the flow control structure at Marten Lake.

#### 5.6.1.4 Crescent River [AWC 245-30-10010]

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“The Crescent River and Crescent Lake, a glacial lake, are located on the north side of Tuxedni Bay and are the objects of a project involving both F.R.E.D. and Commercial Fish Divisions. The key element of the project would be fertilization of the 1,658 acre lake, and pre-fertilization studies are already underway. The success of this project could mean an additional 170,000 adult sockeye salmon annually.*

*“... The Regional Planning Team has been advised by the National Park Service that the ... Crescent River project would require actions which would ‘constitute an inappropriate and unacceptable change to National Park Service lands and waters and are directly contrary to both law and policy.’ The Team understands this present limitation but will continue to carry the projects representing potential resources which would be available for realization should law and policy change during the life of the Plan.”*

#### Subsequent Developments:

The Team believes the same policies to be in effect today, but still recognizes a situation which might be able to strengthen the resource base should the relevant law and policy change.

#### 5.6.1.5 Packers Lake Development [AWC 246-20-10020]

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status described in Chapter 5 and attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

Packers Lake on Kalgin Island was cited as one of these locations where “general fisheries development” could be pursued.

The adult sockeye salmon escapement to Packers Lake has been monitored since 1926. Prior to rehabilitation and enhancement, the number of fish returning to the lake had declined from an average of 15,000 in the 1930's to less than 1,000 throughout the 1950's and 1960's.

The Alaska Department of Fish and Game (ADF&G) reviewed Packers Lake sockeye escapement history and believed the decreased sockeye returns observed during the 1950's and 1960's were related to the depressed sockeye fry densities caused by poor lake rearing conditions resulting from competition for food with threespine and ninespine sticklebacks and predation by other salmonids.

The poor rearing conditions and the decline in sockeye escapements provided the impetus for a sockeye salmon rehabilitation project at Packers Lake that preceded the creation of the original plan.

In 1973, the lake was treated with rotenone to remove all fish from Packers Lake, and sockeye eggs were collected from returning adult fish, incubated, and reared to fry. In 1974 326, 500 fry were released into Packers Lake. A control structure was also installed at the lake outlet to prevent undesirable fish species from re-entering the lake. The long-term goal of this rehabilitation effort was to manage Packers Lake as a sockeye salmon production system.

The 1973 rotenone treatment did reduce the seasonal standing crop of zooplankton by removing copepoda. The reduction of copepoda enabled cladocerans, a preferred food of sockeye fry, to dominate the zooplankton population. However, observations in 1974 revealed the rotenone application failed to eliminate all of the sticklebacks. The flow control structure, because of flooding, also failed to meet its objective of denying undesirable fish species access to the lake. ADF&G concluded the original goal of a single species system could not be met in the Packers Lake system.

In 1975, the sockeye smolt migration was 119,293. All of the smolts were age 1 and were larger than fish observed in earlier migrations. In 1976, the smolt migration was 193,577. Most (64%) smolt from the 1973 brood year were larger in size than previous migrations. The large smolt size was attributed to the increase in the cladoceran population, the preferred food source of sockeye fry.

The success of the initial rehabilitation effort at increasing smolt size was short-lived. By the early 1980's when the original plan was being developed, the average size of out-migrating sockeye smolts had decreased to less than that observed prior to rotenone treatment. ADF&G reported this size change was the result of larger adult escapements and increased competition among sockeye smolts. Also, the lake's zooplankton community was again dominated by copepoda (85%). Cladocerans, the preferred food source, were lower in density; and their size had decreased. Sockeye fry were believed to be preying heavily on the cladocerans and competing for this food source.

The age composition of the smolt migration also fluctuated in the early 1980s. In 1981, 62 percent of the smolt migration was age 1 fish. In 1982, only 5 percent of the migration was age 1. ADF&G believed the change in the zooplankton community structure resulted in an inadequate food supply and a slower growth rate for sockeye fry. With a slower growth rate, the age structure of the smolt population shifted to age 2 fish.

The small size and shift in age composition of the smolt population led ADF&G to alter the Packers Lake sockeye rehabilitation strategy. The new strategy initiated in 1983 recommended support of a larger cladoceran population by increasing primary productivity through nutrient enhancement. It was believed increasing the density of the preferred food would result in more juvenile sockeye maturing to smolt size in 1 year. This enhancement strategy would favor larger age 1 smolts and, according to a model developed by ADF&G, increase smolt-to-adult survival rate. With greater smolt-to-adult survival rates, Packers Lake had the potential to become a substantial Cook Inlet production system.

In 1983, fertilizer was applied to enhance the lake's nutrients; and such applications continued each year until 1998, when enhancement operations ceased at the Packers Lake project. The Packers Lake zooplankton community responded well to the additional nutrients and smolt size increased.

This led to the conclusion that Packers Lake could also be enhanced through supplemental stocking. From 1987 to 1997, 39.2 million eggs were taken and incubated at Trail Lakes Hatchery and 1.8 million for Tutka Bay Hatchery from surplus Packers Lake broodstock. During 1987 thru 1996, 23.6 million fry were released back into the Packers Lake system.

In 1980, the Cook Inlet Aquaculture Association (CIAA) assumed responsibility for completing the smolt migration and adult escapement monitoring at Packers Lake. In 1997, stocking and fertilization activities at Packers Lake were suspended and the last smolt enumeration was conducted in 1998. In 1999 only adult enumeration, sampling and harvest of surplus adults were conducted.

The Packers Lake enhancement project is periodically re-evaluated, and CIAA annually maintains the flow-control structure at the outlet of Packers Lake.

#### 5.6.2 Projects Identified and Implemented After Publication of the Phase I Plan 1981 – 2000

Two projects were identified and implemented since the publication of the Phase I Plan 1981 – 2000, and they involved problems for returning adult salmon caused by substantial alterations of stream channels.

##### 5.6.2.1 Coffee Creek Fishladder [AWC 247-30-10090]

Coffee Creek is a small tributary on the north side of the Beluga River upstream of Olson Creek. There were two small (6 feet high) waterfalls that prevented salmon access to about 4.5 miles of suitable habitat. The waterfalls were over a seam of coal. CIAA decided to carve a short step-pool fishladder in the coal seam thus providing access to the additional habitat. This work was completed in 1984, and no further work has been undertaken there.



### 5.6.2.2 Cannery Creek Fishladder [AWC 245-50-10090]

Cannery Creek originates near the base of Mt. Redoubt and passes south of the Drift River Oil Terminal. Anadromous salmon reported to use the creek are coho, sockeye and pink salmon.

Mt. Redoubt erupted on December 14 and 15, 1989 filling Cannery Creek with large amounts of mud and ash, and forcing it out of its established stream channel. A series of actively eroding water falls have since developed, recently preventing upstream access by anadromous fish.

CIAA first became aware of this rechannelization in 1994. In 1996, CIAA responded to a report by a local fisherman that the falls may be impeding the upstream migration of anadromous fish in Cannery Creek. CIAA then conducted an aerial survey that revealed that such an impediment did seem to exist at low tides. However, individuals familiar with the area claimed fish could pass the falls at tides greater than 21 feet, so no remedial action was taken.

In 2003, the Cook Inlet Pipeline Company, the operators of the Drift River Oil Terminal, contacted CIAA with information that the waterfalls were continuing to erode upstream; and the future of the resident coho salmon population was threatened. With the assistance of the Cook Inlet Pipeline Company, CIAA conducted a ground and aerial survey in August 2003.

By 2003, the creek had braided into several new channels, and each channel now had a waterfall that was approximately 10 feet high. Water flow below the falls is confined to a channel; however, flows above the falls are not confined. As a result the stream depth above the falls is only 12 to 16 inches. The stream flows over a vegetated peat layer, and the falls are constantly cutting back. As the falls have moved further away from Cook Inlet, the falls have remained at about the same height; but the migrating fish have received less and less assistance from tidal action. With the falls in their current location there is not sufficient tidal influence to make the falls passable for fish even at high tides.

In 2004 through the joint collaboration of CIAA, Cook Inlet Pipeline Company, the U.S. Fish and Wildlife Service and the Alaska Department of Fish and Game Division of Sport Fish a portable, specially adapted Alaska Steeppass was constructed and set into the creek to allow the passage of coho salmon past the falls. The project was staffed by CIAA personnel in 2004 and 2005. During these two years, at least, it is believed adult coho salmon could not have passed the falls without this assistance.

Personnel from the Drift River Terminal have offered heavy equipment to open the old channel and allow the stream to return to its previous course. This option would require a substantial commitment of money, time and equipment; and its outcome would not be certain.

## 5.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

### 5.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

#### 5.7.1.1 Potential Impacts of Increased Recreational Use of Big River Lakes

Over the last two decades the Big River lake system has seen a dramatic increase in use by fly-in recreational fishermen and guided bear-viewing parties. These types of increases have a significant potential to damage critical anadromous salmon habitat either through the direct impact from the users or the less direct impact from the support facilities for those users.

#### 5.7.1.2 Potential Impacts of Increased Air Boat Use in Chinitna Bay

The ability of air boats to traverse shallow water makes both shoreline and in-stream spawning areas very susceptible to damage. The increased use of this type of watercraft in Chinitna Bay has the potential to negatively impact productive salmon habitat.

#### 5.7.1.3 Potential Impacts of Chuitna Coal Mine Development

A substantial coal mine development is being proposed in the Chuitna River drainage. The principal mining area would be in the upper reaches of Lone Creek and two unnamed Chuitna River tributaries. These tributary systems are identified in the Anadromous Waters Catalog as 247-20-10010-2020, 247-20-10010-2030 and 247-20-10010-2040 respectively. Lone Creek is identified as being used by all five species of Pacific salmon; unnamed tributary 2030 is identified as being used by king salmon, coho salmon and pink salmon; and unnamed tributary 2040 is identified as being used by king salmon and coho salmon. The project is in the early stages of permitting and development of the environmental impact statement. Infrastructure corridors and support facilities will be placed between the mine site and a site offshore in the Inlet near Ladd Landing. If everything proceeds as scheduled, permits to begin work would not be issued until late 2007 or early 2008.

#### 5.7.1.4 Potential Impacts of BLM Determination of Non-navigability in the Chuitna River

The Native Village/Corporation of Tyonek owns the land bounding the portion of the Chuitna River in which much of the current recreational fishery takes place. They have petitioned the BLM to declare this system non-navigable, and the BLM has issued a preliminary finding of non-navigability. If this finding is upheld, regulation of access to this fishery would be in private hands.

### 5.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of one anadromous salmon run in this unit for which there is insufficient data to make informed decisions.

## 5.7.2.1 Theodore River King Salmon [AWC 247-30-10080]

Recent king salmon returns to the Theodore River have been considerably below historic levels for reasons that are not clear. This system has been a productive king salmon system, and evaluation to determine the cause for the recent declines seems warranted.

## 5.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

5.7.3.1 **ADF&G** Annual Operation of the Crescent River Sonar Sockeye Salmon Escapement Monitor

Escapement into the Crescent River system has been monitored by sonar since 1979, and those counts have been apportioned by fishwheel catches since 1993. This effort provides significant information about a major salmon producing system on the west side of Cook Inlet and is the only such project conducted on that side of the as discussed in sections 5.6.1.1 and 5.6.1.4. ADF&G conducts this project and plans to continue the work.

5.7.3.2 **ADF&G** Packers Lake Video Sockeye Salmon Escapement Enumeration

ADF&G annually uses video equipment to enumerate the sockeye salmon escapement into Packers Lake as discussed in section 5.6.1.5. ADF&G conducts this project and plans to continue the work.

5.7.3.3 **ADF&G** Big River Lakes Video Sockeye Salmon Escapement Enumeration

ADF&G annually uses video equipment to enumerate the sockeye salmon escapement into Big River Lakes as discussed in section 5.6.1.3. ADF&G conducts this project and plans to continue the work.

5.7.3.4 **CIAA** Cannery Creek Fishladder

The Cannery Creek situation described in section 5.6.2.2 is an ongoing project, and the duration of the need for the project is not yet knowable. The rechannelization situation existed for several years before any intervention was necessary. Since the "new" channel keeps cutting further back horizontally into the existing layer of peat out of tidal influence, a permanently installed ladder structure will at best be properly located for only one season. It will not be until the stream reaches a more consolidated layer that the final location and nature of the "barrier" falls will be known. At that point a more permanent solution to assure anadromous salmon full access to their spawning and rearing habitat can be developed and implemented.

5.7.3.5 **CIAA** Annual Operation of the Marten Lake Flow Control Structure

The permanent flow-control structure installed at the outlet of Marten Lake in the Big River lakes system in 1985 has been maintained and operated annually by the Cook Inlet Aquaculture Association. The annual operation requires periodic observation of flow levels in the outlet stream and coincidental observations of migrating salmon. If flows in the stream are not sufficient to allow the fish to pass into the lake, an appropriate adjustment must be made in the flow-control structure. This is a remote location, and the only access is by means of a floatplane. A large increase in the number of recreational users in the vicinity of Marten Lake has meant that there are more frequent unauthorized attempts to manipulate the structure; and this, in turn, increases the amount of annual maintenance. Marten Lake is a productive system, and appropriate maintenance and operation of the flow-control structure will allow that productivity to continue. This is a case of a minimally intrusive enhancement effort yielding tangible benefits.

5.7.3.6 **CIAA** Annual Operation of the Packers Lake Flow Control Structure

Before statehood the federal government was involved in monitoring salmon use of Packers Lake and subsequently both the Alaska Department of Fish and Game and the Cook Inlet Aquaculture Association have had long histories with Packers Lake on Kalgin Island, and some of that history was discussed in section 5.6.1.5. Although there is a demonstrated capacity for this system to respond favorably to enhancement efforts, at this time the only work being done in the Packers Lake system is the annual maintenance of the flow-control structure at the outlet of the lake.

5.7.3.7 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

## 5.7.4 Proposed New Anadromous Salmon Projects

5.7.4.1 **ADF&G** Silver Salmon Creek Escapement and Recreational Harvest Monitoring

ADF&G in cooperation with the National Park Service is planning a project that would include both the video monitoring of coho salmon escapement and the monitoring of recreational harvest in the Silver Salmon Creek drainage. (see Section 5.7.4.6)

5.7.4.2 **CIAA** Introduction of Salmon Production to Fisher Lake

Fisher Lake in the Big River lakes system is not accessible by anadromous salmon. It is a 605 acre clearwater lake with perhaps two different options for being connected in an accessible fashion to the rest of the system. Preliminary evaluations were made of opening a relic channel at the northwest corner of the lake that would connect Fisher Lake to Wolverine Lake and of constructing a fish ladder in the outlet stream at the east end of the lake that would connect Fisher Lake to Otter Lake and Big River. This early assessment seemed to indicate that the latter option would be the better of the two. Successfully-used sockeye salmon spawning habitat in Wolverine Lake in the same system was examined; and measurements in Fisher Lake suggested there is approximately 50 percent more of that type of habitat in Fisher Lake than in Wolverine Lake. Experimental gill netting in Fisher Lake for 43 hours in 1983 yielded only two

small Dolly Varden. Thus, if Fisher Lake were to be connected to the rest of the system, start-up stocking might be necessary.

5.7.4.3 **CIAA** Tyonek Rearing Facilities

Tyonek has natural artesian wells that can supply cheap, clean water in volume sufficient to support remote rearing facilities for juvenile salmon. CIAA has the capacity at its Eklutna Salmon Hatchery to incubate the eggs and provide the necessary juvenile salmon. These two elements could be put together into a single project that allowed fish incubated at Eklutna to be reared and released at Tyonek. The operation of the rearing facility would also provide the opportunity for employment within the Village of Tyonek. It is possible that this potential project developed to its full could provide additional fish, educational opportunities and local employment. The initial steps in such a development process would be to reach agreement on a general plan with the Village of Tyonek, to do preliminary engineering studies on the water supply and to prepare an overall development schedule.

5.7.4.4 **CIAA** Tuxedni Bay Sockeye Salmon Smolt-Release, Cost-Recovery Project

CIAA is investigating the establishment of a smolt-release site somewhere in Tuxedni Bay to serve as a cost-recovery project to support, in part, the other enhancement projects the Association is doing. The objective would be to create a situation where the necessary cost-recovery harvest would have the minimum conflict with any common property harvest.

5.7.4.5 **CIAA** Renewal of Packers Lake Sockeye Salmon Enhancement

It is believed that Packers Lake could again produce additional sockeye salmon through enhancement efforts. Several springs along the lake's shoreline are ideally suited for the placement of experimental incubators. It could be beneficial to develop and test several small shoreline incubators designed to take advantage of the springs that surround the lake. It is thought such incubators could produce up to 1,000,000 fry. Such an effort should also be accompanied by a renewal of the nutrient enrichment of the rearing environment. It is possible that such a program could produce an additional 25,000 sockeye salmon annually.

5.7.4.6 **NPS** Silver Salmon Creek Escapement and Recreational Harvest Monitoring

The National Park Service in cooperation with ADF&G is planning a project that would include both the video monitoring of coho salmon escapement and the monitoring of recreational harvest in the Silver Salmon Creek drainage. (see Section 5.7.4.1)

5.7.4.7 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or group not previously mentioned.

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## CHAPTER 6.0

### SUSITNA RIVER UNIT ANALYSIS

#### 6.1 OVERVIEW

The Susitna River Unit is largely inaccessible by road with the exception of the Parks Highway which runs into a relatively narrow, north-south-oriented corridor. There is increasing recreational pressure on all of the natural resources throughout the drainage, and it is accompanied by development pressures. Unlike most of the other units discussed in this plan it has very little land set aside at either the federal or state level as parks or preserves. Essentially the entire unit is within the Matanuska-Susitna Borough. There are numerous overlapping plans by state and borough agencies that together cover much of this unit.

The Susitna River system is the largest “single system” unit in the region which the CIRPT has to consider. At its maximum it extends approximately 160 air miles north to south and about 230 miles east to west. In a 1989 ADF&G report the Susitna River system was said to be the third major producer of sockeye salmon in Upper Cook Inlet and the major producer of pink salmon, chum salmon, coho salmon and king salmon returning to Upper Cook Inlet.

The area being defined as the Susitna River Unit is generally composed of three quite distinct parts. One part is the mainstem Susitna River and the tributaries which enter it from the east. The second part is the tributary systems which enter the Susitna River from the west. The third area is that portion of the Susitna River system above Devils Canyon.

In the mainstem Susitna River and the tributaries which enter it from the east a notable element affecting both the ability to conduct project work and the facility with which adult fish can be harvested is the presence of the Parks Highway in the Susitna River drainage. The highway traverses the system in a north—south direction along the mainstem of the Susitna and Chulitna rivers.

Portions of the mainstem Susitna River from Talkeetna to the mouth and the area above Devil’s Canyon have been subjected to more intensive study than most systems in the Cook Inlet drainage. The results of the Suhydro study, which examined the potential impact of dam construction for hydroelectric power generation, provide a substantial amount of baseline information about a relatively small portion of the overall drainage.

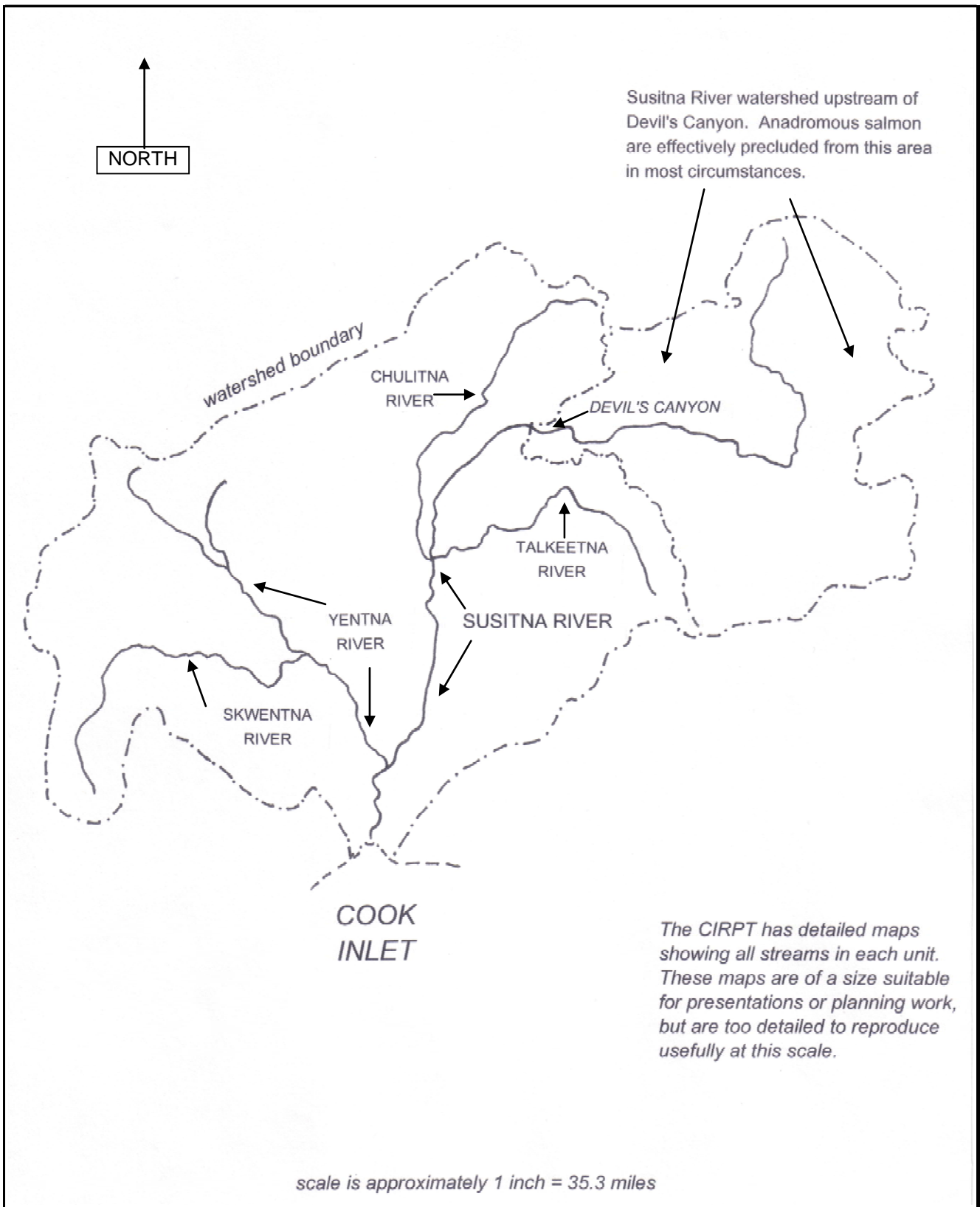
The difficulty of access to most of the unit with the exception of the area in the immediate vicinity of the Parks Highway and the area in the far northeast corner of the watershed traversed by the Denali Highway means that most of the recreational use which occurs in the unit is dependent on air or boat transportation which is often provided by commercial guiding and transportation operations.

The area upstream of Devil’s Canyon is for all intents and purposes salmonless even though under some flow regimes in some years a small number of king salmon do succeed in getting past the velocity barrier presented by Devil’s Canyon.

Although there are numerous lakes within this drainage, very few of the lakes are large enough to provide rearing habitat for large populations of salmon.

**EXHIBIT 6-1**

**SUSITNA RIVER UNIT MAP**





Despite its size the Susitna River drainage has a limited history of salmon enhancement projects. These efforts have involved primarily king and coho salmon with some additional work having been done in support of sockeye salmon enhancement. The technique most often employed has been stocking, although a limited amount of lake fertilization work has been done.

Many of the major streams have a direct glacial origin and are therefore cold, turbid and frequently changing character (ponding, changing channels, etc.). This places limitations on what can be done for enhancement work.

The extremely branched pattern of the Susitna River and its tributaries has the practical consequence of creating a large number of relatively small habitats.

Currently there appears to be a shortage of surplus sockeye salmon broodstock which can have a limiting effect on the magnitude of sockeye salmon enhancement projects involving stocking.

There is intensive recreational use of several of the tributary stream systems within the Susitna River drainage. It can place substantial physical limitations on rehabilitation/enhancement project implementation by restricting the type gear which can be used, e.g. a conventional counting weir is not practical in a stream which is used by recreational rafters.

The shorelines of many of the major lakes in much of the drainage are privately held and used to support either private recreational cabins or commercial wilderness/recreation lodges. The impact of this situation on potential rehabilitation/enhancement projects is that there are a number of separate "constituencies" each of which may have a different agenda for the future of the lake in question.

## 6.2 RELEVANT LAND USE POLICIES

Although the Susitna River Unit does not contain the extensive federal landholdings found in many of the other portions of the Cook Inlet drainage, substantial parts of the drainage have been the subjects planning efforts of one type or another. It is important to identify what affect those plans and the recommendations they include may have on fish production and fishery operation.

### 6.2.1 National Park Service:

The Denali National Park and Preserve contains only a relatively small portion of the Susitna River drainage namely the drainage of the Chulitna River West Fork beyond its confluence with the Bull River. The Anadromous Waters Catalog does not show that anadromous salmon are present in any portion of the Susitna River drainage inside the Denali National Park and Preserve. The policies governing land use within that park and preserve (see Chapter 3.0 section 3.4.5) are not expected to have any measurable influence on potential salmon enhancement or rehabilitation projects in this unit.

### 6.2.2 Alaska Department of Fish and Game:

Susitna Flats State Game Refuge Management Plan. The refuge, administered by the Alaska Department of Fish and Game, is managed under the above cited plan. The plan states several objectives among which are the maintenance, protection and where feasible, enhancement of fish habitat and populations and the minimization of harmful disturbance to spawning, rearing and overwintering fish.

6.2.3 Alaska Department of Natural Resources:

Susitna Basin Recreation Rivers Plan: The Alaska Department of Natural Resources conducted a planning effort to decide how to manage state land and water located in corridor areas along six recreation rivers (five of which are in the Susitna River drainage): Deshka River (including Moose and Kroto Creeks), Talkeetna River, Lake Creek, Talachulitna River, Alexander Creek and Little Susitna River.

Some of the more significant issues addressed by the plan include:

- Recreation: how to manage recreation activities and facilities (such as campsites, restrooms, garbage, boating and trailer-related uses)
- Habitat: which measures are necessary to protect fish and wildlife habitat (such as wet lands, riparian vegetation, stream bottoms and banks).
- Water: which measures are necessary to protect water quality. The plan will also ensure adequate stream flow in the rivers to protect the purposes of the Recreation Rivers Act.
- Transportation: how to manage transportation facilities and resources (such as airstrips, undeveloped landing areas, bridges, trams, easements, rights-of-way, heavy equipment transport and off-road vehicle use).
- Commercial Activities: where commercial facilities (such as lodges, campgrounds and base camps) are allowed in order to protect other resources in the corridors.
- Resource Use: guidelines for resource use (such as timber harvest for personal use and small materials sales). The plan will also decide if new mining claims are permitted on the uplands within the corridors.
- Enforcement: The plan will prescribe management options for resolving unauthorized uses of state land. The planning process will document illegal activities (such as trespass cabins, long term camps and other unauthorized activities).

Although there is no specific reference to salmon enhancement or rehabilitation in this process, it is clear that some of the issues related to habitat have substantial implications for the future of the salmon resource and may have some import for the particulars of project implementation. Although the plan has been approved, it has never been funded for implementation.

Land Use Plan for Public Lands in the Willow Sub-Basin was jointly developed by ADNR, the Matanuska-Susitna Borough and the Alaska Department of Fish and Game, and it covers areas both inside and outside the Susitna River drainage. The portion which falls within the Susitna River Unit is the watersheds of the tributaries on the east side of the Susitna River from the mouth north to include the drainage of Little Willow Creek. In addition this plan deals only with State-owned and Borough-owned lands.

In Chapter III - Goals, Policies and Management Guidelines - Fish and Wildlife, the plan lists the following two goals:

- “1. Maintenance and enhancement of the Willow Sub-basin as one of the state’s most important areas providing high quality, readily accessible use of fish and wildlife for local residents, residents of the Anchorage metropolitan area, and other visitors.
2. A continuing contribution of King, Red, Silver, Pink and Chum Salmon to the Cook Inlet commercial fishery from Willow Sub-basin anadromous streams.”

The Implementation Policies in this same section of the plan states the following general policy:

- “1. Fish and Wildlife habitat values shall be an important consideration in the management of all public lands, regardless of the dominant land use. Development activities will be conducted in a manner that minimizes negative impacts on fish and wildlife habitat.”

The plan does not specifically address the questions of salmon rehabilitation or enhancement; however, the goals and policy cited above would not appear to place any unacceptable conditions on a well-thought-out rehabilitation or enhancement project.

#### Susitna Area Plan:

This plan was prepared by ADNR, the Alaska Department of Fish and Game and the Matanuska-Susitna Borough in cooperation with the Alaska Department of Transportation and Public Facilities, the Kenai Peninsula Borough, the U.S. Department of Agriculture and the Bureau of Land Management.

The area covered by the plan is divided into 15 units; however, 2 of those units are not discussed, the Willow Sub-basin Unit which has its own plan as discussed in preceding paragraphs and the Denali National Park and Preserve. Of the 13 remaining units 3 are outside the drainage of the Susitna River; and they are the Beluga Unit, the Glenn Highway Unit and the Chugach Mountains Unit.

The Susitna Area Plan (SAP) published in 1985 also deals with a portion of the Chakachatna, Beluga and Chuitna River drainages which for CIRPT purposes are in the Westside Unit. The guidance contained in SAP for that area has been superseded by the Region 11 material in the Kenai Area Plan (KAP).

This plan does not specifically address direct rehabilitation or enhancement of the fish stocks, but it does clearly address and provide for rehabilitation or enhancement of fish habitat with the intent of “protecting fish and wildlife resources”.

Susitna Regional Forest Plan: This plan is still under development and is rather narrowly focused on the commercial harvest of timber in the Susitna River drainage. It is of significance to the planning of salmon rehabilitation and enhancement in that the habitat implications of commercial timber harvesting could substantially affect the vitality of existing stocks and limit the opportunities for salmon rehabilitation and enhancement.

#### 6.2.4 Matanuska-Susitna Borough:

The Borough has been an active participant in several of the studies and planning efforts outlined above. The Borough does not have specific policies on fisheries enhancement or

rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation.

**6.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 6-2A through 6-2E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G’s historical escapement counts.

**KEY FOR EXHIBITS 6A THROUGH 6E**

In the following exhibits there are numbers of fish cited under two headings, *“Highest Number of Fish Reported for the System”* (column 3) and *“Most Recent Number of Fish Reported for the System”* (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

SUSITNA RIVER UNIT KING SALMON									
USGS Name [ locally used name ]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
<i>upstream geographic reference:</i>									
		247-41-10200	data to be entered	data to be entered					
	Susitna R. (mainstem)		3 TCU 1958	UNKNOWN					
	Fish C.	247-41-10200-2020							
	Unnamed Tributary	247-41-10200-2020-3008	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2020-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3031-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3130-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2020-3195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2030	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2015	13,385 AS 1977	2,293 RH 2003					
	Alexander C.	247-41-10200-2015-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Granite C.	247-41-10200-2015-3025	UNKNOWN	UNKNOWN					
	Trail C.	247-41-10200-2015-3025-4011	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2015-3025-4015	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2015-3025-4035	UNKNOWN	UNKNOWN					
	Lower Sucker C.	247-41-10200-2015-3035	800 AS 1983	800 AS 1983					
	Wolverine C.	247-41-10200-2015-3035-4019	3,000 AS 1984	3,000 AS 1984					
	Upper Sucker C.	247-41-10200-2015-3035-4223	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-41-10200-2015-3035-4225	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Bear C.	247-41-10200-2015-3117	UNKNOWN	UNKNOWN					

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EXHIBIT 6-2A [ continued from preceding page ]									
SUSITNA RIVER UNIT KING SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Texas C.	247-41-10200-2015-3117-4208	UNKNOWN	UNKNOWN						
Clear C.	247-41-10200-2015-3040	UNKNOWN	UNKNOWN						
Fox C.	247-41-10200-2015-3020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Deep C.	247-41-10200-2015-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Anderson C.	247-41-10200-2043	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2050	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
<b>upstream geographic reference:</b>									
Yentna R.	247-41-10200-2053	data to be entered	data to be entered						
Kroto S.	247-41-10200-2053-3020	UNKNOWN	UNKNOWN						
Fish C.	247-41-10200-2053-3020-4015	132 AS 1977	132 AS 1977						
Moose C.	247-41-10200-2053-3100	100 AS 1984	100 AS 1984						
Kahitna R.	247-10-1200-2053-3150	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3150-4018	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3150-4046	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3150-4052	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Peters C.	247-41-10200-2053-3150-4060	4,000 AS 1982	122 RH 2003						
Bear C.	247-41-10200-2053-3150-4080	298 AS 1977	UNKNOWN						
Hungryman C.	247-41-10200-2053-3150-4090	100 TCJ 1982	UNKNOWN						
Treasure C.	247-41-10200-2053-3150-4115	UNKNOWN	UNKNOWN						
Cache C.	247-41-10200-2053-3150-4120	497 AS 1983	UNKNOWN						
Lake C.	247-41-10200-2053-3170	8,931 AS 1978	4,467 RH 2003						
Yenlo C.	247-41-10200-2053-3170-4027	33 AS 1962	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3170-4039	UNKNOWN	UNKNOWN						
Home C.	247-41-10200-2053-3170-4045	UNKNOWN	UNKNOWN						
Camp C.	247-41-10200-2053-3170-4067	1,050 AS 1983	UNKNOWN						

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EXHIBIT 6-2A [ continued from preceding page ]									
SUSITNA RIVER UNIT KING SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Sunflower C.	247-41-10200-2053-3170-4067	2,250 AS 1983	UNKNOWN						
Coffee C.	247-41-10200-2053-3170-4088	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2053-3170-4093	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Cripple C.	247-41-10200-2053-3170-4095	24 TCU 1976	UNKNOWN						
Fish Lake C.	247-41-10200-2053-3180	250 AS 1983	4,467 RH 2003						
<b>upstream geographic reference:</b>									
Skwentna R.	247-41-10200-2053-3205	data to be entered	data to be entered						
Eighthmile C.	247-41-10200-2053-3205-4027	12 AS 1987	UNKNOWN						
Shell C.	247-41-10200-2053-3205-4050	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Talachulitna R.	247-41-10200-2053-3205-4053	10,014 AS 1982	587 RH 2003						
Quartz. C.	247-41-10200-2053-3205-4057	8 AS 1981	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3205-4064	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Canyon C.	247-41-10200-2053-3205-4067	575 AS 1983	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3205-4070	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2053-3205-4078	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3205-4082	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3205-4099	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Happy R.	247-41-10200-2053-3205-4112	225 TCU 1958	UNKNOWN						
<b>upstream geographic reference:</b>									
Hewitt C.	247-41-10200-2053-3213	<b>CONFLUENCE OF THE YENTNA AND SKWENTNA RIVERS</b>							
Unnamed Tributary	247-41-10200-2053-3213-4050	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Donkey Creek S.	247-41-10200-2053-3220	UNKNOWN	UNKNOWN						
Donkey C.	247-41-10200-2053-3220-4030	163 AS 1978	UNKNOWN						
Johnson C.	247-41-10200-2053-3225	UNKNOWN	UNKNOWN						
Red C.	247-41-10200-2053-3225-4015	1,511 AS 1977	UNKNOWN						

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EXHIBIT 6-2A [ continued from preceding page ]									
SUSITNA RIVER UNIT KING SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
				<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-41-10200-2053-3225-4035	1,000 TCU 1982	1,000 TCU 1982						
Kichatna R.	247-41-10200-2053-3229								
Gagnan C.	247-41-10200-2053-3229-4002	13 TN 1965	13 TN 1965						
Nakochna R.	247-41-10200-2053-3229-4050	100 TCU 1982	100 TCU 1982						
Unnamed Tributary	247-41-10200-2053-3229-4075	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2053-3229-4079	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2053-3229-4087	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2053-3229-4099	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2053-3229-4110	100 TCU 1982	100 TCU 1982						
Cleanwater C.	247-41-10200-2053-3238	UNKNOW	UNKNOW						
West Fork Yentna R.	247-41-10200-2053-3249			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-41-10200-2053-3249-4101			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
East Fork Yentna R.	247-41-10200-2053-3250			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
<b>upstream geographic reference:</b>									
Unnamed Tributary	247-41-10200-2060			<b>RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH THE YENTNA RIVER</b>					
Unnamed Tributary	247-41-10200-2070			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-41-10200-2075	UNKNOW	UNKNOW	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Kroto C. / Deshka River	247-41-10200-2081	27,385 AS 1979	27,385 AS 1979	6,605 RH 2003					
Unnamed Tributary	247-41-10200-2081-3035	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3057	UNKNOW	UNKNOW						
Trapper C.	247-41-10200-2081-3050	283 AS 1979	283 AS 1979						
Unnamed Tributary	247-41-10200-2081-3050-4021	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3050-4040	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3050-4087			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-41-10200-2081-3050-4110	UNKNOW	UNKNOW						
[ continued on following page ]									



EXHIBIT 6-2A [ continued from preceding page ]									
SUSITNA RIVER UNIT KING SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2081-3065	1,220 AS 1979	1,220 AS 1979						
Unnamed Tributary	247-41-10200-2081-3065-4007	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2081-3065-4011	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2081-3065-4012	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2081-3065-4017	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3065-4021	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3065-4027	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3065-4033	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3065-4047	UNKNOW	UNKNOW						
Moose C.	247-41-10200-2081-3100	8,559 AS 1979	8,559 AS 1979						
Unnamed Tributary	247-41-10200-2081-3100-4120	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3100-4128	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Ninemile C.	247-41-10200-2081-3100-4136	UNKNOW	UNKNOW						
Unnamed Tributary	247-41-10200-2081-3100-4155	UNKNOW	UNKNOW						
Gate C.	247-41-10200-2081-3100-4167	49 AS 1964	49 AS 1964						
Unnamed Tributary	247-41-10200-2081-3100-4177	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
West Fork Moose C.	247-41-10200-2081-3100-4189	UNKNOW	UNKNOW						
Twentymile C.	247-41-10200-2081-3181	2,700 MC 1965	2,700 MC 1965						
Seventeenmile C.	247-41-10200-2081-3194	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2081-3194-4016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2081-3197	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2081-3224	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
<i>upstream geographic reference:</i>		<b>CONFLUENCE OF THE SUSITNA RIVER AND WILLOW CREEK</b>							
Willow C.	247-41-10200-2120	4,500 MC 1947	3,922 RH 2003						
Unnamed Tributary	247-41-10200-2120-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							

[ continued on following page ]

EXHIBIT 6-2A		SUSITNA RIVER UNIT KING SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Unnamed Tributary	247-41-10200-2120-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2120-3018	UNKNOW	UNKNOW				
		Deception C.	247-41-10200-2120-3020	1,856 RH 1985	1,856 RH 1985				
		Unnamed Tributary	247-41-10200-2120-3020-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2120-3020-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2120-3020-4021	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2120-3020-4031	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2120-3020-4041	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2120-3020-4051	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2120-3020-4071	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2120-3043	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Little Willow C.	247-41-10200-2130	2,133 AS 1986	310 RH 2003				
		Unnamed Tributary	247-41-10200-2130-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Rogers C.	247-41-10200-2130-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Iron C.	247-41-10200-2130-3030	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2130-3030-4025	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2130-3036	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2130-3050	UNKNOW	UNKNOW				
		Unnamed Tributary	247-41-10200-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		196 Mile C.	247-41-10200-2170	UNKNOW	UNKNOW				
		<i>upstream geographic reference:</i>		CONFLUENCE OF THE SUSITNA RIVER AND KASHWITNA RIVERS					
		Kashwitna R.	247-41-10200-2180	35 AS 1961	373 RH 2003				
		North Fork Kashwitna R.	247-41-10200-2180-3061	557 AS 1981	1,856 RH 1985				
		Caswell C.	247-41-10200-2190	6 AS 1961	26 RH 2003				
		Unnamed Tributary	247-41-10200-2190-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

EXHIBIT 6-2A		SUSITNA RIVER UNIT KING SALMON						
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
						MAY	JUNE	JULY
Sheep C.	247-41-10200-2200	1,634	RH 1985	1,284	RH 2003			
Goose C.	247-41-10200-2230	630	AS 1986	350	RH 2003			
Montana C.	247-41-10200-2250	2,309	GS 1984	1,242	RH 2003			
South Fork Montana C.	247-41-10200-2250-3050	UNKNOW		UNKNOW				
Middle Fork Montana C.	247-41-10200-2250-3061	UNKNOW		UNKNOW				
North Fork Montana C.	247-41-10200-2250-3061-4009	UNKNOW		UNKNOW				
Little Montana C.	247-41-10200-2254	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	247-41-10200-2261	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Rabideux C.	247-41-10200-2291	99	AS 1977	99	AS 1977			
Queer C.	247-41-10200-2291-3011	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	247-41-10200-2291-3011-4030	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Sawmill C.	247-41-10200-2291-3041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	247-41-10200-2291-3049	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Sunshine C.	247-41-10200-2300	25	MC 1963	154	RH 2003			
Question C.	247-41-10200-2300-3011	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Answer C.	247-41-10200-2300-3011-4016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	247-41-10200-2300-3022	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Birch Creek S.	247-41-10200-2320	UNKNOW		UNKNOW				
Birch C.	247-41-10200-2320-3010	80	AS 1961	167	RH 2003			
Unnamed Tributary	247-41-10200-2320-3010-4010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Trapper C.	247-41-10200-2341	103	AS 1985	103	AS 1985			
Unnamed Tributary	247-41-10200-2361	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
<b>upstream geographic reference:</b>								
Talkeetha R.	247-41-10200-2370	2,129	AS 1981	1,276	RH 2003	CONFLUENCE OF THE SUSITNA AND TALLEETNA RIVERS		
Chunilina R.	247-41-10200-2370-3041	1,520	AS 1984	1,520	AS 1984			

[ continued on following page ]

EXHIBIT 6-2A [ continued from preceding page ]									
SUSITNA RIVER UNIT KING SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY		AUG.	SEPT.
Unnamed Tributary	247-41-10200-2370-3041-4010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2370-3080	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3080-4007			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Sheep R.	247-41-10200-2370-3090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2370-3090-4040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Disappointment C.	247-41-10200-2370-3171	20 AS 1974	20 AS 1974						
Prairie C.	247-41-10200-2370-3301	9,000 AS 1984	9,000 AS 1984						
Unnamed Tributary	247-41-10200-2370-3301-4021	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3301-4034	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3301-4044	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3320	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3328	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3332	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3340	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3350	UNKNOWN	UNKNOWN						
<b>upstream geographic reference:</b>									
Chulitna R.	247-41-10200-2381	4,191 BS 1984	4,191 BS 1984						
Unnamed Tributary	247-41-10200-2381-3007			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2381-3007-4017			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2381-3007-4029			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2381-3051			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2381-3060			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2381-3073			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10200-2381-3090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Troublesome C.	247-41-10200-2381-3130	192 GS 1978	192 GS 1978						
[ continued on following page ]									

EXHIBIT 6-2A		SUSITNA RIVER UNIT KING SALMON						
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
						MAY	JUNE	JULY
	Tokostina R.	247-41-10200-2381-3161	UNKNOW	UNKNOW	UNKNOW			
	Alder C.	247-41-10200-2381-3161-4016	UNKNOW	UNKNOW	UNKNOW			
	Unnamed Tributary	247-41-10200-2381-3161-4071	UNKNOW	UNKNOW	UNKNOW			
	Bunco C.	247-41-10200-2381-3161-4085	523 AS 1983	523 AS 1983	523 AS 1983			
	Spink C.	247-41-10200-2381-3179	60 AS 1958	60 AS 1958	60 AS 1958			
	Byers C.	247-41-10200-2381-3180	69 AS 1977	69 AS 1977	69 AS 1977			
	Horseshoe C.	247-41-10200-2381-3220	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Unnamed Tributary	247-41-10200-2381-3231	UNKNOW	UNKNOW	UNKNOW			
	Granite C.	247-41-10200-2381-3600	UNKNOW	UNKNOW	UNKNOW			
	Division C.	247-41-10200-2381-3600-4006	UNKNOW	UNKNOW	UNKNOW			
	Honolulu C.	247-41-10200-2381-3240	36 AS 1977	36 AS 1977	36 AS 1977			
	Little Honolulu C.	247-41-10200-2381-3240-4020	UNKNOW	UNKNOW	UNKNOW			
	East Fork Chulitna R.	247-41-10200-2381-3260	168 AS 1977	168 AS 1977	168 AS 1977			
	<b>upstream geographic reference:</b>		<b>RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH CHULITNA RIVER</b>					
	Whiskers C.	247-41-10200-2391	103 AS 1985	103 AS 1985	103 AS 1985			
	Unnamed Tributary	247-41-10200-2391-3021	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Unnamed Tributary	247-41-10200-2391-3033	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Unnamed Tributary	247-41-10200-2391-3036	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Unnamed Tributary	247-41-10200-2391-3039	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Unnamed Tributary	247-41-10200-2420	31 AS 1985	31 AS 1985	31 AS 1985			
	Unnamed Tributary	247-41-10200-2420-3004	UNKNOW	UNKNOW	UNKNOW			
	Unnamed Tributary	247-41-10200-2420-3013	UNKNOW	UNKNOW	UNKNOW			
	Unnamed Tributary	247-41-10200-2426	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Unnamed Tributary	247-41-10200-2436	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
	Lane C.	247-41-10200-2440	47 GS 1982	47 GS 1982	47 GS 1982			

[ continued on following page ]

EXHIBIT 6-2A		SUSITNA RIVER UNIT KING SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
Unnamed Tributary		247-41-10200-2441	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2443	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lower McKenzie C.		247-41-10200-2444	UNKNOWN	UNKNOWN					
Upper McKenzie C.		247-41-10200-2450	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2452	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Portage C.		247-41-10200-2454	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2457	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2459	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2462	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2463	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2470	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2473	21 AS 1985	21 AS 1985					
Unnamed Tributary		247-41-10200-2474	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		247-41-10200-2510	3 GS 1982	3 GS 1982					
Unnamed Tributary		247-41-10200-2511	92 AS 1984	92 AS 1984					
Gold C.		247-41-10200-2540	35 AS 1985	35 AS 1985					
Indian R.		247-41-10200-2551	1,456 AS 1984	1,456 AS 1984					
Salmon C.		247-41-10200-2551-3015	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-41-10200-2551-3201	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-41-10200-2570	7 AS 1985	7 AS 1985					
Portage C.		247-41-10200-2585	5,446 AS 1984	5,446 AS 1984					
Unnamed Tributary		247-41-10200-2585-3100	UNKNOWN	UNKNOWN					
Thoroughfare C.		247-41-10200-2585-3201	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-41-10200-2585-3223	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-41-10200-2596	29 AS 1984	29 AS 1984					
Unnamed Tributary		247-41-10200-2630	15 AS 1984	15 AS 1984					
Unnamed Tributary		247-41-10200-2696	2 AS 1984	2 AS 1984					

SUSITNA RIVER UNIT SOCKEYE SALMON									
Stream USGS Name / locally used name	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<b>upstream geographic reference:</b>									
			data to be entered	data to be entered					
Susitna R. (mainstem)	247-41-10200								
Fish C.	247-41-10200-2020	5,900 TCU 1981	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3008	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3031	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3031-4016	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3041	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3110	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3130	450 TCU 1984	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3130-4020	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2030	UNKNOWN	UNKNOWN						
Alexander C.	247-41-10200-2015	5,000 EHO no date	138 RH 2003						
Granite C.	247-41-10200-2015-3017	UNKNOWN	UNKNOWN						
Trail C.	247-41-10200-2015-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3025-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3025-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3025-4035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Lower Sucker C.	247-41-10200-2015-3035	UNKNOWN	UNKNOWN						
Wolverine C.	247-41-10200-2015-3035-4019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Upper Sucker C.	247-41-10200-2015-3035-4223	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2015-3035-4225	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bear C.	247-41-10200-2015-3117	UNKNOWN	UNKNOWN						

[ continued on following page ]

EXHIBIT 6-2B		SUSITNA RIVER UNIT SOCKEYE SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Texas C.	247-41-10200-2015-3117-4208	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Clear C.	247-41-10200-2015-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Fox C.	247-41-10200-2015-3020	UNKNOWN	UNKNOWN				
		Deep C.	247-41-10200-2015-3010	UNKNOWN	UNKNOWN				
		Anderson C.	247-41-10200-2043	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		<b>upstream geographic reference:</b>							
		Yentna R.	247-41-10200-2053	data to be entered	data to be entered				
		Kroto S.	247-41-10200-2053-3020	UNKNOWN	UNKNOWN				
		Fish C.	247-41-10200-2053-3020-4015	UNKNOWN	UNKNOWN				
		Moose C.	247-41-10200-2053-3100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Kahlitna R.	247-10-1200-2053-3150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3150-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3150-4046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3150-4052	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Peters C.	247-41-10200-2053-3150-4060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Bear C.	247-41-10200-2053-3150-4080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Hungryman C.	247-41-10200-2053-3150-4090	5,000 TCU 1982	UNKNOWN				
		Treasure C.	247-41-10200-2053-3150-4115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Cache C.	247-41-10200-2053-3150-4120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Lake C.	247-41-10200-2053-3170	23,180 TCU 1982	6,900 RH 2003				
		Yenlo C.	247-41-10200-2053-3170-4027	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3170-4039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Home C.	247-41-10200-2053-3170-4045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Camp C.	247-41-10200-2053-3170-4057	UNKNOWN	UNKNOWN				
		[ continued on following page ]							



EXHIBIT 6-2B [ continued from preceding page ]									
SUSITNA RIVER UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Sunflower C.	247-41-10200-2053-3170-4067	UNKNOWN	UNKNOWN						
Coffee C.	247-41-10200-2053-3170-4088	254 GS 1972	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3170-4093	57 GS 1972	UNKNOWN						
Cripple C.	247-41-10200-2053-3170-4095	438 TCU 1976	UNKNOWN						
Fish Lake C.	247-41-10200-2053-3180	17,500 AS 1972	162 RH 2003						
<b>upstream geographic reference:</b>									
Skwentna R.	247-41-10200-2053-3205	data to be entered	data to be entered						
Eightmile C.	247-41-10200-2053-3205-4027	15,900 AS 1983	UNKNOWN						
Shell C.	247-41-10200-2053-3205-4050	45,000 AS 1985	UNKNOWN						
Talachulitna R.	247-41-10200-2053-3205-4053	52,000 MC 1962	233 RH 2003						
Quartz. C.	247-41-10200-2053-3205-4057	1,210 TCU 1981	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3205-4064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Canyon C.	247-41-10200-2053-3205-4067	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2053-3205-4070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2053-3205-4078	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2053-3205-4082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2053-3205-4099	1,212 TCU 1981	UNKNOWN						
Happy R.	247-41-10200-2053-3205-4112	2,100 AS 1977	UNKNOWN						
<b>upstream geographic reference:</b>									
Hewitt C.	247-41-10200-2053-3213	4,301 TCU 1984	UNKNOWN						
Unnamed Tributary	247-41-10200-2053-3213-4050	12,993 WC 1990	UNKNOWN						
Donkey Creek S.	247-41-10200-2053-3220	UNKNOWN	UNKNOWN						
Donkey C.	247-41-10200-2053-3220-4030	1,000 TCU 1982	UNKNOWN						
Johnson C.	247-41-10200-2053-3225	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Red C.	247-41-10200-2053-3225-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

[ continued on following page ]

EXHIBIT 6-2B [ continued from preceding page ]									
SUSITNA RIVER UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2053-3225-4035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kichatna R.	247-41-10200-2053-3229		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Gagnan C.	247-41-10200-2053-3229-4002		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Nakochna R.	247-41-10200-2053-3229-4050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4075		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4079		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4087		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4099		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Clearwater C.	247-41-10200-2053-3238	UNKNOWN	UNKNOWN						
West Fork Yentna R.	247-41-10200-2053-3249	10,340 TCU 1982	10,340 TCU 1982						
Unnamed Tributary	247-41-10200-2053-3249-4101	UNKNOWN	UNKNOWN						
East Fork Yentna R.	247-41-10200-2053-3250	UNKNOWN	UNKNOWN						
<b>upstream geographic reference:</b>									
Unnamed Tributary	247-41-10200-2060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2075		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kroto C. / Deshka River	247-41-10200-2081	500 TCU 1982	500 TCU 1982						
Unnamed Tributary	247-41-10200-2081-3035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3057		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Trapper C.	247-41-10200-2081-3050	3,000 TCU 1983	3,000 TCU 1983						
Unnamed Tributary	247-41-10200-2081-3050-4021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4087		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

[ continued on following page ]

EXHIBIT 6-2B [ continued from preceding page ]									
SUSITNA RIVER UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2081-3065	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2081-3065-4007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4027	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4047	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Moose C.	247-41-10200-2081-3100	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2081-3100-4120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4128	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Ninemile C.	247-41-10200-2081-3100-4136	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4155	UNKNOWN	UNKNOWN						
Gate C.	247-41-10200-2081-3100-4167	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4177	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
West Fork Moose C.	247-41-10200-2081-3100-4189	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Twentymile C.	247-41-10200-2081-3181	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Seventeenmile C.	247-41-10200-2081-3194	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3194-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3197	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3224	UNKNOWN	UNKNOWN						
<b>upstream geographic reference:</b>									
Willow C.	247-41-10200-2120	212 GS 1984	CONFLUENCE OF THE SUSITNA RIVER AND WILLOW CREEK						
Unnamed Tributary	247-41-10200-2120-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
[ continued on following page ]									

EXHIBIT 6-2B		SUSITNA RIVER UNIT SOCKEYE SALMON							
		[ continued from preceding page ]					Run Timing		
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2120-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Deception C.	247-41-10200-2120-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3020-4071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2120-3043	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Willow C.	247-41-10200-2130	141 RH 1979	63 RH 2003						
Unnamed Tributary	247-41-10200-2130-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Rogers C.	247-41-10200-2130-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Iron C.	247-41-10200-2130-3030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2130-3030-4025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2130-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2130-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2095	UNKNOWN	UNKNOWN						
196 Mile C.	247-41-10200-2170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
<b>upstream geographic reference:</b>									
Kashwitna R.	247-41-10200-2180	CONFLUENCE OF THE SUSITNA RIVER AND KASHWITNA RIVERS							
North Fork Kashwitna R.	247-41-10200-2180-3061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Caswell C.	247-41-10200-2190	2,300 AS 1983	2,300 AS 1983						
Unnamed Tributary	247-41-10200-2190-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

[ continued on following page ]

EXHIBIT 6-2B		SUSITNA RIVER UNIT SOCKEYE SALMON										
		[ continued from preceding page ]										
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing								
				MAY	JUNE	JULY	AUG.	SEPT.				
Sheep C.	247-41-10200-2200	31 RH 1979	74 RH 2003									
Goose C.	247-41-10200-2230	74 GS 1984	27 RH 2003									
Montana C.	247-41-10200-2250	267 RH 2003	267 RH 2003									
South Fork Montana C.	247-41-10200-2250-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Middle Fork Montana C.	247-41-10200-2250-3061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
North Fork Montana C.	247-41-10200-2250-3061-4009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Little Montana C.	247-41-10200-2254	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-41-10200-2261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Rabideux C.	247-41-10200-2291	7 GS 1984	7 GS 1984									
Queer C.	247-41-10200-2291-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-41-10200-2291-3011-4030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Sawmill C.	247-41-10200-2291-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-41-10200-2291-3049	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Sunshine C.	247-41-10200-2300	42 GS 1984	116 RH 2003									
	247-41-10200-2300-3011	5,970 MC 1957	5,970 MC 1957									
	247-41-10200-2300-3011-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-41-10200-2300-3022	UNKNOW										
Birch Creek S.	247-41-10200-2320	UNKNOW										
	247-41-10200-2320-3010	2,100 TCU 1980	105 RH 2003									
Unnamed Tributary	247-41-10200-2320-3010-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Trapper C.	247-41-10200-2341	3,000 TCU 1983	3,000 TCU 1983									
Unnamed Tributary	247-41-10200-2361	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
<b>upstream geographic reference:</b>												
Talkeetna R.	247-41-10200-2370	1,574 RH 2003	1,574 RH 2003	CONFLUENCE OF THE SUSITNA AND TALLEKEETNA RIVERS								
Chunilna R.	247-41-10200-2370-3041	7,000 TCU 1970	7,000 TCU 1970									

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EXHIBIT 6-2B		SUSITNA RIVER UNIT SOCKEYE SALMON									
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
						MAY	JUNE	JULY	AUG.		SEPT.
		Unnamed Tributary	247-41-10200-2370-3041-4010	1,315 TCU 1982	1,315 TCU 1982						
		Unnamed Tributary	247-41-10200-2370-3080	37,874 WC 1985	37,874 WC 1985						
		Unnamed Tributary	247-41-10200-2370-3080-4007			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Sheep R.	247-41-10200-2370-3090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3090-4040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Disappointment C.	247-41-10200-2370-3171			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Prairie C.	247-41-10200-2370-3301	6,500 MC 1951	6,500 MC 1951						
		Unnamed Tributary	247-41-10200-2370-3301-4021			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3301-4034			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3301-4044		UNKNOWN						
		Unnamed Tributary	247-41-10200-2370-3320			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3328			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3332			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3340			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2370-3350			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		<b>upstream geographic reference:</b>				CONFLUENCE OF THE SUSITNA AND CHULITNA RIVERS					
		Chulitna R.	247-41-10200-2381		UNKNOWN						
		Unnamed Tributary	247-41-10200-2381-3007			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3007-4017			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3007-4029			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3051			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3060			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3073			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Troublesome C.	247-41-10200-2381-3130	182 TCU 1972	182 TCU 1972						

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EXHIBIT 6-2B [ continued from preceding page ]									
SUSITNA RIVER UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Tokositna R.	247-41-10200-2381-3161	UNKNOWN	UNKNOWN						
Alder C.	247-41-10200-2381-3161-4016	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3161-4071	917 TCU 1978	917 TCU 1978						
Bunco C.	247-41-10200-2381-3161-4085	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Spink C.	247-41-10200-2381-3179	12 AS 1982	12 AS 1982						
Byers C.	247-41-10200-2381-3180	1,200 TCU 1964	1,200 TCU 1964						
Horseshoe C.	247-41-10200-2381-3220	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2381-3231	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Granite C.	247-41-10200-2381-3600	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Division C.	247-41-10200-2381-3600-4006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Honolulu C.	247-41-10200-2381-3240	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Little Honolulu C.	247-41-10200-2381-3240-4020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
East Fork Chulitna R.	247-41-10200-2381-3260	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
<b>upstream geographic reference:</b>		<b>RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH CHULITNA RIVER</b>							
Whiskers C.	247-41-10200-2391	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2391-3021	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2391-3033	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2391-3036	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2391-3039	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2420	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2420-3004	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2420-3013	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2426	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2436	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Lane C.	247-41-10200-2440	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							

[ continued on following page ]

EXHIBIT 6-2B [ continued from preceding page ]									
SUSITNA RIVER UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			SEPT.		
				MAY	JUNE	JULY		AUG.	
Unnamed Tributary	247-41-10200-2441	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2443	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lower McKenzie C.	247-41-10200-2444	1 GS 1981	1 GS 1981						
Upper McKenzie C.	247-41-10200-2450	45 TCU 1975	45 TCU 1975						
Unnamed Tributary	247-41-10200-2452	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Portage C.	247-41-10200-2454	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2457	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2459	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2462	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2463	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2470	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2473	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2474	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2510	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2511	1,500 GS 1984	1,500 GS 1984						
Gold C.	247-41-10200-2540	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Indian R.	247-41-10200-2551	1 AS 1984	1 AS 1984						
Salmon C.	247-41-10200-2551-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2551-3201	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2570	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Portage C.	247-41-10200-2585	14 AS 1984	14 AS 1984						
Unnamed Tributary	247-41-10200-2585-3100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Thoroughfare C.	247-41-10200-2585-3201	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2585-3223	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2596	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2630	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2696	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						



EXHIBIT 6-2C SUSITNA RIVER UNIT COHO SALMON						
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
<b>upstream geographic reference:</b>						
Susitna R. (mainstem)	247-41-10200	data to be entered	data to be entered			
Fish C.	247-41-10200-2020	100 AS 1972	UNKNOWN			
Unnamed Tributary	247-41-10200-2020-3008	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2020-3031	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2020-3031-4016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2020-3041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2020-3110	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2020-3130	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2020-3130-4020	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2020-3150	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2020-3185	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2020-3195	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2030	UNKNOWN	UNKNOWN			
Alexander C.	247-41-10200-2015	1,560 SH 1979	1,071 RH 2003			
Granite C.	247-41-10200-2015-3017	UNKNOWN	UNKNOWN			
Trail C.	247-41-10200-2015-3025	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2015-3025-4011	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2015-3025-4015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Unnamed Tributary	247-41-10200-2015-3025-4035	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Lower Sucker C.	247-41-10200-2015-3035	UNKNOWN	UNKNOWN			
Wolverine C.	247-41-10200-2015-3035-4019	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				
Upper Sucker C.	247-41-10200-2015-3035-4223	UNKNOWN	UNKNOWN			
Unnamed Tributary	247-41-10200-2015-3035-4225	UNKNOWN	UNKNOWN			
Bear C.	247-41-10200-2015-3117	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>				

[ continued on following page ]

EXHIBIT 6-2C											
[ continued from preceding page ]											
SUSITNA RIVER UNIT COHO SALMON											
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			MAY	JUNE	JULY	AUG.	SEPT.
				ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Texas C.	247-41-10200-2015-3117-4208			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Clear C.	247-41-10200-2015-3040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Fox C.	247-41-10200-2015-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Deep C.	247-41-10200-2015-3010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Anderson C.	247-41-10200-2043	UNKNOW	UNKNOW								
Unnamed Tributary	247-41-10200-2050	UNKNOW	UNKNOW								
<b>upstream geographic reference:</b>											
Yentna R.	247-41-10200-2053	data to be entered	data to be entered	CONFLUENCE OF THE SUSITNA AND YENTNA RIVERS							
Kroto S.	247-41-10200-2053-3020	55 AS 1984	UNKNOW								
Fish C.	247-41-10200-2053-3020-4015	UNKNOW	UNKNOW								
Moose C.	247-41-10200-2053-3100	UNKNOW	UNKNOW								
Kahlina R.	247-10-1200-2053-3150	UNKNOW	UNKNOW								
Unnamed Tributary	247-41-10200-2053-3150-4018	UNKNOW	UNKNOW								
Unnamed Tributary	247-41-10200-2053-3150-4046			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2053-3150-4052	UNKNOW	UNKNOW								
Peters C.	247-41-10200-2053-3150-4060	1,000 AS 1982	155 RH 2003								
Bear C.	247-41-10200-2053-3150-4080			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Hungryman C.	247-41-10200-2053-3150-4090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Treasure C.	247-41-10200-2053-3150-4115	UNKNOW	UNKNOW								
Cache C.	247-41-10200-2053-3150-4120	2 TCU 1982	UNKNOW								
Lake C.	247-41-10200-2053-3170	2,500 TCU 1980	5,263 RH 2003								
Yenlo C.	247-41-10200-2053-3170-4027			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2053-3170-4039	UNKNOW	UNKNOW								
Home C.	247-41-10200-2053-3170-4045	UNKNOW	UNKNOW								
Camp C.	247-41-10200-2053-3170-4057	UNKNOW	UNKNOW								
[ continued on following page ]											

EXHIBIT 6-2C		SUSITNA RIVER UNIT COHO SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Sunflower C.	247-41-10200-2053-3170-4067	UNKNOWN	UNKNOWN				
		Coffee C.	247-41-10200-2053-3170-4088	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3170-4093	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Cripple C.	247-41-10200-2053-3170-4095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Fish Lake C.	247-41-10200-2053-3180	500 TCU 1981	959 RH 2003				
		<b>upstream geographic reference:</b>							
		Skwentna R.	247-41-10200-2053-3205	data to be entered	data to be entered				
		Eightmile C.	247-41-10200-2053-3205-4027	UNKNOWN	UNKNOWN				
		Shell C.	247-41-10200-2053-3205-4050	200 TCU 1979	UNKNOWN				
		Talachulitna R.	247-41-10200-2053-3205-4053	30,000 MC 1952	1,543 RH 2003				
		Quartz. C.	247-41-10200-2053-3205-4057	50 TCU 1981	UNKNOWN				
		Unnamed Tributary	247-41-10200-2053-3205-4064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Canyon C.	247-41-10200-2053-3205-4067	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3205-4070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3205-4078	UNKNOWN	UNKNOWN				
		Unnamed Tributary	247-41-10200-2053-3205-4082	UNKNOWN	UNKNOWN				
		Unnamed Tributary	247-41-10200-2053-3205-4099	230 AS 1978	UNKNOWN				
		Happy R.	247-41-10200-2053-3205-4112	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		<b>upstream geographic reference:</b>							
		Hewitt C.	247-41-10200-2053-3213	50 TCU 1980	UNKNOWN				
		Unnamed Tributary	247-41-10200-2053-3213-4050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Donkey Creek S.	247-41-10200-2053-3220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Donkey C.	247-41-10200-2053-3220-4030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Johnson C.	247-41-10200-2053-3225	UNKNOWN	UNKNOWN				
		Red C.	247-41-10200-2053-3225-4015	UNKNOWN	UNKNOWN				
		[ continued on following page ]							

SUSITNA RIVER UNIT COHO SALMON									
USGS Name [locally used name]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
	Unnamed Tributary	247-41-10200-2053-3225-4035	UNKNOWN	UNKNOWN					
	Kichatna R.	247-41-10200-2053-3229	10,000 TCU 1982	10,000 TCU 1982					
	Gagnan C.	247-41-10200-2053-3229-4002	UNKNOWN	UNKNOWN					
	Nakochna R.	247-41-10200-2053-3229-4050	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2053-3229-4075	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	247-41-10200-2053-3229-4079	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	247-41-10200-2053-3229-4087	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	247-41-10200-2053-3229-4099	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	247-41-10200-2053-3229-4110	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Cleanwater C.	247-41-10200-2053-3238	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	West Fork Yentna R.	247-41-10200-2053-3249	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	247-41-10200-2053-3249-4101	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	East Fork Yentna R.	247-41-10200-2053-3250	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	<b>upstream geographic reference:</b>								
	Unnamed Tributary	247-41-10200-2060	UNKNOWN	UNKNOWN	<b>RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH THE YENTNA RIVER</b>				
	Unnamed Tributary	247-41-10200-2070	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2075	UNKNOWN	UNKNOWN					
	Kroto C. / Deshka River	247-41-10200-2081	10,000 TCU 1982	4,946 RH 2003					
	Unnamed Tributary	247-41-10200-2081-3035	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2081-3057	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Trapper C.	247-41-10200-2081-3050	294 TCU 1985	294 TCU 1985					
	Unnamed Tributary	247-41-10200-2081-3050-4021	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2081-3050-4040	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2081-3050-4087	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2081-3050-4110	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						

[ continued on following page ]

EXHIBIT 6-2C										SUSITNA RIVER UNIT COHO SALMON			
[ continued from preceding page ]										Run Timing			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	247-41-10200-2081-3065	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3065-4007	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3065-4011	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3065-4012	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3065-4017	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3065-4021	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3065-4027	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>											
Unnamed Tributary	247-41-10200-2081-3065-4033	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>											
Unnamed Tributary	247-41-10200-2081-3065-4047	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>											
Moose C.	247-41-10200-2081-3100	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3100-4120	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>											
Unnamed Tributary	247-41-10200-2081-3100-4128	UNKNOWN	UNKNOWN										
Ninemile C.	247-41-10200-2081-3100-4136	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3100-4155	UNKNOWN	UNKNOWN										
Gate C.	247-41-10200-2081-3100-4167	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3100-4177	UNKNOWN	UNKNOWN										
West Fork Moose C.	247-41-10200-2081-3100-4189	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>											
Twentymile C.	247-41-10200-2081-3181	UNKNOWN	UNKNOWN										
Seventeenmile C.	247-41-10200-2081-3194	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3194-4016	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3197	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-41-10200-2081-3224	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>											
<b>upstream geographic reference:</b>										<b>CONFLUENCE OF THE SUSITNA RIVER AND WILLOW CREEK</b>			
Willow C.	247-41-10200-2120	2,000	MC 1950	2,918	RH 2003								
Unnamed Tributary	247-41-10200-2120-3010	UNKNOWN	UNKNOWN										
[ continued on following page ]													

EXHIBIT 6-2C										SUSITNA RIVER UNIT COHO SALMON				
[ continued from preceding page ]										Run Timing				
Stream USGS Name [ locally used name ]		Anadromous Waters Catalog Number		Highest Number of Fish Reported for the System		Most Recent Number of Fish Reported for the System		MAY	JUNE	JULY	AUG.	SEPT.		
Unnamed Tributary		247-41-10200-2120-3017		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3018		UNKNOWN		UNKNOWN								
Deception C.		247-41-10200-2120-3020		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4010		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4018		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4021		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4031		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4041		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4051		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3020-4071		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2120-3043		UNKNOWN		UNKNOWN								
Little Willow C.		247-41-10200-2130		494 RH 1980		635 RH 2003								
Unnamed Tributary		247-41-10200-2130-3011		UNKNOWN		UNKNOWN								
Rogers C.		247-41-10200-2130-3020		UNKNOWN		UNKNOWN								
Iron C.		247-41-10200-2130-3030		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2130-3030-4025		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		UNKNOWN								
Unnamed Tributary		247-41-10200-2130-3036		UNKNOWN		UNKNOWN								
Unnamed Tributary		247-41-10200-2130-3050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		UNKNOWN								
Unnamed Tributary		247-41-10200-2095		UNKNOWN		UNKNOWN								
196 Mile C.		247-41-10200-2170		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		UNKNOWN								
upstream geographic reference:														
Kashwitna R.		247-41-10200-2180		CONFLUENCE OF THE SUSITNA RIVER AND KASHWITNA RIVERS		UNKNOWN								
North Fork Kashwitna R.		247-41-10200-2180-3061		33 TCU 1984		33 TCU 1984								
Caswell C.		247-41-10200-2190		938 RH 2003		938 RH 2003								
Unnamed Tributary		247-41-10200-2190-3020		UNKNOWN		UNKNOWN								

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EXHIBIT 6-2C		SUSITNA RIVER UNIT COHO SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
Sheep C.	247-41-10200-2200	1,908	RH 2003	1,908	RH 2003				
Goose C.	247-41-10200-2230	220	RH 2003	220	RH 2003				
Montana C.	247-41-10200-2250	3,361	RH 2003	3,361	RH 2003				
South Fork Montana C.	247-41-10200-2250-3050	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Middle Fork Montana C.	247-41-10200-2250-3061	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
North Fork Montana C.	247-41-10200-2250-3061-4009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Little Montana C.	247-41-10200-2254	UNKNOWN		UNKNOWN					
Unnamed Tributary	247-41-10200-2261	UNKNOWN		UNKNOWN					
Rabideux C.	247-41-10200-2291	21	AS 1984	21	AS 1984				
Queer C.	247-41-10200-2291-3011	UNKNOWN		UNKNOWN					
Unnamed Tributary	247-41-10200-2291-3011-4030	UNKNOWN		UNKNOWN					
Sawmill C.	247-41-10200-2291-3041	UNKNOWN		UNKNOWN					
Unnamed Tributary	247-41-10200-2291-3049	UNKNOWN		UNKNOWN					
Sunshine C.	247-41-10200-2300	2,508	RH 2003	2,508	RH 2003				
Question C.	247-41-10200-2300-3011	397	TCU 1982	397	TCU 1982				
Answer C.	247-41-10200-2300-3011-4016	60	TCU 1984	60	TCU 1984				
Unnamed Tributary	247-41-10200-2300-3022	UNKNOWN		UNKNOWN					
Birch Creek S.	247-41-10200-2320	UNKNOWN		UNKNOWN					
Unnamed Tributary	247-41-10200-2320-3010	421	RH 2003	421	RH 2003				
Trapper C.	247-41-10200-2341	443	AS 1985	443	AS 1985				
Unnamed Tributary	247-41-10200-2361	UNKNOWN		UNKNOWN					
<b>upstream geographic reference:</b>									
Talkeetna R.	247-41-10200-2370	443	AS 1985	443	AS 1985				
Chunilna R.	247-41-10200-2370-3041	2,500	TCU 1982	2,500	TCU 1982				

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SUSITNA RIVER UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2370-3041-4010	250 TCU 1978	250 TCU 1978						
Unnamed Tributary	247-41-10200-2370-3080	97 WC 1986	97 WC 1986						
Unnamed Tributary	247-41-10200-2370-3080-4007	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Sheep R.	247-41-10200-2370-3090	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2370-3090-4040	UNKNOWN	UNKNOWN						
Disappointment C.	247-41-10200-2370-3171	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Prairie C.	247-41-10200-2370-3301	44 GS 1975	44 GS 1975						
Unnamed Tributary	247-41-10200-2370-3301-4021	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3301-4034	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3301-4044	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3320	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3328	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3332	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3340	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2370-3350	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
<b>upstream geographic reference:</b>									
Chulitna R.	247-41-10200-2381	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3007	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3007-4017	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3007-4029	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3051	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3060	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3073	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2381-3090	UNKNOWN	UNKNOWN						
Troublesome C.	247-41-10200-2381-3130	155 RH 2003	155 RH 2003						

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EXHIBIT 6-2C [ continued from preceding page ]									
SUSITNA RIVER UNIT COHO SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Tokositna R.	247-41-10200-2381-3161	UNKNOWN	UNKNOWN						
Alder C.	247-41-10200-2381-3161-4016	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3161-4071	50 TCU 1976	50 TCU 1976						
Bunco C.	247-41-10200-2381-3161-4085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Spink C.	247-41-10200-2381-3179	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Byers C.	247-41-10200-2381-3180	500 TCU 1979	500 TCU 1979						
Horseshoe C.	247-41-10200-2381-3220	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2381-3231	UNKNOWN	UNKNOWN						
Granite C.	247-41-10200-2381-3600	UNKNOWN	UNKNOWN						
Division C.	247-41-10200-2381-3600-4006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Honolulu C.	247-41-10200-2381-3240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Honolulu C.	247-41-10200-2381-3240-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
East Fork Chulitna R.	247-41-10200-2381-3260	UNKNOWN	UNKNOWN						
<i>upstream geographic reference:</i>									
Whiskers C.	247-41-10200-2391	443 AS 1985	443 AS 1985						
Unnamed Tributary	247-41-10200-2391-3021	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2391-3033	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2391-3036	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2391-3039	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2420	239 GS 1984	239 GS 1984						
Unnamed Tributary	247-41-10200-2420-3004	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2420-3013	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2426	8 AS 1985	8 AS 1985						
Unnamed Tributary	247-41-10200-2436	234 GS 1984	234 GS 1984						
Lane C.	247-41-10200-2440	13 GS 1985	13 GS 1985						

[ continued on following page ]

SUSITNA RIVER UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2441	8 GS 1984	8 GS 1984						
Unnamed Tributary	247-41-10200-2443	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Lower McKenzie C.	247-41-10200-2444	133 GS 1982	133 GS 1982						
Upper McKenzie C.	247-41-10200-2450	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2452	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Portage C.	247-41-10200-2454	2 AS 1985	2 AS 1985						
Unnamed Tributary	247-41-10200-2457	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2459	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2462	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2463	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2470	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2473	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2474	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2510	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2511	26 PC 1974	26 PC 1974						
Gold C.	247-41-10200-2540	1 GS 1982	1 GS 1982						
Indian R.	247-41-10200-2551	465 AS 1984	465 AS 1984						
Salmon C.	247-41-10200-2551-3015	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2551-3201	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2570	11 AS 1985	11 AS 1985						
Portage C.	247-41-10200-2585	128 AS 1984	128 AS 1984						
Unnamed Tributary	247-41-10200-2585-3100	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Thoroughfare C.	247-41-10200-2585-3201	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2585-3223	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2596	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2630	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10200-2696	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							

EXHIBIT 6-2D										SUSITNA RIVER UNIT PINK SALMON									
Stream USGS Name [ locally used name ]		Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing														
					MAY	JUNE	JULY	AUG.	SEPT.										
<i>upstream geographic reference:</i>										MOUTH OF THE SUSITNA RIVER									
Susitna R. (mainstem)		247-41-10200	data to be entered	data to be entered															
Fish C.		247-41-10200-2020	UNKNOWN	UNKNOWN															
Unnamed Tributary		247-41-10200-2020-3008	UNKNOWN	UNKNOWN															
Unnamed Tributary		247-41-10200-2020-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3031-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3130-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2020-3195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Alexander C.		247-41-10200-2015	250,000	EHO no date	75	RH 2003													
Granite C.		247-41-10200-2015-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Trail C.		247-41-10200-2015-3025	UNKNOWN	UNKNOWN															
Unnamed Tributary		247-41-10200-2015-3025-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2015-3025-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2015-3025-4035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Lower Sucker C.		247-41-10200-2015-3035	UNKNOWN	UNKNOWN															
Wolverine C.		247-41-10200-2015-3035-4019	1,000,000	TCU 1966															
Upper Sucker C.		247-41-10200-2015-3035-4223	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		247-41-10200-2015-3035-4225	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Bear C.		247-41-10200-2015-3117	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																

[ continued on following page ]

EXHIBIT 6-2D		SUSITNA RIVER UNIT PINK SALMON						
[ continued from preceding page ]								
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Texas C.	247-41-10200-2015-3117-4208			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Clear C.	247-41-10200-2015-3040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Fox C.	247-41-10200-2015-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Deep C.	247-41-10200-2015-3010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Anderson C.	247-41-10200-2043	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10200-2050	UNKNOWN	UNKNOWN					
<b>upstream geographic reference:</b>								
Yentna R.	247-41-10200-2053	data to be entered	data to be entered					
Kroto S.	247-41-10200-2053-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Fish C.	247-41-10200-2053-3020-4015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Moose C.	247-41-10200-2053-3100			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Kahlina R.	247-10-1200-2053-3150	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10200-2053-3150-4018			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	247-41-10200-2053-3150-4046			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	247-41-10200-2053-3150-4052			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Peters C.	247-41-10200-2053-3150-4060	10,000 AS 1982	UNKNOWN					
Bear C.	247-41-10200-2053-3150-4080	5,000 EHO 1982	UNKNOWN					
Hungryman C.	247-41-10200-2053-3150-4090	5,000 TCJ 1982	UNKNOWN					
Treasure C.	247-41-10200-2053-3150-4115			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Cache C.	247-41-10200-2053-3150-4120	UNKNOWN	UNKNOWN					
Lake C.	247-41-10200-2053-3170	500,000 TCJ 1980	204 RH 2003					
Yenlo C.	247-41-10200-2053-3170-4027			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	247-41-10200-2053-3170-4039			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Home C.	247-41-10200-2053-3170-4045			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Camp C.	247-41-10200-2053-3170-4057			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
[ continued on following page ]								

EXHIBIT 6-2D [ continued from preceding page ]							SUSITNA RIVER UNIT PINK SALMON			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Sunflower C.	247-41-10200-2053-3170-4067									
Coffee C.	247-41-10200-2053-3170-4088									
Unnamed Tributary	247-41-10200-2053-3170-4093									
Cripple C.	247-41-10200-2053-3170-4095									
Fish Lake C.	247-41-10200-2053-3180	7 WC 1974	8 RH 2003							
<b>upstream geographic reference:</b>										
Skwentna R.	247-41-10200-2053-3205	data to be entered	data to be entered							
Eightmile C.	247-41-10200-2053-3205-4027	UNKNOWN	UNKNOWN							
Shell C.	247-41-10200-2053-3205-4050	172 WC 1986	UNKNOWN							
Talachulitna R.	247-41-10200-2053-3205-4053	1,000,000 MC 1960	90 RH 2003							
Quartz C.	247-41-10200-2053-3205-4057	35 TCU 1976	UNKNOWN							
Unnamed Tributary	247-41-10200-2053-3205-4064									
Canyon C.	247-41-10200-2053-3205-4067	UNKNOWN	UNKNOWN							
Unnamed Tributary	247-41-10200-2053-3205-4070									
Unnamed Tributary	247-41-10200-2053-3205-4078									
Unnamed Tributary	247-41-10200-2053-3205-4082									
Unnamed Tributary	247-41-10200-2053-3205-4099	900 TCU 1980	UNKNOWN							
Happy R.	247-41-10200-2053-3205-4112									
<b>upstream geographic reference:</b>										
Hewitt C.	247-41-10200-2053-3213	17 TCU 1977	UNKNOWN							
Unnamed Tributary	247-41-10200-2053-3213-4050									
Donkey Creek S.	247-41-10200-2053-3220	UNKNOWN	UNKNOWN							
Donkey C.	247-41-10200-2053-3220-4030	5,000 TCU 1982	UNKNOWN							
Johnson C.	247-41-10200-2053-3225									
Red C.	247-41-10200-2053-3225-4015	5,100 TCU 1982	UNKNOWN							
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EXHIBIT 6-2D										SUSITNA RIVER UNIT PINK SALMON									
[ continued from preceding page ]																			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Unnamed Tributary	247-41-10200-2053-3225-4035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Kichatna R.	247-41-10200-2053-3229	10,000 TCU 1982	10,000 TCU 1982																
Gagnan C.	247-41-10200-2053-3229-4002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Nakochna R.	247-41-10200-2053-3229-4050	1,000 TCU 1982	1,000 TCU 1982																
Unnamed Tributary	247-41-10200-2053-3229-4075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2053-3229-4079	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2053-3229-4087	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2053-3229-4099	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2053-3229-4110	5,000 TCU 1982	5,000 TCU 1982																
Cleanwater C.	247-41-10200-2053-3238	UNKNOWN	UNKNOWN																
West Fork Yentna R.	247-41-10200-2053-3249	210 TCU 1982	210 TCU 1982																
Unnamed Tributary	247-41-10200-2053-3249-4101	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
East Fork Yentna R.	247-41-10200-2053-3250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
<i>upstream geographic reference:</i>		RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH THE YENTNA RIVER																	
Unnamed Tributary	247-41-10200-2060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Kroto C. / Deshka River	247-41-10200-2081	500,000 TCU 1982	24 RH2003																
Unnamed Tributary	247-41-10200-2081-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2081-3057	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Trapper C.	247-41-10200-2081-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2081-3050-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2081-3050-4040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2081-3050-4087	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-41-10200-2081-3050-4110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	

[ continued on following page ]

EXHIBIT 6-2D [ continued from preceding page ]									
SUSITNA RIVER UNIT PINK SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2081-3065	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2081-3065-4007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4027	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4047	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Moose C.	247-41-10200-2081-3100	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2081-3100-4120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4128	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Ninemile C.	247-41-10200-2081-3100-4136	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Gate C.	247-41-10200-2081-3100-4167	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4177	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
West Fork Moose C.	247-41-10200-2081-3100-4189	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Twentymile C.	247-41-10200-2081-3181	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Seventeenmile C.	247-41-10200-2081-3194	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3194-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3197	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3224	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<b>upstream geographic reference:</b>									
Willow C.	247-41-10200-2120	250,000 EHO no date	681 RH 2003						
Unnamed Tributary	247-41-10200-2120-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

[ continued on following page ]

EXHIBIT 6-2D		SUSITNA RIVER UNIT PINK SALMON								
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
						MAY	JUNE	JULY	AUG.	SEPT.
		Unnamed Tributary	247-41-10200-2120-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Deception C.	247-41-10200-2120-3020	UNKNOWN	UNKNOWN					
		Unnamed Tributary	247-41-10200-2120-3020-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3020-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3020-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3020-4031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3020-4041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3020-4051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3020-4071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2120-3043	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Little Willow C.	247-41-10200-2130	35,000 MC no date	34 RH 2003					
		Unnamed Tributary	247-41-10200-2130-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Rogers C.	247-41-10200-2130-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Iron C.	247-41-10200-2130-3030	UNKNOWN	UNKNOWN					
		Unnamed Tributary	247-41-10200-2130-3030-4025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2130-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2130-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		Unnamed Tributary	247-41-10200-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		196 Mile C.	247-41-10200-2170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		<b>upstream geographic reference:</b>		<b>CONFLUENCE OF THE SUSITNA RIVER AND KASHWITNA RIVERS</b>						
		Kashwitna R.	247-41-10200-2180	12 RH 2003	12 RH 2003					
		North Fork Kashwitna R.	247-41-10200-2180-3061	10,000 MC 1966	10,000 MC 1966					
		Caswell C.	247-41-10200-2190	39 GS 1984	39 GS 1984					
		Unnamed Tributary	247-41-10200-2190-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
				[ continued on following page ]						



EXHIBIT 6-2D		SUSITNA RIVER UNIT PINK SALMON									
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
						MAY	JUNE	JULY	AUG.		SEPT.
	Sheep C.	247-41-10200-2200	22,500	TCU 1964	218	RH 2003					
	Goose C.	247-41-10200-2230	5,000	MC 1969	19	RH 2003					
	Montana C.	247-41-10200-2250	30,000	MC 1966	573	RH 2003					
	South Fork Montana C.	247-41-10200-2250-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Middle Fork Montana C.	247-41-10200-2250-3061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	North Fork Montana C.	247-41-10200-2250-3061-4009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Little Montana C.	247-41-10200-2254	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Rabideux C.	247-41-10200-2291	35	GS 1984	35	GS 1984					
	Queer C.	247-41-10200-2291-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2291-3011-4030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Sawmill C.	247-41-10200-2291-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2291-3049	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Sunshine C.	247-41-10200-2300	1,611	GS 1984	24	RH 2003					
	Question C.	247-41-10200-2300-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Answer C.	247-41-10200-2300-3011-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2300-3022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Birch Creek S.	247-41-10200-2320	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN					
	Birch C.	247-41-10200-2320-3010	75,000	MC 1969	75,000	MC 1969					
	Unnamed Tributary	247-41-10200-2320-3010-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Trapper C.	247-41-10200-2341	313	GS 1984	313	GS 1984					
	Unnamed Tributary	247-41-10200-2361	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	<b>upstream geographic reference:</b>		CONFLUENCE OF THE SUSITNA AND TALLEKETA RIVERS								
	Talkeetna R.	247-41-10200-2370	165	RH 2003	165	RH 2003					
	Chunilna R.	247-41-10200-2370-3041	75,000	MC 1954	75,000	MC 1954					

[ continued on following page ]

EXHIBIT 6-2D										SUSITNA RIVER UNIT PINK SALMON									
[ continued from preceding page ]																			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Unnamed Tributary	247-41-10200-2370-3041-4010	20,250 TCU 1978	20,250 TCU 1978																
Unnamed Tributary	247-41-10200-2370-3080	5,000 TCU 1982	5,000 TCU 1982																
Unnamed Tributary	247-41-10200-2370-3080-4007	UNKNOWN	UNKNOWN																
Sheep R.	247-41-10200-2370-3090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3090-4040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Disappointment C.	247-41-10200-2370-3171			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Prairie C.	247-41-10200-2370-3301			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3301-4021			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3301-4034			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3301-4044			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3320			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3328			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3332			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3340			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2370-3350			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
<b>upstream geographic reference:</b>										CONFLUENCE OF THE SUSITNA AND CHULITNA RIVERS									
Chulitna R.	247-41-10200-2381	UNKNOWN	UNKNOWN																
Unnamed Tributary	247-41-10200-2381-3007			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2381-3007-4017			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2381-3007-4029			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2381-3051			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2381-3060			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary	247-41-10200-2381-3073	UNKNOWN	UNKNOWN																
Unnamed Tributary	247-41-10200-2381-3090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Troublesome C.	247-41-10200-2381-3130	172 TCU 1982	172 TCU 1982																

[ continued on following page ]

EXHIBIT 6-2D		SUSITNA RIVER UNIT PINK SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Tokostina R.	247-41-10200-2381-3161	UNKNOWN	UNKNOWN				
		Alder C.	247-41-10200-2381-3161-4016	UNKNOWN	UNKNOWN				
		Unnamed Tributary	247-41-10200-2381-3161-4071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Bunco C.	247-41-10200-2381-3161-4085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Spink C.	247-41-10200-2381-3179	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Byers C.	247-41-10200-2381-3180	1,110 TCU 1982	1,110 TCU 1982				
		Horseshoe C.	247-41-10200-2381-3220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2381-3231	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Granite C.	247-41-10200-2381-3600	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Division C.	247-41-10200-2381-3600-4006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Honolulu C.	247-41-10200-2381-3240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Little Honolulu C.	247-41-10200-2381-3240-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		East Fork Chulitna R.	247-41-10200-2381-3260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		<b>upstream geographic reference:</b>		RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH CHULITNA RIVER					
		Whiskers C.	247-41-10200-2391	293 GS 1984	293 GS 1984				
		Unnamed Tributary	247-41-10200-2391-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2391-3033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2391-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2391-3039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2420	438 GS 1984	438 GS 1984				
		Unnamed Tributary	247-41-10200-2420-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2420-3013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2426	UNKNOWN	UNKNOWN				
		Unnamed Tributary	247-41-10200-2436	2 AS 1985	2 AS 1985				
		Lane C.	247-41-10200-2440	329 GS 1984	329 GS 1984				

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EXHIBIT 6-2D		[ continued from preceding page ]										SUSITNA RIVER UNIT PINK SALMON			
		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
						MAY	JUNE	JULY	AUG.	SEPT.					
	Unnamed Tributary	247-41-10200-2441	34 GS 1984	34 GS 1984											
	Unnamed Tributary	247-41-10200-2443	107 GS 1984	107 GS 1984											
	Lower McKenzie C.	247-41-10200-2444	585 GS 1984	585 GS 1984											
	Upper McKenzie C.	247-41-10200-2450	17 GS 1982	17 GS 1982											
	Unnamed Tributary	247-41-10200-2452	UNKNOW	UNKNOW											
	Portage C.	247-41-10200-2454	162 GS 1984	162 GS 1984											
	Unnamed Tributary	247-41-10200-2457	UNKNOW	UNKNOW											
	Unnamed Tributary	247-41-10200-2459	UNKNOW	UNKNOW											
	Unnamed Tributary	247-41-10200-2462	337 GS 1984	337 GS 1984											
	Unnamed Tributary	247-41-10200-2463	UNKNOW	UNKNOW											
	Unnamed Tributary	247-41-10200-2470	UNKNOW	UNKNOW											
	Unnamed Tributary	247-41-10200-2473	411 GS 1984	411 GS 1984											
	Unnamed Tributary	247-41-10200-2474	121 GS 1984	121 GS 1984											
	Unnamed Tributary	247-41-10200-2510	48 GS 1984	48 GS 1984											
	Unnamed Tributary	247-41-10200-2511	1,842 GS 1984	1,842 GS 1984											
	Gold C.	247-41-10200-2540	82 GS 1984	82 GS 1984											
	Indian R.	247-41-10200-2551	9,066 AS 1984	9,066 AS 1984											
	Salmon C.	247-41-10200-2551-3015	UNKNOW	UNKNOW											
	Unnamed Tributary	247-41-10200-2551-3201	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												
	Unnamed Tributary	247-41-10200-2570	21 GS 1982	21 GS 1982											
	Portage C.	247-41-10200-2585	2,707 AS 1984	2,707 AS 1984											
	Unnamed Tributary	247-41-10200-2585-3100	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												
	Thoroughfare C.	247-41-10200-2585-3201	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												
	Unnamed Tributary	247-41-10200-2585-3223	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												
	Unnamed Tributary	247-41-10200-2596	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												
	Unnamed Tributary	247-41-10200-2630	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												
	Unnamed Tributary	247-41-10200-2696	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>												

SUSITNA RIVER UNIT CHUM SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<i>upstream geographic reference:</i>									
Susitna R. (mainstem)	247-41-10200	data to be entered	data to be entered						
Fish C.	247-41-10200-2020	1,000 AS 1982	UNKNOWN						
Unnamed Tributary	247-41-10200-2020-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3031-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3130-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2020-3195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Alexander C.	247-41-10200-2015	500 MC 1963	52 RH 2003						
Granite C.	247-41-10200-2015-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Trail C.	247-41-10200-2015-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3025-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3025-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3025-4035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Lower Sucker C.	247-41-10200-2015-3035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Wolverine C.	247-41-10200-2015-3035-4019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Upper Sucker C.	247-41-10200-2015-3035-4223	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2015-3035-4225	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bear C.	247-41-10200-2015-3117	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
[ continued on following page ]									

EXHIBIT 6-2E		SUSITNA RIVER UNIT CHUM SALMON							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Texas C.	247-41-10200-2015-3117-4208	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Clear C.	247-41-10200-2015-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Fox C.	247-41-10200-2015-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Deep C.	247-41-10200-2015-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Anderson C.	247-41-10200-2043	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		<b>upstream geographic reference:</b>		CONFLUENCE OF THE SUSITNA AND YENTNA RIVERS					
		Yentna R.	247-41-10200-2053	data to be entered	data to be entered				
		Kroto S.	247-41-10200-2053-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Fish C.	247-41-10200-2053-3020-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Moose C.	247-41-10200-2053-3100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Kahlina R.	247-10-1200-2053-3150	UNKNOWN	UNKNOWN				
		Unnamed Tributary	247-41-10200-2053-3150-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3150-4046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3150-4052	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Peters C.	247-41-10200-2053-3150-4060	UNKNOWN	UNKNOWN				
		Bear C.	247-41-10200-2053-3150-4080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Hungryman C.	247-41-10200-2053-3150-4090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Treasure C.	247-41-10200-2053-3150-4115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Cache C.	247-41-10200-2053-3150-4120	68 TCU 1982	UNKNOWN				
		Lake C.	247-41-10200-2053-3170	15,000 TCU 1980	322 RH 2003				
		Yenlo C.	247-41-10200-2053-3170-4027	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10200-2053-3170-4039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Home C.	247-41-10200-2053-3170-4045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Camp C.	247-41-10200-2053-3170-4057	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

EXHIBIT 6-2E		SUSITNA RIVER UNIT CHUM SALMON						
[ continued from preceding page ]								
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	
				SEPT.				
Sunflower C.	247-41-10200-2053-3170-4067							
Coffee C.	247-41-10200-2053-3170-4088							
Unnamed Tributary	247-41-10200-2053-3170-4093							
Cripple C.	247-41-10200-2053-3170-4095							
Fish Lake C.	247-41-10200-2053-3180		28					
<b>upstream geographic reference:</b>								
Skwentna R.	247-41-10200-2053-3205	data to be entered	data to be entered					
Eightmile C.	247-41-10200-2053-3205-4027	UNKNOWN	UNKNOWN					
Shell C.	247-41-10200-2053-3205-4050	2	WC 1975					
Talachulitna R.	247-41-10200-2053-3205-4053	12,783	OTC 1972					
Quartz. C.	247-41-10200-2053-3205-4057							
Unnamed Tributary	247-41-10200-2053-3205-4064	UNKNOWN	UNKNOWN					
Canyon C.	247-41-10200-2053-3205-4067	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10200-2053-3205-4070	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10200-2053-3205-4078							
Unnamed Tributary	247-41-10200-2053-3205-4082							
Unnamed Tributary	247-41-10200-2053-3205-4099	1,050	TCU 1984					
Happy R.	247-41-10200-2053-3205-4112							
<b>upstream geographic reference:</b>								
Hewitt C.	247-41-10200-2053-3213							
Unnamed Tributary	247-41-10200-2053-3213-4050							
Donkey Creek S.	247-41-10200-2053-3220							
Donkey C.	247-41-10200-2053-3220-4030							
Johnson C.	247-41-10200-2053-3225							
Red C.	247-41-10200-2053-3225-4015							
[ continued on following page ]								

SUSITNA RIVER UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2053-3225-4035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kichatna R.	247-41-10200-2053-3229		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Gagnan C.	247-41-10200-2053-3229-4002		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Nakochna R.	247-41-10200-2053-3229-4050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4075		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4079		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4087		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4099		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3229-4110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Cleanwater C.	247-41-10200-2053-3238		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
West Fork Yentna R.	247-41-10200-2053-3249		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2053-3249-4101		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
East Fork Yentna R.	247-41-10200-2053-3250		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<b>upstream geographic reference:</b>			RETURN TO SUSITNA RIVER UPSTREAM OF CONFLUENCE WITH THE YENTNA RIVER						
Unnamed Tributary	247-41-10200-2060		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2075		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kroto C. / Deshka River	247-41-10200-2081	38 RH 2003							
Unnamed Tributary	247-41-10200-2081-3035		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3057		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Trapper C.	247-41-10200-2081-3050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4087		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3050-4110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 6-2E [ continued from preceding page ]									
<b>SUSITNA RIVER UNIT CHUM SALMON</b>									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY		AUG.	SEPT.
Unnamed Tributary	247-41-10200-2081-3085		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4007		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4017		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4027		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4033		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3065-4047		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Moose C.	247-41-10200-2081-3100	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2081-3100-4120		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4128		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Ninemile C.	247-41-10200-2081-3100-4136		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4155		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Gate C.	247-41-10200-2081-3100-4167		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3100-4177		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
West Fork Moose C.	247-41-10200-2081-3100-4189		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Twentymile C.	247-41-10200-2081-3181		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Seventeenmile C.	247-41-10200-2081-3194		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3194-4016		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3197		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10200-2081-3224		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<b>upstream geographic reference:</b>									
Willow C.	247-41-10200-2120	20,000 MC 1950	CONFLUENCE OF THE SUSITNA RIVER AND WILLOW CREEK	316 RH 2003					
Unnamed Tributary	247-41-10200-2120-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

[ continued on following page ]

EXHIBIT 6-2E		SUSITNA RIVER UNIT CHUM SALMON								
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
						MAY	JUNE	JULY	AUG.	SEPT.
	Unnamed Tributary	247-41-10200-2120-3017	UNKNOWN	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10200-2120-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Deception C.	247-41-10200-2120-3020	UNKNOWN	UNKNOWN						
	Unnamed Tributary	247-41-10200-2120-3020-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3020-4018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3020-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3020-4031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3020-4041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3020-4051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3020-4071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2120-3043	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Little Willow C.	247-41-10200-2130	270 RH 1980	270 RH 1980						
	Unnamed Tributary	247-41-10200-2130-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Rogers C.	247-41-10200-2130-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Iron C.	247-41-10200-2130-3030	UNKNOWN	UNKNOWN						
	Unnamed Tributary	247-41-10200-2130-3030-4025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2130-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2130-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	Unnamed Tributary	247-41-10200-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	196 Mile C.	247-41-10200-2170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
	<b>upstream geographic reference:</b>									
	CONFLUENCE OF THE SUSITNA RIVER AND KASHWITNA RIVERS									
	Kashwitna R.	247-41-10200-2180	14 RH 2003	14 RH 2003						
	North Fork Kashwitna R.	247-41-10200-2180-3061	172 TCU 1984	172 TCU 1984						
	Caswell C.	247-41-10200-2190	52 RH 2003	52 RH 2003						
	Unnamed Tributary	247-41-10200-2190-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

[ continued on following page ]

EXHIBIT 6-2E		SUSITNA RIVER UNIT CHUM SALMON									
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
						MAY	JUNE	JULY	AUG.		SEPT.
	Sheep C.	247-41-10200-2200	709 RH 2003	709 RH 2003							
	Goose C.	247-41-10200-2230	281 GS 1984	281 GS 1984							
	Montana C.	247-41-10200-2250	1,050 RH 2003	1,050 RH 2003							
	South Fork Montana C.	247-41-10200-2250-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Middle Fork Montana C.	247-41-10200-2250-3061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	North Fork Montana C.	247-41-10200-2250-3061-4009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Little Montana C.	247-41-10200-2254	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Rabideux C.	247-41-10200-2291	91 GS 1984	91 GS 1984							
	Queer C.	247-41-10200-2291-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2291-3011-4030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Sawmill C.	247-41-10200-2291-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2291-3049	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Sunshine C.	247-41-10200-2300	83 GS 1984	42 RH 2003							
	Question C.	247-41-10200-2300-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Answer C.	247-41-10200-2300-3011-4016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-41-10200-2300-3022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Birch Creek S.	247-41-10200-2320	UNKNOWN	UNKNOWN							
	Birch C.	247-41-10200-2320-3010	10 TCU 1981	10 TCU 1981							
	Unnamed Tributary	247-41-10200-2320-3010-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Trapper C.	247-41-10200-2341	46 GS 1984	46 GS 1984							
	Unnamed Tributary	247-41-10200-2361	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	<b>upstream geographic reference:</b>		CONFLUENCE OF THE SUSITNA AND TALLEKETA RIVERS								
	Talkeetna R.	247-41-10200-2370	486 RH 2003	486 RH 2003							
	Chunilna R.	247-41-10200-2370-3041	10,000 MC 1953	10,000 MC 1953							

[ continued on following page ]

EXHIBIT 6-2E		SUSITNA RIVER UNIT CHUM SALMON									
		[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Unnamed Tributary	247-41-10200-2370-3041-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3080	108 WC 1986	108 WC 1986								
Unnamed Tributary	247-41-10200-2370-3080-4007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Sheep R.	247-41-10200-2370-3090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3090-4040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Disappointment C.	247-41-10200-2370-3171	UNKNOW	UNKNOW								
Prairie C.	247-41-10200-2370-3301	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3301-4021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3301-4034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3301-4044	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3328	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3332	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2370-3350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
<b>upstream geographic reference:</b>											
Chulitna R.	247-41-10200-2381	UNKNOW	UNKNOW								
Unnamed Tributary	247-41-10200-2381-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2381-3007-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2381-3007-4029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2381-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2381-3060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2381-3073	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-41-10200-2381-3090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Troublesome C.	247-41-10200-2381-3130	585 TCU 1982	14 RH 2003								
[ continued on following page ]											

EXHIBIT 6-2E		SUSITNA RIVER UNIT CHUM SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
	Tokositna R.	247-41-10200-2381-3161	UNKNOWN	UNKNOWN				
	Alder C.	247-41-10200-2381-3161-4016	UNKNOWN	UNKNOWN				
	Unnamed Tributary	247-41-10200-2381-3161-4071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Bunco C.	247-41-10200-2381-3161-4085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Spink C.	247-41-10200-2381-3179	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Byers C.	247-41-10200-2381-3180	1,100 TCU 1971	1,100 TCU 1971				
	Horseshoe C.	247-41-10200-2381-3220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2381-3231	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Granite C.	247-41-10200-2381-3600	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Division C.	247-41-10200-2381-3600-4006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Honolulu C.	247-41-10200-2381-3240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Little Honolulu C.	247-41-10200-2381-3240-4020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	East Fork Chulitna R.	247-41-10200-2381-3260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	<i>upstream geographic reference:</i>		CONFLUENCE OF THE SUSITNA AND CHULITNA RIVERS					
	Whiskers C.	247-41-10200-2391	1 GS 1981	1 GS 1981				
	Unnamed Tributary	247-41-10200-2391-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2391-3033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2391-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2391-3039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2420	1 GS 1984	1 GS 1981				
	Unnamed Tributary	247-41-10200-2420-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2420-3013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	247-41-10200-2426	5 AS 1985	5 AS 1985				
	Unnamed Tributary	247-41-10200-2436	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Lane C.	247-41-10200-2440	76 GS 1981	76 GS 1981				

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EXHIBIT 6-2E [ continued from preceding page ] SUSITNA RIVER UNIT CHUM SALMON									
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10200-2441	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2443	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Lower McKenzie C.	247-41-10200-2444	23 GS 1984	23 GS 1984						
Upper McKenzie C.	247-41-10200-2450	1 AS 1985	1 AS 1985						
Unnamed Tributary	247-41-10200-2452	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Portage C.	247-41-10200-2454	31 GS 1982	31 GS 1982						
Unnamed Tributary	247-41-10200-2457	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2459	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2462	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2463	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2470	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2473	6 GS 1983	6 GS 1983						
Unnamed Tributary	247-41-10200-2474	10 GS 1981	10 GS 1981						
Unnamed Tributary	247-41-10200-2510	9 GS 1981	9 GS 1981						
Unnamed Tributary	247-41-10200-2511	594 PC 1974	594 PC 1974						
Gold C.	247-41-10200-2540	UNKNOWN	UNKNOWN						
Indian R.	247-41-10200-2551	2,247 AS 1984	2,247 AS 1984						
Salmon C.	247-41-10200-2551-3015	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10200-2551-3201	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2570	4 GS 1984	4 GS 1984						
Portage C.	247-41-10200-2585	1,285 AS 1984	1,285 AS 1984						
Unnamed Tributary	247-41-10200-2585-3100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Thoroughfare C.	247-41-10200-2585-3201	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2585-3223	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2596	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2630	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10200-2696	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

6.4 SIGNIFICANT STOCKS

Based on the available data, the following stocks are known to fit the size criterion for local significance as discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0 of this document. The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

EXHIBIT 6-3		SIGNIFICANT STOCKS				
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM
Susitna River	247-41-10200	significant	significant	significant	significant	significant
Fish Creek	247-41-10200-2020		significant			significant
Alexander Creek	247-41-10200-2015	significant	significant	significant	significant	
Lower Sucker Creek	247-41-10200-2015-3035	significant				
Wolverine Creek	247-41-10200-2015-3035-4019	significant			significant	
Yentna River	247-41-10200-2053	significant	significant	significant	significant	significant
Peters Creek	247-41-10200-2053-3150-4060	significant		significant	significant	
Bear Creek	247-41-10200-2053-3150-4080				significant	
Hungryman Creek	247-41-10200-2053-3150-4090		significant		significant	
Cache Creek	247-41-10200-2053-3150-4120	significant				
Lake Creek	247-41-10200-2053-3170	significant	significant	significant	significant	significant
Camp Creek	247-41-10200-2053-3170-4057	significant				
Sunflower Creek	247-41-10200-2053-3170-4067	significant				
Fish Lake Creek	247-41-10200-2053-3180	significant	significant	significant		
Skwentna River	247-41-10200-2053-3205	significant	significant	significant	significant	significant
Eightmile Creek	247-41-10200-2053-3205-4027		significant			
Shell Creek	247-41-10200-2053-3205-4050		significant			
Talachulitna River	247-41-10200-2053-3205-4053	significant	significant	significant	significant	significant
Canyon Creek	247-41-10200-2053-3205-4067	significant				
Unnamed Tributary	247-41-10200-2053-3205-4099					significant
Happy River	247-41-10200-2053-3205-4112		significant			
Hewitt Creek	247-41-10200-2053-3213		significant			
Unnamed Tributary	247-41-10200-2053-3213-4050		significant			
Donkey Creek	247-41-10200-2053-3220-4030				significant	
Red Creek	247-41-10200-2053-3225-4015	significant			significant	
Kitchatna River	247-41-10200-2053-3229	significant		significant	significant	
Unnamed Tributary	247-41-10200-2053-3229-4110				significant	
West Fork Yentna River	247-41-10200-2053-3249		significant			
Deshka River / Kroto Creek	247-41-10200-2081	significant		significant	significant	
Trapper Creek	247-41-10200-2081-3050		significant			
Unnamed Tributary	247-41-10200-2081-3065	significant				
Moose Creek	247-41-10200-2081-3100	significant				
Twentymile Creek	247-41-10200-2081-3181	significant				
Willow Creek	247-41-10200-2120	significant		significant	significant	significant
Deception Creek	247-41-10200-2120-3020	significant				
Little Willow Creek	247-41-10200-2130	significant			significant	

( continued on the following page )





Rationale: It has no record of king salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the more distant portions of the Yentna River drainage.

Stock identified: Alexander Creek stock  
[AWC 247-41-10200-2015]

Rationale: It has no record of king salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the lower portions of the mainstem Susitna River drainage.

Stock identified: Prairie Creek stock  
[AWC 247-41-10200-2370-3301]

Rationale: It has no record of king salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the lower portions of the mainstem Susitna River drainage.

6.5.2 Sockeye Salmon

Stock identified: Judd Lake stock  
[AWC 247-41-10200-2053-3205-4053-5066-0010]

Rationale: It has no record of sockeye salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the more distant southern portions of the Yentna River drainage.

Stock identified: West Fork of the Yentna River stock  
[AWC 247-41-10200-2053-3249]

Rationale: It has no record of sockeye salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the more distant northwestern portions of the Yentna River drainage.

Stock identified: Larson Lake stock  
[AWC 247-41-10200-2370-3080-0010]

Rationale: It has no record of sockeye salmon rehabilitation or enhancement involving stocking, but fertilizer was applied to increase the food supply for juvenile salmon for two years in the mid-1980's. The stock has a history that indicates it is large enough to function as a wild stock

sanctuary / stock reserve. It is representative of the Talkeetna River in the northeastern portions of the Susitna River drainage.

6.5.3 Coho Salmon

Stock identified: Talachulitna River stock  
[AWC 247-41-10200-2053-3205-4053]

Rationale: It has no record of coho salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the more distant portions of the Yentna River drainage.

Stock identified: Chulitna River stock  
[AWC 247-41-10200-2381]

Rationale: It has no record of coho salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the more distant northern portions of the Susitna River drainage.

6.5.4 Pink Salmon

Stock identified: Talkeetna stock  
[AWC 247-10-10200-2370]

Rationale: It has no record of pink salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the eastern portion of the Susitna River drainage.

6.5.5 Chum Salmon

Stock identified: Talachulitna River stock  
[AWC 247-41-10200-2053-3205-4053]

Rationale: It has no record of chum salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of the more distant portions of the Yentna River drainage.

**6.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

6.6.1 Projects Identified in the Phase I Plan 1981 - 2000

6.6.1.1 Spawning Ground Survey

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This project would deal with only Upper Cook Inlet and would be carried out primarily by the research arm of the Commercial Fish Division. The thrust of the project is to verify and explore the ramifications of sonar escapement counts where they exist and develop comparable monitoring where it would be useful and is not now in place. Three specific elements have now been defined within this general project. First, because of problems with migration outside the sonar counter verification of the counts on the Kasilof River is necessary. Second, there should be a program to assess the distribution of spawners in the Kenai, Kasilof and Susitna River systems. Finally, it would be useful to develop an historical perspective on previous escapements in the Susitna system where sonar has only been in operation for two years.”*

Subsequent Developments:

A large number of stream surveys were conducted in the 1980's and early 1990's when they were suspended for budgetary reasons. Although there are essentially continuous attempts to refine the existing sonar systems, the use of this type of apparatus to enumerate escapements has not been expanded beyond the four river systems involved in the early 1980's.

Two specific portions of this original project involved the Susitna River, assessment of the distribution of spawners and development of an historical perspective on previous escapements in the Susitna River Unit. During the late 1980's and the 1990's various attempts to further improve and verify escapement counts in the Susitna River system were carried out.

In 2006 a very aggressive program is being proposed to verify escapements in the Susitna River system, and this effort has been triggered in large part by the apparent low sockeye salmon escapements in recent years.

6.6.1.2 Upper Cook Inlet Run Modeling

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“There are serious time constraints on the data acquisition / management decision process which is central to the effective management of the Upper Cook Inlet fisheries. The continued development and refinement of a computer simulation model for the Upper Cook Inlet salmon stocks would be of marked assistance in data compilation and analysis.*

*“The types of data to be processed include catch, escapement, off-shore test fishing results, and in-district test fishing results. A management system has been developed to make possible in-season data analysis. The simulation techniques will allow the managers to evaluate variations in run timing, stock abundance, and harvest management tactics so that there can be appropriate applications of fishing times and area schedules.”*

Subsequent Developments:

ADF&G has continued to examine and refine its run modeling process. The use of the off-shore test fishery and the sonar derived escapement counts continue to be the main components of this ongoing, in-season program.

#### 6.6.1.3 Deshka River Coho Salmon Study

This project was described in the *Phase I Plan 1981 – 2000* in the following way:

*“Since 1980 the Alaska Field Station of the National Fisheries Research Center and the Sport Fish Division of ADF&G have been involved in radio tagging of coho salmon in the Deshka River. The purpose of the study was to identify both spawning areas and travel time of coho salmon using the Deshka River. The method employed was to tag, release and radio track migrating adults. Several mainstem spawning areas were found in 1980. The project may be continued in 1982.”*

#### Subsequent Developments:

The procedure of using radio telemetry to identify spawning areas and travel time of coho salmon was deemed feasible after a study of five individual coho salmon, but the project was not continued.

#### 6.6.1.4 Susitna River Radio Tagging Study

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“Under contract to ADF&G (SuHydro), the Alaska Field Station of the National Fisheries Research Center has assisted in radio tagging of king, coho and chum salmon in the Susitna River during 1981. Objectives of the study were to determine the extent of habitat utilization by salmon in the upper Susitna near the proposed hydroelectric facility.”*

#### Subsequent Developments:

The Susitna Hydro Aquatic Studies were published in 1982. Fishwheels were operated as escapement monitoring stations at five sites. All intercepted king, sockeye, pink, chum and coho were tagged (non-radio tagging) and 16 king, 18 chum and 16 coho were implanted with radio transmitters. Fish locations were recorded to the nearest 0.1 river mile.

#### 6.6.1.5 Larson Lake Fertilization [247-41-10200-2370-3080-0010]

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This 800 acre lake near Talkeetna is a candidate for fertilization as a F.R.E.D. Division project. Pre-fertilization studies have yet to be done, but it is believed that this tactic could produce an additional 64,000 adult sockeye salmon annually.”*

#### Subsequent Developments:

ADF&G did a smolt count in 1982, and CIAA did smolt and adult counts in 1984 through 1987 and a smolt count in 1988. CIAA applied fertilizer to the lake in 1986 and 1987, but these applications ceased after 1987 because of complaints about these

activities by area residents. Adult counts were made by ADF&G in 1997 through 2000 and again by CIAA in 2005

#### 6.6.1.6 Byers Lake Fertilization

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This 400 acre lake east of the Chulitna River is a candidate for fertilization as a F.R.E.D. Division project. Pre-fertilization studies have yet to be done, but the success of this tactic could produce an additional 32,000 adult sockeye salmon annually.”*

#### Subsequent Developments:

No fertilization project was ever undertaken in this lake.

#### 6.6.1.7 Shell Lake Fertilization [247-41-10200-2053-3205-4050-0010]

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This 1,000 acre lake between the Skwentna and Yentna Rivers is a candidate for fertilization as a F.R.E.D. Division project. Pre-fertilization studies have yet to be done, but it is believed that this tactic could produce an additional 80,000 adult sockeye salmon annually.”*

#### Subsequent Developments:

No fertilization project was ever undertaken in this lake. However, CIAA conducted an adult enumeration in 1986 and a smolt enumeration in 1987. It was clear that beaver dams along Shell Creek annually present a problem for adult salmon attempting the upstream migration. Since the mid-1980's CIAA has annually monitored salmon progress up this stream and modified beaver dams as necessary to facilitate the migration.

#### 6.6.1.8 Willow Creek King Salmon Enhancement [247-41-10200-2120]

This project was described in the *Phase I Plan 1981 – 2000* in the following way. (It should be noted that the Phase I plan combined both king and coho salmon in the same project description, but for purposes of this Phase II plan the two species are addressed separately as two projects – see section 6.6.1.9.)

*“This project will provide a harvest of 6,000 king salmon and 6,000 coho salmon which will result in an estimated 42,000 man-days of additional fishing opportunity, but it is contingent upon development of an access road along the lower portion of Willow creek to its junction with the Susitna River.*

*Besides improving access to the mouth of Willow Creek by road-boat launch construction, it will be necessary to identify various adult and juvenile release sites. Optimum smolt and/or fingerling stocking densities, sizes and release time must be determined; and then there must be evaluation of enhancement contributions low Creek fishery and to fisheries of the Dëshka River and Alexander Creek (downstream Susitna River tributaries). Finally, there will be an evaluation of the affects of king salmon enhancement on the system's coho salmon population. Coho salmon*

*enhancement may be practical in this system, if it can be demonstrated that such a program does not conflict with the primary goal of king salmon enhancement.”*

Subsequent Developments:

The king salmon project was implemented with an egg take in 1984 and the first release in 1985, and it continues. The broodstock source is Deception Creek, a tributary of Willow Creek; and the annual egg take goal is 400,000. In 2001 and 2002 a total of 799 supplementally-produced and tagged king salmon were recovered on Willow Creek, and the overall contribution of this enhancement effort was estimated to be 45 percent of the harvested fish at the recovery site.

Willow Creek has also come to function as a broodstock source for an Eagle River anadromous king salmon enhancement project and various land-locked lake stocking projects.

6.6.1.9 Willow Creek Coho Salmon Enhancement [247-41-10200-2120]

This project was described in the *Phase I Plan 1981 – 2000* in the following way. (It should be noted that the original plan combined both king and coho salmon in the same project description, but for purposes of this Phase II plan the two species are addressed separately as two projects – see section 6.6.1.8.)

*“This project will provide a harvest of 6,000 king salmon and 6,000 coho salmon which will result in an estimated 42,000 man-days of additional fishing opportunity, but it is contingent upon development of an access road along the lower portion of Willow creek to its junction with the Susitna River.*

*Besides improving access to the mouth of Willow Creek by road-boat launch construction, it will be necessary to identify various adult and juvenile release sites. Optimum smolt and/or fingerling stocking densities, sizes and release time must be determined; and then there must be evaluation of enhancement contributions low Creek fishery and to fisheries of the Deshka River and Alexander Creek (downstream Susitna River tributaries). Finally, there will be an evaluation of the affects of king salmon enhancement on the system’s coho salmon population. Coho salmon enhancement may be practical in this system, if it can be demonstrated that such a program does not conflict with the primary goal of king salmon enhancement.”*

Subsequent Developments:

There appear to be no records indicating coho salmon were stocked in Willow Creek.

6.6.1.10 Caswell Creek Coho Salmon Enhancement [AWC 247-41-10200-2190]

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This project will provide a harvest of 6,000 late-run coho salmon which will result in an estimated 12,000 man-days of additional fishing opportunity; and to evaluate harvest and catch distributions at the mouths of downstream Susitna River tributaries.*

*The magnitude, distribution and timing of all segments of the escapement into the system will be determined; and various adult capture and juvenile release sites will be*

*identified. Optimum fry and/or smolt release densities, size, age and timing must be determined. These studies must include, but not be limited to, evaluation of lotic and lentic releases, fry-fingerling versus smolt releases and accelerated versus full-term smolt releases. Finally, there should be assessment of the contribution of enhanced coho salmon to the Caswell Creek fishery and to fisheries of the lower Susitna River.”*

Subsequent Developments:

Caswell Creek was stocked with coho salmon in at least the years 1987 through 1990. The information about the various studies mentioned does not seem to be readily available.

6.6.1.11 Escapement Monitoring

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This tactic, which is the cornerstone of the harvest management strategy, is evidenced in an ongoing set of projects in the four major sockeye salmon producing river systems in the Inlet, the Kasilof, Kenai, Susitna and Crescent Rivers. Sonar counters are set up and manned annually on these four systems, and it is assumed that proper escapements into these four systems can be extrapolated to mean that the lesser systems are probably achieving appropriate escapements.”*

Subsequent Developments:

The escapements counts into the Susitna River and the three other major systems are gathered annually and continue to be pivotal pieces of information in the harvest management strategy. An effective harvest management strategy is, in turn, important to the maintenance of a strong salmon resource.

6.6.1.12 In-season Effort and Catch Monitoring

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This project has several diverse elements all designed to improve the management of the salmon fishery in Upper Cook Inlet. The Commercial Fish Division would provide in-season estimates of effort and catch by set gill netters and the drift gill netters by means of vehicle surveys on the eastside set nets and aerial catch estimating surveys of the drift fleet. These data can be supplemented through daily contact with processors and weekly collection of the fish tickets. This estimating would be refined to the level of period-by-period estimates on a district-by-district basis. Clear in-season marking of the sub-district boundaries on the west side of the Inlet would be a necessary corollary to complete the information gathering.”*

Subsequent Developments:

In-season effort and catch monitoring continue to be pivotal pieces of information in the harvest management strategy. An effective harvest management strategy is, in turn, important to the maintenance of a strong salmon resource.

## 6.6.1.13 Upper Cook Inlet Central District Test Fishing

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“Large concentrations of sockeye salmon enter the Inlet and mill in the lower portion of the district in the middle part of July. This situation enhances the management problems which are inherent in the mixed stock fishery. Experience during 1979 showed that limited test fishing by drift gill netters during closed periods allowed more accurate monitoring of the movement of these stocks. In turn, managers were better able to set appropriate fishing times and areas for attainment of escapement goals.”*

Subsequent Developments:

The off-shore test fishery using drift gill net boats in the central district was abandoned.

## 6.6.1.14 Upper Cook Inlet Stock Separation

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This project also addresses the management problems posed by the mixed stock nature of the salmon fishery in Upper Cook Inlet. It is keyed to the ability to identify the various sockeye salmon stocks, to determine the portion of each stock that is being harvested, and ultimately to assure that escapement goals are attained on a stock-by-stock basis.*

*Sockeye salmon from the commercial catch as well as from the escapement are sampled for scales, length, and weight. Through a scale recognition pattern the Statewide Scale Lab can identify the stocks being handled. Under special conditions termed ‘critical’, this identification can be expedited; and the stock identity will be in the hands of the field manager within twenty-four hours of the sampling.*

*This continuing project aids in the regulation of the fishery, helps to identify the strength of each of the component stocks and relates distribution to the harvest process.”*

Subsequent Developments:

The concept of stock separation remains an important element in the harvest management strategy. All of the techniques mentioned above continue to be employed. In addition considerably more emphasis is being placed on genetic identification.

## 6.6.1.15 Off-shore Test Fishing

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“This project has been set up to provide early information on the sockeye salmon runs and enable the managers to adjust their day-to-day management accordingly. The catches from a vessel fishing a transect between Anchor Point and the Red River are analyzed, and the results are integrated with the results of the commercial catch and the escapement monitoring to create a broad profile of the timing and run strength of the Upper Cook Inlet sockeye salmon. “*



Subsequent Developments:

ADF&G began this project in 1979, and it continues annually. The data provided is very important for effective in-season management of the commercial fishery, and effective management is crucial to achieving appropriate escapements on which the strength of the resource depends.

6.6.2 Projects Identified and Implemented After Publication of the Phase I Plan 1981 – 2000

Several project were identified and implemented after the publication of the Phase I Plan 1981 – 2000, and they focused primarily on sockeye salmon production in various parts of the Susitna River drainage.

6.6.2.1 Chelatna Lake [AWC 247-41-10200-2053-3170-0010]  
[see section 6.6.2.5 also]

Chelatna Lake is at the northern end of Lake Creek and is the largest of the 24 lakes within the Susitna River drainage system known to support sockeye salmon. The U.S. Fish and Wildlife Service was the first agency to estimate sockeye salmon use of the lake by conducting aerial and ground counts throughout the 1930's and 1940's. ADF&G conducted similar counts in the 1970's and early 1980's. Counts varied widely as can be seen in the counts for the following years 1948 – 13,000; 1949 – 100,000; 0 – 1974 and 1982 – 23,180. It seemed clear that the salmon production potential of this system was substantial.

Between 1983 and 1988 CIAA and ADF&G cooperatively investigated Chelatna Lake as a candidate for salmon enhancement through nutrient enrichment. Based on euphotic volume studies it was estimated that the lake could potentially produce as many as 389,000 sockeye salmon. Additionally the nutrient studies showed the lake to have an ample food base, thus the focus for a potential increase in production shifted from rearing capacity to insufficient broodstock.

Between 1989 and 1996 CIAA's program at Chelatna Lake included limnological surveys, enumeration of smolt and adult migrations, identification of the principal spawning areas, collection of up to 2 million eggs for incubation and release of the resulting fry back into the system. In addition ADF&G conducted fall hydroacoustic surveys of the lake.

With adult returns to the lake in the range of 20,000 to 30,000 it was felt that there was sufficient broodstock for the lake, and CIAA made the decision to suspend the project after the 1996 season.

ADF&G and CIAA engaged in a cooperative effort in 1997 to collect and read otoliths from returning adult salmon to determine the magnitude of the contribution of supplemental production to the total return. Independent analysis by ADF&G and CIAA led to the conclusion that 6 percent of the return was attributable to the stocking effort.

6.6.2.2 Judd Lake [AWC 247-41-10200-2053-3205-4053-5066-0010]  
[see section 6.6.2.5 also]

The contingency plan for CIAA's sockeye salmon enhancement project at Chelatna Lake (see section 6.7.2.1) was to consider using Judd Lake as a broodstock source if insufficient broodstock was present at Chelatna Lake. The criteria for selecting an alternative broodstock source were: (1) the alternative broodstock originate within the Susitna River drainage, (2) the pathology of the alternative broodstock be found to be compatible with the Chelatna Lake fish with respect to the Infectious Hematopoietic Necrosis virus (IHNV) and bacterial kidney disease (BKD) and (3) there were fish surplus to broodstock needs at the alternative site.

Pathology samples were collected from Judd Lake sockeye salmon in 1988. The fish were found to have BKD and a normal prevalence of IHNV. A similar sampling of Chelatna Lake fish was conducted in 1989, and they were found to be free of BKD but with a high prevalence of IHNV. This was found to be a failure to meet the second criteria set out above, and Judd Lake sockeye salmon were ruled out as an alternative broodstock source for Chelatna Lake.

In 1989 CIAA conducted an escapement count at a site on the Talachulitna River about 1,000 yards downstream of the outlet of Judd Lake between July 13 and August 27. The sockeye salmon escapement count was 12,792; and the fish were sampled for age, weight, length and fecundity.

6.6.2.3 Hewitt Lake [AWC 247-41-10200-2053-3213-4050-0010]  
[see section 6.6.2.5 also]

The contingency plan for CIAA's sockeye salmon enhancement project at Chelatna Lake (see section 6.7.2.1) was to consider using Hewitt Lake as a broodstock source if insufficient broodstock was present at Chelatna Lake. The criteria for selecting an alternative broodstock source were: (1) the alternative broodstock originate within the Susitna River drainage, (2) the pathology of the alternative broodstock be found to be compatible with the Chelatna Lake fish with respect to the Infectious Hematopoietic Necrosis virus (IHNV) and bacterial kidney disease (BKD), (3) there were fish surplus to broodstock needs at the alternative site and (4) there was a definitive low level of escapement at Chelatna Lake..

Pathology samples were collected from Hewitt Lake sockeye salmon in 1989. None of the fish were found to have BKD, but IHNV was present. A similar sampling of Chelatna Lake fish was conducted in 1989, and they were found to be free of BKD but with a high prevalence of IHNV. The Hewitt Lake fish met the second criteria set out above.

In 1990 CIAA conducted an escapement count at a weir site in Hewitt Creek between the outlet of Hewitt Lake and the confluence with Whiskey Creek between July 19 and August 13. The sockeye salmon escapement count was 12,943; and the fish were sampled for age, weight, length and fecundity.

Chelatna Lake escapement did not fall below the threshold referenced in the fourth criterion set out above, and Hewitt Lake was not used as an alternative broodstock source.

#### 6.6.2.4 Upper Susitna River Salmon Enhancement Study

In 1983 ADF&G produced a study entitled "Upper Susitna River Salmon Enhancement Study", which dealt with the methods by which anadromous salmon could reach the Susitna River watershed above Devil's Canyon and what the salmon production of that portion of the watershed might be.

In the assessment of sockeye salmon potential the study assessed 24 lakes with a combined surface area of 33,628 acres. Under the assumptions which were used at the time potential adult sockeye salmon production was estimated at 159,751.

Since that study, considerable work has been done on refining the model by which the sockeye salmon production potential of lakes is estimated. In 1990 then Principal Limnologist for ADF&G, Jeff Koenings, was asked to conduct a brief re—examination of the 1983 estimate and update it based on today's assumptions.

Koenings responded, "Adult sockeye salmon production is dependent, in large part, on the production capacity of nursery lakes to support the growth of rearing juveniles. Both larger lakes and more productive lakes, which support a higher standing crop of fish forage items, are expected to support the growth of more numerous juveniles. Both of these features of sockeye nursery lakes have been combined into a single index to fresh water carry-capacity called euphotic volume (EV).

"Subsequent work showed this index was only valid in estimating adult production where juvenile rearing food supply (not spawning area or another element) was the limiting factor.

"Adult sockeye production from rearing limited lakes is about 2,500 fish per EV unit. The model predicts long term average adult sockeye production given estimates of the number of euphotic volume units.

"Several studies have compared adult production estimates from the EV model to measured sockeye production levels in individual lakes and whole watersheds. For example, comparable levels of adult sockeye were achieved by both methods (modeled and measured) from the Susitna River watershed (portions currently accessible to anadromous salmon), from historic production levels in the Fraser River (Canada), and from the Kamchatka Peninsula (Soviet Union).

"Applied to the lakes in the portion of the Susitna River watershed above Devil Canyon the available information allowed a range of production values. Combining the surface areas of all the lakes considered, and applying a statewide mean depth of light penetration for stained lakes (low estimate) and clearwater lakes (high estimate), the number of EV units was estimated to between 1,000 and 2,000. Estimates of adult production from these lakes assuming rearing limitation ranges from 2.5 million to 5.0 million adult sockeye salmon.

"It should be noted a variety of factors including the presence of both competitor and predator populations and successful smolt passage will influence actual production. Also, the model predicts long-term production at freshwater rearing limitation not maximum sustained yield. Thus, actual adult sockeye production at juvenile loading densities necessary to achieve maximum sustained yield may be higher than the model estimates."

Obviously this assessment of sockeye salmon potential above Devil's Canyon (2.5 to 5.0 million) is dramatically different than the original estimate.

In 1983 estimates of potential chinook salmon and coho salmon production were made for a group of 21 streams above Devil's Canyon with a combined surface area of 1,250 acres. The estimates were 3,036 adult chinook salmon and 5,058 adult coho salmon. There has been no update of these estimates.

In 1983 an estimate of potential chum salmon production was made for 18 streams above Devil's Canyon with a combined surface area of 8 acres. The estimate was 9,740 adult chum salmon. There has been no update of this estimate.

No estimate has been made for potential pink salmon production.

6.6.2.5 An Estimate of Adult Sockeye Salmon Production for the Susitna River Drainage, Alaska

In 1989 ADF&G produced a study entitled "An Estimate of Adult Sockeye Salmon (*Oncorhynchus nerka*) Production, Based on Euphotic Volume, for the Susitna River Drainage, Alaska". The twenty-four lakes that were assessed were as follows.

Bunco Lake	[AWC 247-41-10200-2381-3161-4085-0010]
Byers Lake	[AWC 247-41-10200-2381-3180-0010]
Caswell Lake	[AWC 247-41-10200-2190-0010]
Chelatna Lake	[AWC 247-41-10200-2053-3170-0010]
Eightmile Lake	[AWC 247-41-10200-2053-3205]
Fish Creek Lakes	[AWC 247-41-10200-2053-3180-0010 through -0050]
Fish Lake	
Hewitt Lake	[AWC 247-41-10200-2053-3213-4050-0010]
Judd Lake	[AWC 247-41-10200-2053-3205-4053-5066-0010]
Larson Lake	[AWC 247-41-10200-2370-3080-0010]
Lockwood Lake	[AWC 247-41-10200-2053-3020-4015]
Movie Lake	[AWC 247-41-10200-2053-3205-4053-5066-6012-0020]
Neil Lake	[AWC 247-41-10200-2081-3073]
Puntilla Lake	[AWC 247-41-10200-2053-3205-4112-5045-0010]
Red Salmon Lake	[AWC 247-41-10200-2053-3205-4099-0010]
Red Shirt Lake	[AWC 247-41-10200-2020-0015]
Shell Lake	[AWC 247-41-10200-2053-3205-4050-0010]
Spink Lake	[AWC 247-41-10200-2381-3179-0010]
Stephan Lake	[AWC 247-41-10200-2370-3301-0020]
Sucker Lake	[AWC 247-41-10200-2015-3035-0030]
Swan Lake	[AWC 247-41-10200-2381-3161-4071-0010]
Trapper Lake	[AWC 247-41-10200-2081-3050-0050]
Trinity Lake	[AWC 247-41-10200-2053-3205-4053-5066-6012-0010]
Whiskey Lake	[AWC 247-41-10200-2053-3213-0010]

This report suggested that a first-order approximation of the potential sockeye salmon production could be made from euphotic volume measurements. There was a wide variety of lake types and productivity levels; but the estimated total adult sockeye salmon production from the twenty-four lakes examined based on this analysis was 1,009,100.

The 1989 report noted that the past data about sockeye salmon production in the Susitna River system tended to generally support the findings of the euphotic volume study. The data indicate that adult sockeye salmon returns between 1968 and 1982 ranged between 180,579 and 1,206,470 and averaged 608,131.

The report concluded by noting that much work yet needed to be done to refine the assessment of the Susitna River system's capacity to produce salmon.

#### 6.6.2.6 Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems

This investigation is being conducted by the Kachemak Bay Research Reserve in cooperation with the University of Alaska, Fairbanks; the University of Alaska, Anchorage and the U.S. Geological Survey and is funded by the Exxon Valdez Oil Spill Trustee Council. It is a three-year study (2004 – 2006) to develop monitoring tools for tracking marine derived nutrients in Alaskan watersheds. The Doshka River was the only system in the Susitna River Unit to be included in the study, but there were an additional ten rivers in four of the other units described in this Phase II Plan 2006 – 2025.

### 6.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

#### 6.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

##### 6.7.1.1 Impacts of Beaver Dams on Annual Salmon Migration

Substantial beaver dams on streams used by anadromous salmon can limit or prevent entirely the upstream passage of adult salmon. It is possible to temporarily modify these structures at the appropriate time and facilitate that migration to the spawning areas. This habitat issue, while natural in its origin, can have a dramatic impact on salmon production. There is no permanent solution. It requires annual monitoring and selected field work to minimize the negative effects of this beaver activity.

##### 6.7.1.2 Apparent Low Dissolved Oxygen Levels in Hewitt Lake

Low levels of dissolved oxygen create an adverse situation for salmon production. It appears that such a situation may exist in Hewitt Lake for reasons that are not clear. Clarification of the problem and its cause or causes will be necessary before identification of any potential remedial measures can be made.

##### 6.7.1.3 Impact of Northern Pike Predation on Juvenile Salmon

Northern pike are appearing in increasing numbers of sub-systems within the Susitna River system. There is the suspicion that some of this expansion of territory may be man-assisted although it has not been documented. Northern pike are voracious and

effective predators, and they are already in some of the larger salmon producing sub-systems. Additional work is necessary to determine the magnitude of their impact, but it is certainly a matter of concern in a system that already seems to be experiencing salmon production problems.

#### 6.7.1.4 Impacts of Increased Water Temperatures in Susitna River System Lakes

Salmon are sensitive to changes in temperature regimes, and it appears that water temperatures in many of the lakes in the Susitna River system are increasing. These lakes are particularly important to the spawning and rearing of sockeye salmon; and, as previously noted, apparently declining sockeye salmon production in the Susitna River system is already attracting considerable attention.

#### 6.7.1.5 Impacts of Increased Development Along Stream Banks

Increased development along stream banks can result in the loss of important salmon rearing habitat and may affect in-stream spawning areas. In addition activity related to that development may increase harvest levels and result in yet further bank damage.

### 6.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of one specific anadromous salmon run and two more generalized run patterns in this unit for which there is insufficient data to make informed decisions.

#### 6.7.2.1 Trinity Lake Sockeye Salmon [AWC 247-41-10200-2053-3205-4053-5066-6012-0010]

There appear to be substantially reduced returns of sockeye salmon to Trinity Lake recently, and the cause is not immediately apparent. This should be examined in the context of an overall reduction in sockeye salmon returns to the Susitna River system.

#### 6.7.2.2 Susitna River System Sockeye Salmon Production [AWC 247-41-10200]

In recent years there has apparently been an overall reduction in sockeye salmon returns to the Susitna River system, and this warrants attention. An initial program of projects is being implemented to begin to more clearly define the magnitude and potential causes of this situation. It is likely that yet additional work will be necessary, but the nature of that work will not be clear until at least some of the results of this initial effort are in hand.

#### 6.7.2.3 Local Perceptions of Smaller Runs Having Disappeared

Individuals fairly regularly report the disappearance of relatively small local runs of salmon from certain streams. The accuracy of these reports is not always readily apparent. When resources allow, such reports should be investigated both for their accuracy and the suggestion of remedial measures.

### 6.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

#### 6.7.3.1 **ADF&G** Annual Operation of the Yentna River Sonar Sockeye Salmon Escapement Monitor

Escapement into the Yentna River system, a major tributary system of the Susitna River, has been monitored by sonar since 1981. This effort provides significant information about a major salmon producing system in the northern part of Cook Inlet. ADF&G conducts this project and plans to continue the work.

#### 6.7.3.2 **ADF&G** Deception Creek King Salmon Stocking

ADF&G has been stocking king salmon in this tributary of Willow Creek since 1985 and plans to continue the work. (see Section 6.6.1.8)

#### 6.7.3.3 **ADF&G** Susitna River Sockeye Salmon Mark/Recapture Project for Population Estimate

ADF&G will be marking sockeye salmon near the point at which they enter freshwater in the Susitna River system. Sockeye salmon subsequently caught elsewhere in the system such as at the weirs described below in sections 6.7.4.2.2 through 6.7.4.2.8 will be examined for such marks. This information will be used to generate a population estimate for sockeye salmon in the Susitna River system in 2006.

#### 6.7.3.4 **ADF&G** Susitna River Sockeye Salmon Radio Telemetry Project for Spawner Distribution

ADF&G will be equipping a limited number of sockeye salmon with transmitters near the point at which they enter freshwater in the Susitna River system. ADF&G will subsequently fly the Susitna River with a receiver on a regular basis to ascertain spawner distribution throughout the system.

#### 6.7.3.5 **CIAA** Annual Seasonal Modification of Beaver Dam Barriers to Salmon Migration

For over two decades CIAA has monitored selected streams in the Susitna River system during the period of adult salmon returns for the presence of beaver dams that would hinder or prevent the successful completion of spawning migration. When such barriers are found, they are temporarily modified to allow fish passage. CIAA plans to continue this work.

#### 6.7.3.6 **CIAA** Byers Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology

Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Byers Lake, which is about fifty river-miles upstream of the confluence of the Susitna River and its Chulitna River tributary. In addition to counting returning adults CIAA will be checking for various tags and marks

placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)

- 6.7.3.7 **CIAA** Chelatna Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology
- Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Chelatna Lake, which is at the head of Lake Creek in the Yentna River tributary system of the Susitna River. In addition to counting returning adults CIAA will be checking for various tags and marks placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)
- 6.7.3.8 **CIAA** Shell Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology
- Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Shell Lake, which is at the head of Shell Creek in the Skwentna River tributary system of the Susitna River. In addition to counting returning adults CIAA will be checking for various tags and marks placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)
- 6.7.3.9 **CIAA** Stephan Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology
- Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Stephan Lake, which is at the head of Prairie Creek in the Talkeetna River tributary system of the Susitna River. In addition to counting returning adults CIAA will be checking for various tags and marks placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)
- 6.7.3.10 **CIAA** Larson Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology
- Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Larson Lake, which is on a short tributary on the south side of the Talkeetna River about twelve river-miles upstream of its confluence with the Susitna River. In addition to counting returning adults CIAA will be checking for various tags and marks placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)
- 6.7.3.11 **CIAA** Hewitt Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology
- Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Hewitt Lake, which is at the head of Hewitt Creek in the Yentna River tributary system of the Susitna River. In addition to counting returning adults CIAA will be checking for various tags and marks placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)



6.7.3.12 **CIAA** Judd Lake Sockeye Salmon Adult and Smolt Enumeration and Limnology

Working in conjunction with ADF&G, CIAA will install, staff and operate a smolt enumeration trap and adult counting weir at Judd Lake, which is at the head of a tributary of the Talachulitna River in the Yentna River tributary system of the Susitna River. In addition to counting returning adults CIAA will be checking for various tags and marks placed by ADF&G fishwheel operations near the mouth of the Susitna River. This work will begin with adult weirs in 2006. (see Sections 6.7.3.3 and 6.7.3.4)

6.7.3.13 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

6.7.4 Proposed New Anadromous Salmon Projects

6.7.4.1 **ADF&G** Beaver Dam Removal in Shell and Trinity Lake Systems

During the critical adult spawning migration, ADF&G will monitor and modify where necessary beaver dams blocking thee migration in the Shell Lake and Trinity Lake systems.

6.7.4.2 **CIAA** Conceptual Plan for Lake Louise Sockeye Salmon Stocking

There have been preliminary discussions about the possibility of bringing the portion of the Susitna River system upstream of Devil's Canyon into salmon production by stocking sockeye salmon in Lake Louise. CIAA is developing a conceptual plan for such a project to identify if it could be done, how it might be done and what the associated costs and problems might be. Until this type of information is available, initiating permit applications and projecting implementation schedules are premature.

6.7.4.3 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

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## CHAPTER 7.0

### KNIK ARM UNIT ANALYSIS

#### 7.1 OVERVIEW

The Knik Arm Unit is the most densely populated and heavily developed of any of the ten units that make up the Cook Inlet region. It continues to grow at a rapid rate, and by virtue of the road system it is also the most thoroughly accessible. It may also be the unit in which there has been the greatest number of individual anadromous salmon enhancement projects.

The Knik Arm Unit does not contain the extensive dedicated federal or state landholdings found in many of the other portions of the Cook Inlet drainage. This means there are fewer restrictive land use policies that might limit potential salmon rehabilitation or enhancement projects, but it also means there are fewer limits on the types of activities that might destroy productive salmon habitat.

Well over half of the total state population lives within the drainage of the Knik Arm Unit, and this puts considerable pressure on all of the natural resources of the unit. This fosters a need to make use of the natural resources such as the harvest of salmon as available as possible; and that means the development of more access roads, boat ramps and parking areas. There is a cyclical pattern that functions as follows: (1) if there are fish people will want to get to them; (2) if people can get to them quite readily they will want more of them and (3) If there are abundant fish more people will want to have access to them.

There are three hatcheries in the unit, the Eklutna Hatchery which has made both direct and remote releases and the Elemendorf and Fort Richardson Hatcheries which are collectively referred to as the Anchorage Area Complex and make only remote releases. The Eklutna Hatchery is not currently incubating any eggs; however, it is being used as a backup rearing facility for some coho and sockeye salmon from Trail Lakes Hatchery and as a short-term rearing and release site for and ADF&G king salmon project.

There is a very limited set gill net commercial fishery in the Knik Arm and a personal use dipnet fishery in Fish Creek. The remainder of the harvest in the Knik Arm Unit is from recreational fisheries from the Little Susitna River in the northwest corner of the unit to Ship Creek in downtown Anchorage at the southwest corner of the unit.

#### 7.2 RELEVANT LAND USE POLICIES

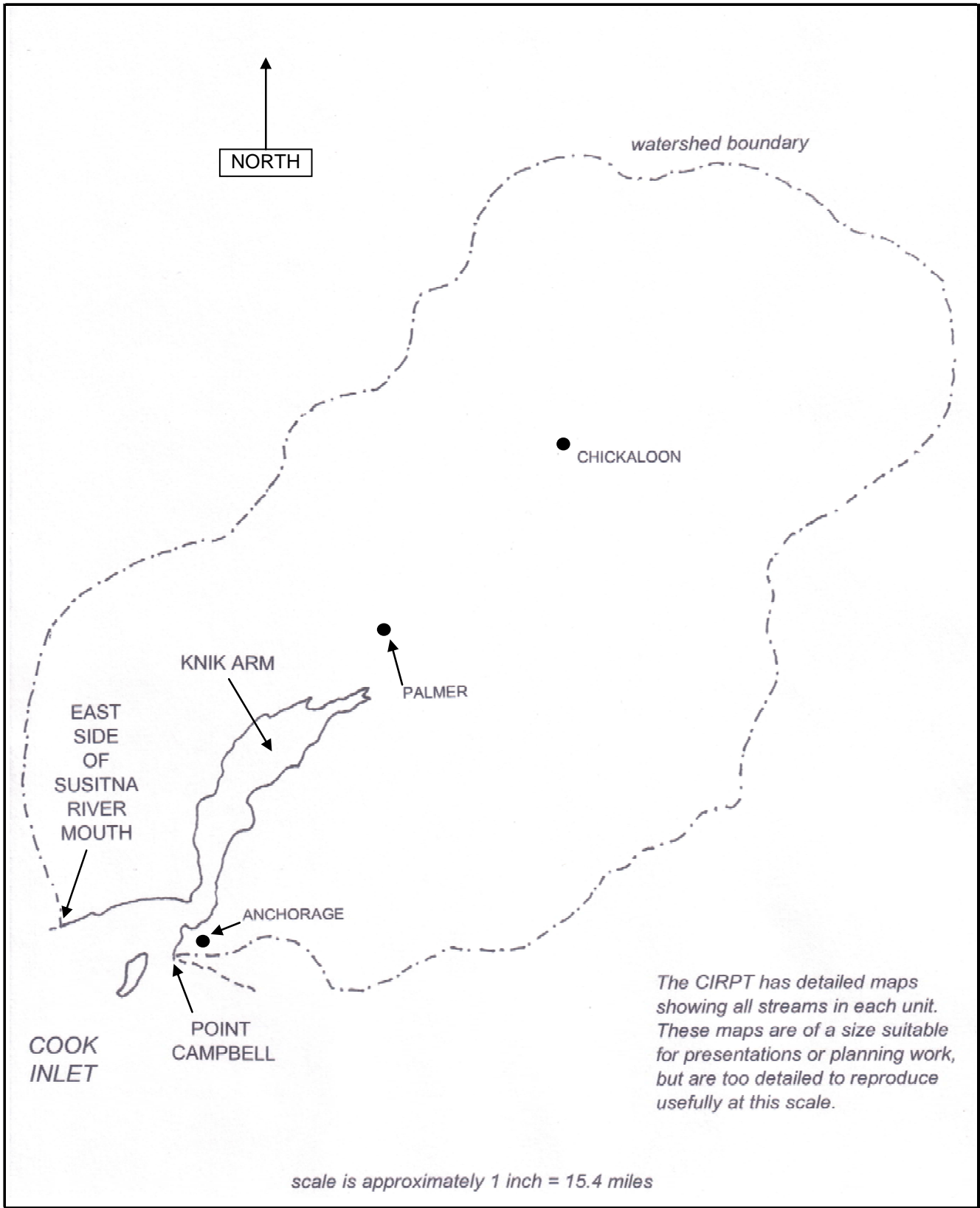
The Knik Arm watershed has been the subject of numerous planning efforts of one type or another. It is important to identify what affect those plans and the recommendations they include may have on fish production and fishery operation.

##### 7.2.1 Alaska Department of Natural Resources:

Susitna Basin Recreation Rivers Plan: The Alaska Department of Natural Resources conducted a planning effort to decide how to manage state land and water located in corridor areas along six recreation rivers (one of which is in the Knik Arm drainage): Deshka River

**EXHIBIT 7-1**

**KNIK ARM UNIT MAP**



(including Moose and Kroto Creeks), Talkeetna River, Lake Creek, Talachulitna River, Alexander Creek and Little Susitna River.

Some of the more significant issues addressed by the plan include:

- Recreation: how to manage recreation activities and facilities (such as campsites, restrooms, garbage, boating and trailer-related uses)
- Habitat: which measures are necessary to protect fish and wildlife habitat (such as wet lands, riparian vegetation, stream bottoms and banks).
- Water: which measures are necessary to protect water quality. The plan will also ensure adequate stream flow in the rivers to protect the purposes of the Recreation Rivers Act.
- Transportation: how to manage transportation facilities and resources (such as airstrips, undeveloped landing areas, bridges, trams, easements, rights-of-way, heavy equipment transport and off-road vehicle use).
- Commercial Activities: where commercial facilities (such as lodges, campgrounds and base camps) are allowed in order to protect other resources in the corridors.
- Resource Use: guidelines for resource use (such as timber harvest for personal use and small materials sales). The plan will also decide if new mining claims are permitted on the uplands within the corridors.
- Enforcement: The plan will prescribe management options for resolving unauthorized uses of state land. The planning process will document illegal activities (such as trespass cabins, long term camps and other unauthorized activities).

Although there is no specific reference to salmon enhancement or rehabilitation in this process, it is clear that some of the issues related to habitat have substantial implications for the future of the salmon resource and may have some import for the particulars of project implementation. Although the plan has been approved, it has never been funded for implementation.

Land Use Plan for Public Lands in the Willow Sub-Basin was jointly developed by ADNR, the Matanuska-Susitna Borough and the Alaska Department of Fish and Game, and it covers areas both inside and outside the Knik Arm drainage. The portion which falls within the Knik Arm Unit is the watersheds of the Little Susitna River, Goose Creek, Fish Creek, O'Brien Creek, Crocker Creek, Cottonwood Creek, Wasilla Creek and Rabbit Slough. In addition this plan deals only with State-owned and Borough-owned lands.

In Chapter III - Goals, Policies and Management Guidelines - Fish and Wildlife, the plan lists the following two goals:

- “1. Maintenance and enhancement of the Willow Sub-basin as one of the state’s most important areas providing high quality, readily accessible use of fish and wildlife for local residents, residents of the Anchorage metropolitan area, and other visitors.
2. A continuing contribution of King, Red, Silver, Pink and Chum Salmon to the Cook Inlet commercial fishery from Willow Sub-basin anadromous streams.”

The Implementation Policies in this same section of the plan states the following general policy:

- “1. Fish and Wildlife habitat values shall be an important consideration in the management of all public lands, regardless of the dominant land use. Development activities will be conducted in a manner that minimizes negative impacts on fish and wildlife habitat.”

The plan does not specifically address the questions of salmon rehabilitation or enhancement; however, the goals and policy cited above would not appear to place any unacceptable conditions on a well-thought-out rehabilitation or enhancement project.

#### Susitna Area Plan:

This plan was prepared by ADNR, the Alaska Department of Fish and Game and the Matanuska-Susitna Borough in cooperation with the Alaska Department of Transportation and Public Facilities, the Kenai Peninsula Borough, the U.S. Department of Agriculture and the Bureau of Land Management.

The area covered by the plan is divided into 15 units; however, 2 of those units are not discussed, the Willow Sub-basin Unit which has its own plan as discussed in preceding paragraphs and the Denali National Park and Preserve. Of the 13 remaining units only 2 are in the Knik Arm drainage; and they are the Glenn Highway Unit and the Chugach Mountains Unit.

This plan does not specifically address direct rehabilitation or enhancement of the fish stocks, but it does clearly address and provide for rehabilitation or enhancement of fish habitat with the intent of “protecting fish and wildlife resources”.

Susitna Regional Forest Plan: This plan is rather narrowly focused on the commercial harvest of timber in the Susitna River drainage. It is of significance to the planning of salmon rehabilitation and enhancement in that the habitat implications of commercial timber harvesting could substantially affect the vitality of existing stocks and limit the opportunities for salmon rehabilitation and enhancement.

#### 7.2.2 Matanuska-Susitna Borough:

The Borough has been an active participant in several of the studies and planning efforts outlined above. The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation.

In 2005 the Borough convened the Big Lake Watershed Forum as an element of the larger Big Lake Watershed Assessment and Planning Project funded by the U.S. Environmental Protection Agency. The purpose of the Forum was stated in Summary Report, “...to share information about projects and plans in the Big Lake Watershed, discuss the use of GIS as a

watershed tool, and identify and discuss citizen and agency concerns about the watershed and water quality.”

**7.3 ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 7-2A through 7-2E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G’s historical escapement counts

**KEY FOR EXHIBITS 7A THROUGH 7E**

In the following exhibits there are numbers of fish cited under two headings, “Highest Number of Fish Reported for the System” (column 3) and “Most Recent Number of Fish Reported for the System” (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 7-2A		KNIK ARM UNIT KING SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Little Susitna R.	247-41-10100	2,138 RH 2003	2,138 RH 2003					
Maguire C.	247-41-10100-2005	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10100-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2089	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2129	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2150-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2150-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2150-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2171	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Lake C.	247-41-10100-2231	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2231-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2231-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2231-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2231-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2231-3051-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2271	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2291	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2295	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-41-10100-2297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 7-2A									
[ continued from preceding page ]									
<b>KNIK ARM UNIT KING SALMON</b>									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-41-10100-2299	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10100-2301	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10100-2305	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10100-2309	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10100-2313	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10100-2319	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10100-2323	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10100-2329	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10100-2329-3008	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10100-2335	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-41-10100-2343	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-41-10100-2351	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Fishhook C.	247-41-10100-2379	UNKNOWN	UNKNOWN						
Archangel C.	247-41-10100-2387	UNKNOWN	UNKNOWN						
Goose C.	247-50-10360	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Fish C.	247-50-10330	UNKNOWN	UNKNOWN						
Threemile C.	247-50-10330-2020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
O'Brien C.	247-50-10320	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Crocker C.	247-50-10305	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Cottonwood C.	247-50-10300	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-50-10300-2055	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-50-10300-2055-3008	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Wasilla C.	247-50-10270	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-50-10270-2020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-50-10270-2041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							

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EXHIBIT 7-2A [ continued from preceding page ]							KNIK ARM UNIT KING SALMON			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Unnamed Tributary	247-50-10270-2066			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Barrett S.	247-50-10260			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10260-2019			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10260-2019-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10260-2019-3020-4008			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10260-2019-3020-4015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Matanuska R.	247-50-10220	UNKNOWN	UNKNOWN							
Unnamed Tributary	247-50-10220-2036			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10220-2036-3016			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10220-2037			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Wolverine C.	247-50-10220-2080			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10220-2080-3019			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Moose C.	247-50-10220-2085	590 GS 2004	556 GS 2006							
Eska C.	247-50-10220-2095			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10220-2098			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-50-10220-2098-3015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Granite C.	247-50-10220-2105	UNKNOWN	UNKNOWN							
Little Granite C.	247-50-10220-2109	UNKNOWN	UNKNOWN							
Unnamed Tributary	247-50-10220-2109-3012			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kings R.	247-50-10220-2115	UNKNOWN	UNKNOWN							
Chickaloon R.	247-50-10220-2171			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lake C.	247-50-10220-2260			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Caribou C.	247-50-10220-2341			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Knik R.	247-50-10200			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bodenburg C.	247-50-10200-2071			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 7-2A		[ continued from preceding page ]							KNIK ARM UNIT KING SALMON			
USGS Name [locally used name ]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
					MAY	JUNE	JULY	AUG.	SEPT.			
	Unnamed Tributary	247-50-10200-2071-3025		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Jim C.	247-50-10200-2081		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2081-3021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2081-3025		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2081-3025-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2081-3031		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2081-3041		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2126		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Friday C.	247-50-10200-2131		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10200-2135		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Hunter C.	247-50-10200-2140		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10180		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Eklutna R.	247-50-10175		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Peters C.	247-50-10160	101	UNKNOWN								
	Fire C.	247-50-10150	UNKNOWN	UNKNOWN								
	Unnamed Tributary	247-50-10150-2024		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Eagle R.	247-50-10110	313	TCU 1977	25	RH 2003						
	Unnamed Tributary	247-50-10110-2010	UNKNOWN	UNKNOWN								
	Unnamed Tributary	247-50-10110-2033		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10110-2095		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10095		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10095-2006		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Unnamed Tributary	247-50-10095-2010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Sixmile C.	247-50-10090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Ship C.	247-50-10060	3,588	RH 2003	3,588	RH 2003						
	Chester C.	247-50-10050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
	Fish C.	247-50-10090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								

EXHIBIT 7-2B		KNIK ARM UNIT SOCKEYE SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Little Susitna R.	247-41-10100	8,900 TCU 1984	3,373 RH 2003					
Maguire C.	247-41-10100-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2089	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2129	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2171	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lake C.	247-41-10100-2231	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10100-2231-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3051-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2271	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2291	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2295	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 7-2B		[ continued from preceding page ]					KNIK ARM UNIT SOCKEYE SALMON			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG. SEPT.			
Unnamed Tributary	247-41-10100-2299		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2301		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2305		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2309		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2313		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2319		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2323		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2329		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2329-3008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2335		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2343		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-41-10100-2351		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Fishhook C.	247-41-10100-2379		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Archangel C.	247-41-10100-2387		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Goose C.	247-50-10360		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Fish C.	247-50-10330	306,982 MC 1940	57 RH 2003							
Threemile C.	247-50-10330-2020	UNKNOWN	UNKNOWN							
O'Brien C.	247-50-10320		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Crocker C.	247-50-10305		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Cottonwood C.	247-50-10300	25,180 WC 1981	961 RH 2003							
Unnamed Tributary	247-50-10300-2055	UNKNOWN	UNKNOWN							
Unnamed Tributary	247-50-10300-2055-3008	UNKNOWN	UNKNOWN							
Wasilla C.	247-50-10270	UNKNOWN	UNKNOWN							
Unnamed Tributary	247-50-10270-2020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-50-10270-2041	UNKNOWN	UNKNOWN							

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EXHIBIT 7-2B										KNIK ARM UNIT SOCKEYE SALMON									
[ continued from preceding page ]										[ continued from preceding page ]									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Unnamed Tributary	247-50-10270-2066	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Barrett S.	247-50-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-50-10260-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-50-10260-2019-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-50-10260-2019-3020-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-50-10260-2019-3020-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Matanuska R.	247-50-10220	505 PC 1978	13 RH 2003																
Unnamed Tributary	247-50-10220-2036	UNKNOWN	UNKNOWN																
Unnamed Tributary	247-50-10220-2036-3016	UNKNOWN	UNKNOWN																
Unnamed Tributary	247-50-10220-2037	UNKNOWN	UNKNOWN																
Wolverine C.	247-50-10220-2080	UNKNOWN	UNKNOWN																
Unnamed Tributary	247-50-10220-2080-3019	UNKNOWN	UNKNOWN																
Moose C.	247-50-10220-2085	19 GS 2006	19 GS 2006																
Eska C.	247-50-10220-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-50-10220-2098	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	247-50-10220-2098-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Granite C.	247-50-10220-2105	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Little Granite C.	247-50-10220-2109	UNKNOWN	UNKNOWN																
Unnamed Tributary	247-50-10220-2109-3012	UNKNOWN	UNKNOWN																
Kings R.	247-50-10220-2115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Chickaloon R.	247-50-10220-2171	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Lake C.	247-50-10220-2260	UNKNOWN	UNKNOWN																
Caribou C.	247-50-10220-2341	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Knik R.	247-50-10200	1,554 RH 2003	1,554 RH 2003																
Bodenburg C.	247-50-10200-2071	UNKNOWN	UNKNOWN																

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EXHIBIT 7-2B		[ continued from preceding page ]							KNIK ARM UNIT SOCKEYE SALMON			
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing								
				MAY	JUNE	JULY	AUG.	SEPT.				
Unnamed Tributary	247-50-10200-2071-3025	UNKNOWN	UNKNOWN									
Jim C.	247-50-10200-2081	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10200-2081-3021	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10200-2081-3025	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10200-2081-3025-4010	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10200-2081-3031	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10200-2081-3041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10200-2126	UNKNOWN	UNKNOWN									
Friday C.	247-50-10200-2131	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10200-2135	UNKNOWN	UNKNOWN									
Hunter C.	247-50-10200-2140	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10180	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Eklutna R.	247-50-10175	UNKNOWN	UNKNOWN									
Peters C.	247-50-10160	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Fire C.	247-50-10150	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10150-2024	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Eagle R.	247-50-10110	12 RH 2003	12 RH 2003									
Unnamed Tributary	247-50-10110-2010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10110-2033	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10110-2095	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10095	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10095-2006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10095-2010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Sixmile C.	247-50-10090	300 TCU 1980	300 TCU 1980									
Ship C.	247-50-10060	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Chester C.	247-50-10050	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Fish C.	247-50-10046	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										

EXHIBIT 7-2C		KNIK ARM UNIT COHO SALMON						
		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Little Susitna R.	247-41-10100	13,672 RH 2003	13,672 RH 2003	13,672 RH 2003				
Meguire C.	247-41-10100-2005	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2010	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2080	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2090	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2100	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2089	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2095	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2129	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2150	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2150-3010	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2150-3051	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2150-3070	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2171	UNKNOWN	UNKNOWN	UNKNOWN				
Lake C.	247-41-10100-2231	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2231-3018	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2231-3018-4011	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2231-3026	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2231-3051	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2231-3051-4011	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2255	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2271	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2291	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2295	UNKNOWN	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-41-10100-2297	UNKNOWN	UNKNOWN	UNKNOWN				

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KNIK ARM UNIT COHO SALMON									
USGS Name [locally used name]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
	Unnamed Tributary	247-41-10100-2299	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2301	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2305	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2309	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2313	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2319	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2323	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2329	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2329-3008	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2335	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2343	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-41-10100-2351	UNKNOWN	UNKNOWN					
	Fishhook C.	247-41-10100-2379	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Archangel C.	247-41-10100-2387	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Goose C.		247-50-10360	UNKNOWN	< 500					
Fish C.		247-50-10330	19,417 MC 1938	112 RH 2003					
	Threemile C.	247-50-10330-2020	UNKNOWN	UNKNOWN					
O'Brien C.		247-50-10320	UNKNOWN	UNKNOWN					
Crocker C.		247-50-10305	UNKNOWN	UNKNOWN					
Cottonwood C.		247-50-10300	3,375 RH 1980	665 RH 2003					
	Unnamed Tributary	247-50-10300-2055	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-50-10300-2055-3008	UNKNOWN	UNKNOWN					
Wasilla C.		247-50-10270	3,555 RH 1980	261 RH 2003					
	Unnamed Tributary	247-50-10270-2020	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-50-10270-2041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						

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EXHIBIT 7-2C		[ continued from preceding page ]							KNIK ARM UNIT COHO SALMON			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing								
				MAY	JUNE	JULY	AUG.	SEPT.				
Unnamed Tributary	247-50-10270-2066	UNKNOWN	UNKNOWN									
Barrett S.	247-50-10260	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10260-2019	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10260-2019-3020	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10260-2019-3020-4008	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10260-2019-3020-4015	UNKNOWN	UNKNOWN									
Matanuska R.	247-50-10220	2,500 TCU 1981	13 RH 2003									
Unnamed Tributary	247-50-10220-2036	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10220-2036-3016	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10220-2037	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Wolverine C.	247-50-10220-2080	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10220-2080-3019	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Moose C.	247-50-10220-2085	335 GS 2006	335 GS 2006									
Eska C.	247-50-10220-2095	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Unnamed Tributary	247-50-10220-2098	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10220-2098-3015	UNKNOWN	UNKNOWN									
Granite C.	247-50-10220-2105	UNKNOWN	UNKNOWN									
Little Granite C.	247-50-10220-2109	UNKNOWN	UNKNOWN									
Unnamed Tributary	247-50-10220-2109-3012	UNKNOWN	UNKNOWN									
Kings R.	247-50-10220-2115	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Chickaloon R.	247-50-10220-2171	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Lake C.	247-50-10220-2260	UNKNOWN	UNKNOWN									
Caribou C.	247-50-10220-2341	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										
Knik R.	247-50-10200	6,415 RH 2003	6,415 RH 2003									
Bodenburg C.	247-50-10200-2071	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>										

[ continued on following page ]

KNIK ARM UNIT COHO SALMON									
USGS Name [locally used name]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary		247-50-10200-2071-3025	UNKNOWN	UNKNOWN					
	Jim C.	247-50-10200-2081	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10200-2081-3021	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10200-2081-3025	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10200-2081-3025-4010	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10200-2081-3031	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10200-2081-3041	UNKNOWN	UNKNOWN					
ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unamed Tributary	247-50-10200-2126	UNKNOWN	UNKNOWN					
	Friday C.	247-50-10200-2131	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10200-2135	UNKNOWN	UNKNOWN					
	Hunter C.	247-50-10200-2140	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10180	UNKNOWN	UNKNOWN					
	Eklutna R.	247-50-10175	UNKNOWN	UNKNOWN					
	Peters C.	247-50-10160	UNKNOWN	UNKNOWN					
	Fire C.	247-50-10150	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10150-2024	UNKNOWN	UNKNOWN					
	Eagle R.	247-50-10110	156 RH 2003	156 RH 2003					
ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unamed Tributary	247-50-10110-2010	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10110-2033	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10110-2095	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10095	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10095-2006	UNKNOWN	UNKNOWN					
	Unamed Tributary	247-50-10095-2010	UNKNOWN	UNKNOWN					
	Sixmile C.	247-50-10090	200 TCU no date	200 TCU no date					
	Ship C.	247-50-10060	6,094 RH 2003	6,094 RH 2003					
	Chester C.	247-50-10050	UNKNOWN	UNKNOWN					
	Fish C.	247-50-10046	UNKNOWN	UNKNOWN					

EXHIBIT 7-2D		KNIK ARM UNIT PINK SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Little Sustina R.	247-41-10100	45,000 MC 1964	30 RH 2003					
Maguire C.	247-41-10100-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2090	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-41-10100-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2089	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2129	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2150-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2171	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Lake C.	247-41-10100-2231	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2231-3051-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2271	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2291	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2295	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-41-10100-2297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

[ continued on following page ]

EXHIBIT 7-2D		KNIK ARM UNIT PINK SALMON							
USGS Name [locally used name]		Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Unnamed Tributary	247-41-10100-2299	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2301	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2305	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2309	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2313	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2319	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2323	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2329	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2329-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2335	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2343	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-41-10100-2351	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Fishhook C.	247-41-10100-2379	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Archangel C.	247-41-10100-2387	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Goose C.	247-50-10360	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Fish C.	247-50-10330	3,940 WC 1970	0 RH 2003	TIMING UNKNOWN			
		Threemile C.	247-50-10330-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		O'Brien C.	247-50-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Crocker C.	247-50-10305	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Cottonwood C.	247-50-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-50-10300-2055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-50-10300-2055-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Wasilla C.	247-50-10270	210 RH 1980	0 RH 2003	TIMING UNKNOWN			
		Unnamed Tributary	247-50-10270-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	247-50-10270-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

<b>EXHIBIT 7-2D</b>		<b>KNIK ARM UNIT PINK SALMON</b>							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Unnamed Tributary	247-50-10270-2066	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Barrett S.	Unnamed Tributary	247-50-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10260-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10260-2019-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10260-2019-3020-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10260-2019-3020-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Matanuska R.		247-50-10220	2,500 TCU 1981	2,500 TCU 1981					TIMING UNKNOWN
	Unnamed Tributary	247-50-10220-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10220-2036-3016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10220-2037	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Wolverine C.	247-50-10220-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10220-2080-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Moose C.	247-50-10220-2085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Eska C.	247-50-10220-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10220-2098	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10220-2098-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Granite C.	247-50-10220-2105	UNKNOWN	UNKNOWN					TIMING UNKNOWN
	Little Granite C.	247-50-10220-2109	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-50-10220-2109-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Kings R.	247-50-10220-2115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Chickaloon R.	247-50-10220-2171	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Lake C.	247-50-10220-2260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Caribou C.	247-50-10220-2341	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Knik R.		247-50-10200	50 TCU no date	22 RH 2003					TIMING UNKNOWN
	Bodenburg C.	247-50-10200-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		[ continued on following page ]							

EXHIBIT 7-2D		[ continued from preceding page ]							KNIK ARM UNIT PINK SALMON			
		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
						MAY	JUNE	JULY	AUG.	SEPT.		
	Unnamed Tributary	247-50-10200-2071-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Jim C.	247-50-10200-2081	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2081-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2081-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2081-3025-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2081-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2081-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2126	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Friday C.	247-50-10200-2131	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10200-2135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Hunter C.	247-50-10200-2140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Eklutha R.	247-50-10175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Peters C.	247-50-10160	UNKNOWN	UNKNOWN								
	Fire C.	247-50-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10150-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Eagle R.	247-50-10110	3,000 MC 1963	0 RH 2003								
	Unnamed Tributary	247-50-10110-2010	UNKNOWN	UNKNOWN								
	Unnamed Tributary	247-50-10110-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10110-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10095-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Unnamed Tributary	247-50-10095-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
	Sixmile C.	247-50-10090	UNKNOWN	UNKNOWN								
	Ship C.	247-50-10060	1,258 MC 1952	291 RH 2003								
	Chester C.	247-50-10050	UNKNOWN	UNKNOWN								
	Fish C.	247-50-10046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									

EXHIBIT 7-2E		KNIK ARM UNIT CHUM SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Little Susitna R.	247-41-10100	838 RH 2003	838 RH 2003					
Maguire C.	247-41-10100-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2089	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2129	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2150-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2150-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2150-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2171	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Lake C.	247-41-10100-2231	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2231-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2231-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2231-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2231-3051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2231-3051-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2271	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2291	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2295	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-41-10100-2297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					

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EXHIBIT 7-2E							KNIK ARM UNIT CHUM SALMON						
[ continued from preceding page ]													
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	247-41-10100-2299	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2301	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2305	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2309	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2313	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2319	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2323	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2329	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2329-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2335	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2343	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-41-10100-2351	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Fishhook C.	247-41-10100-2379	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Archangel C.	247-41-10100-2387	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Goose C.	247-50-10360	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Fish C.	247-50-10330	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Threemile C.	247-50-10330-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
O'Brien C.	247-50-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Crocker C.	247-50-10305	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Cottonwood C.	247-50-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-50-10300-2055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-50-10300-2055-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Wasilla C.	247-50-10270	45 RH 1979	28 RH 2003	TIMING UNKNOWN									
Unnamed Tributary	247-50-10270-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	247-50-10270-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										

[ continued on following page ]

EXHIBIT 7-2E										KNIK ARM UNIT CHUM SALMON			
[ continued from preceding page ]													
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	247-50-10270-2066		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Barrett S.	247-50-10260		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-50-10260-2019		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-50-10260-2019-3020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-50-10260-2019-3020-4008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	247-50-10260-2019-3020-4015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Matanuska R.	247-50-10220	150 TCU 1981	13 RH 2003										
Unnamed Tributary	247-50-10220-2036	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-50-10220-2036-3016	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-50-10220-2037	UNKNOWN	UNKNOWN										
Wolverine C.	247-50-10220-2080			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-50-10220-2080-3019			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Moose C.	247-50-10220-2085	2 GS 2004	2 GS 2004										
Eska C.	247-50-10220-2095	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-50-10220-2098			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-50-10220-2098-3015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Granite C.	247-50-10220-2105	UNKNOWN	UNKNOWN										
Little Granite C.	247-50-10220-2109	UNKNOWN	UNKNOWN										
Unnamed Tributary	247-50-10220-2109-3012	UNKNOWN	UNKNOWN										
Kings R.	247-50-10220-2115	UNKNOWN	UNKNOWN										
Chickaloon R.	247-50-10220-2171	UNKNOWN	UNKNOWN										
Lake C.	247-50-10220-2260			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Caribou C.	247-50-10220-2341	UNKNOWN	UNKNOWN										
Knik R.	247-50-10200	105 RH 2003	105 RH 2003										
									TIMING UNKNOWN				
Bodenburg C.	247-50-10200-2071			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									

[ continued on following page ]

EXHIBIT 7-2E		[ continued from preceding page ]							KNIK ARM UNIT CHUM SALMON				
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	247-50-10200-2071-3025	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Jim C.	247-50-10200-2081	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2081-3021	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2081-3025	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2081-3025-4010	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2081-3031	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2081-3041	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2126	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Friday C.	247-50-10200-2131	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10200-2135	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Hunter C.	247-50-10200-2140	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10180	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Eklutha R.	247-50-10175	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Peters C.	247-50-10160	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Fire C.	247-50-10150	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10150-2024	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Eagle R.	247-50-10110	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	247-50-10110-2010	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10110-2033	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10110-2095	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10095	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10095-2006	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	247-50-10095-2010	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Sixmile C.	247-50-10090	100	TCU 1980	0	RH 2003				TIMING UNKNOWN				
Ship C.	247-50-10060	600	MC 1963	67	RH 2003				TIMING UNKNOWN				
Chester C.	247-50-10050	100	EHO no date	100	EHO no date				TIMING UNKNOWN				
Fish C.	247-50-10046	ANADROMOUS	WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									

7.4 SIGNIFICANT STOCKS



7.5.2 Sockeye Salmon

Stock identified: None

Rationale: There are only a very limited number of sockeye salmon stocks in the Knik Arm that have not been enhanced and are of sufficient size to qualify for designation as a wild stock sanctuary / stock reserve. Designating a sockeye salmon wild stock sanctuary / stock reserve in this unit would substantially restrict the ability to respond to situations in which some type of rehabilitation effort would seem to be warranted.

7.5.3 Coho Salmon

Stock identified: None

Rationale: There are only a very limited number of coho salmon stocks in the Knik Arm that have not been enhanced and are of sufficient size to qualify as a wild stock sanctuary / stock reserve. Designating a coho salmon wild stock sanctuary / stock reserve in this unit would substantially restrict the ability to respond to situations in which some type of rehabilitation effort would seem to be warranted.

7.5.4 Pink Salmon

Stock identified: Little Susitna River stock  
[AWC 247-41-10100]

Rationale: It has no record of pink salmon rehabilitation or enhancement. The stock has a history that indicates it is large enough to function as a wild stock sanctuary / stock reserve. It is representative of pink salmon in the Knik Arm Unit.

7.5.5 Chum Salmon

Stock identified: None

Rationale: There are only a very limited number of chum salmon stocks in the Knik Arm that have not been enhanced and are of sufficient size to qualify as a wild stock sanctuary / stock reserve. Designating a chum salmon wild stock sanctuary / stock reserve in this unit would substantially restrict the ability to respond to situations in which some type of rehabilitation effort would seem to be warranted.

**7.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

7.6.1 Projects Identified in the Phase I Plan 1981 - 2000

## 7.6.1.1 Upper Cook Inlet Run Modeling

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“There are serious time constraints on the data acquisition / management decision process which is central to the effective management of the Upper Cook Inlet fisheries. The continued development and refinement of a computer simulation model for the Upper Cook Inlet salmon stocks would be of marked assistance in data compilation and analysis.*

*“The types of data to be processed include catch, escapement, off-shore test fishing results, and in-district test fishing results. A management system has been developed to make possible in-season data analysis. The simulation techniques will allow the managers to evaluate variations in run timing, stock abundance, and harvest management tactics so that there can be appropriate applications of fishing times and area schedules.”*

Subsequent Developments:

ADF&G has continued to examine and refine its run modeling process. The use of the off-shore test fishery and the sonar derived escapement counts continue to be the main components of this ongoing, in-season program.

## 7.6.1.2 Big Lake Hatchery

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“F.R.E.D.’s Big Lake Hatchery a short distance north of the Knik Arm has been operational since 1974. The strategy involved is to rear sockeye and coho salmon fry and release the sockeye salmon into Fish Creek, Meadow Creek, Nancy Lake and Wasilla Lake. The coho salmon fry are released into the Little Susitna River and other systems in the Matanuska-Susitna valleys. By 1990 it is expected that production from this facility will be about 130,000 adult sockeye salmon and 80,000 adult coho salmon.”*

Subsequent Developments:

Big Lake Hatchery operated until 1992 when it was closed. Its sockeye salmon releases reached a high of 15,000,000 in 1986 and annually averaged 12,536,515 in the seven years from 1985 through 1991. The program to stock sockeye salmon in the Big Lake drainage was transferred to the Eklutna Hatchery. The coho salmon stocking program in the Little Susitna River continued through the Anchorage Hatchery Complex.

## 7.6.1.3 Anchorage Hatchery Complex – Ft. Richardson and Elmendorf

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The F.R.E.D. facility at Fort Richardson is the major component of this complex. Crooked Creek is the present source of king salmon eggs for this facility. Coho salmon*

*eggs are secured in Bear Creek near Seward, but a new site is being sought. King salmon releases occur in the Matanuska-Susitna valleys, Halibut Cove, and Crooked Creek. The coho salmon are released in Fritz Creek, Halibut Cove, Seward, Whittier, and on Homer Spit and are used in lake stocking in landlocked situations. Given the appropriate funding and staffing it is projected that this complex which is undergoing expansion that will be complete in 1982 could account for the annual production of 75,000 adult king salmon and 200,000 adult coho salmon by 1990."*

Subsequent Developments:

Although there have been some adjustments in these programs, the basic pattern has remained the same; and the Complex continues to function annually. At this time the Complex is the only state-operated hatchery "facility" in Cook Inlet.

7.6.1.4 Eklutna Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"The Eklutna Hatchery is now in the final stages of permitting and will be a CIAA facility located near the upper end of Knik Arm. Construction of the facility is scheduled to begin in 1981 with production slated to begin in 1982. This will be the first private non-profit hatchery in Cook Inlet and will be basically a chum salmon facility, although there is some provision for experimentation with the production of coho salmon. Initial broodstocks will come from stocks originating in the vicinity of the hatchery. By 2000 annual chum salmon production from this facility is expected to be 308,000 adult fish."*

Subsequent Developments:

The construction of the Eklutna Hatchery was completed, and the operating permit was issued in the same year. Although the facility began as a chum salmon hatchery, during its sixteen year history each of the five species of Pacific salmon was incubated at least once.

In the build up of broodstock (1982-1987) chum salmon eggs were taken from the Matanuska River, Skwentna River and Chulitna River and the Eklutna tailrace. The last chum salmon release was in 1992, and the largest estimated return was 119,000 in 1995.

King salmon from Moose Creek stock were incubated only one year (1984), and an IHNV outbreak forced the destruction of the entire lot.

During the period 1984 through 1986 pink salmon from the Skwentna River broodstock were incubated and released to the Eklutna tailrace.

The facility started to incubate and release coho salmon (Fish Creek broodstock) in 1984. The initial release was in Cottonwood Creek, but subsequent releases were made in the Eklutna tailrace.

In 1992 the Big Lake Hatchery sockeye salmon projects were transferred to the Eklutna Hatchery when the Big Lake Hatchery was closed. The first release of sockeye salmon in the Eklutna tailrace took place in 1993. Resumption of the stocking of sockeye salmon in the Big Lake drainage took place in 1994.

The Crooked Creek Hatchery closed after the release of fish in the spring of 1996, and its sockeye salmon programs were transferred to the Eklutna Hatchery.

Operations at the Eklutna Hatchery were suspended following the releases in 1998, and the facility was "mothballed". The Big Lake and Lower Cook Inlet lakes projects that had been conducted by the Eklutna Hatchery were transferred to the Trail Lakes Hatchery.

Since the early returns of chum salmon to the tailrace, an increasingly popular local recreational fishery had been developing at the tailrace below the Hatchery's special harvest area. In May of 2002 ADF&G Division of Sport Fish began annually imprinting king salmon in the outdoor raceways at the Hatchery and releasing king salmon smolt in the tailrace. In addition substantial improvements are being made to the area at the end of the tailrace where the bulk of the recreational activity occurs.

In 2005 the Eklutna Hatchery was reopened on a limited basis to provide additional rearing capacity for projects at the Trail Lakes Hatchery when that facility experienced a water shortage. It was used in a similar capacity in 2006.

#### 7.6.1.5 Finger, Delyndia and Butterfly Lakes

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"These three lakes situated between the Susitna River and Big Lake and totaling approximately 600 acres are candidates for fertilization as a F.R.E.D. Division project. Pre-fertilization studies have yet to be done, but it is believed that this tactic could produce an additional 12,000 adult sockeye salmon annually."*

#### Subsequent Developments:

No fertilization project was ever undertaken in this lake. However, all three lakes have been stocked with coho salmon.

#### 7.6.1.6 Little Susitna River Coho Salmon Enhancement

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"The object of this project is to provide a harvest of 10,000 late run coho salmon which will result in an estimated 20,000 man-days of additional recreational fishing opportunity."*

*"In addition to improving the Burma Road access to lower portions of the Little Susitna River, it will be necessary to determine magnitude, distribution and timing of all segments of the escapement. Identification of various adult capture and juvenile release sites will include lakes of the Nancy Lake Recreation Area, including Nancy Lake. Subsequently, there will be determination of optimum smolt release size, age, timing and locations, and assessment of the contribution to the recreational fisheries of the Little Susitna River. Finally, there will be evaluation of the effect of coho salmon plants on other rearing species, i.e., King, sockeye, etc. King salmon enhancement may be practical in this system if it can be demonstrated that such a program does not conflict with the primary goal of coho salmon production."*

#### Subsequent Developments:



This coho salmon project was implemented in 1990 and successfully supplemented the Little Susitna River return which, in turn, increased the recreational fishing.

7.6.1.7 Little Susitna River King Salmon Enhancement

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The object of this project is to provide a harvest of 6,000 king salmon which will result in an estimated 30,000 man-days of additional recreational fishing opportunity. The requirements and procedures would be the same as were outlined in section 7.7.1.6.”*

Subsequent Developments:

This project was not undertaken.

7.6.1.8 Knik Arm Tributaries Coho Salmon Enhancement

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project, which includes Fish, Cottonwood and Wasilla Creeks, will provide a harvest of 9,000 late run coho salmon which will result in an estimated 18,000 man-days of additional fishing and opportunity to develop and evaluate various coho salmon enhancement practices.*

*“The magnitude, distribution and timing of all segments of the escapement into Cottonwood and Wasilla Creeks must be determined; and various adult capture and juvenile release sites identified. Optimal fry and/or smolt release densities, size, age and timing will be determined. These studies must include, but not be limited to evaluation of lotic versus lentic releases, fry-fingerling versus smolt releases and accelerated versus full-term smolt releases. The contribution of enhanced stocks to the recreational fisheries of the respective systems will be evaluated. There will be an evaluation of the effect of coho salmon plants on other species. Emphasis should be directed toward interactions between sockeye salmon and rainbow trout. Coho salmon production must not significantly interfere with or impact the enhancement of Fish Creek sockeye salmon.”*

Subsequent Developments:

Wasilla Creek was stocked from the Big Lake Hatchery with an estimated 153,489 coho salmon from the Fish Creek broodstock in 1992. In 1996 it was stocked again with coho salmon out of the Fort Richardson Hatchery from Little Susitna River broodstock.

In 1992 Fish Creek was stocked from the Big Lake Hatchery with an estimated 74,953 coho salmon from the Fish Creek broodstock. The project continued annually through 1993.

In 1992 Cottonwood Creek was stocked from the Big Lake Hatchery with an estimated 53,900 coho salmon from the Fish Creek broodstock. The project continued annually through 1993.

## 7.6.1.9 In-season Effort and Catch Monitoring

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project has several diverse elements all designed to improve the management of the salmon fishery in Upper Cook Inlet. The Commercial Fish Division would provide in-season estimates of effort and catch by set gill netters and the drift gill netters by means of vehicle surveys on the eastside set nets and aerial catch estimating surveys of the drift fleet. These data can be supplemented through daily contact with processors and weekly collection of the fish tickets. This estimating would be refined to the level of period-by-period estimates on a district-by-district basis. Clear in-season marking of the sub-district boundaries on the west side of the Inlet would be a necessary corollary to complete the information gathering.”*

Subsequent Developments:

In-season effort and catch monitoring continue to be pivotal pieces of information in the harvest management strategy. An effective harvest management strategy is, in turn, important to the maintenance of a strong salmon resource.

## 7.6.1.10 Upper Cook Inlet Central District Test Fishing

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“Large concentrations of sockeye salmon enter the Inlet and mill in the lower portion of the district in the middle part of July. This situation enhances the management problems which are inherent in the mixed stock fishery. Experience during 1979 showed that limited test fishing by drift gill netters during closed periods allowed more accurate monitoring of the movement of these stocks. In turn, managers were better able to set appropriate fishing times and areas for attainment of escapement goals.”*

Subsequent Developments:

The off-shore test fishery using drift gill net boats in the central district was abandoned.

## 7.6.1.11 Upper Cook Inlet Stock Separation

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project also addresses the management problems posed by the mixed stock nature of the salmon fishery in Upper Cook Inlet. It is keyed to the ability to identify the various sockeye salmon stocks, to determine the portion of each stock that is being harvested, and ultimately to assure that escapement goals are attained on a stock-by-stock basis.*

*Sockeye salmon from the commercial catch as well as from the escapement are sampled for scales, length, and weight. Through a scale recognition pattern the Statewide Scale Lab can identify the stocks being handled. Under special conditions termed ‘critical’, this identification can be expedited; and the stock identity will be in the hands of the field manager within twenty-four hours of the sampling.*

*This continuing project aids in the regulation of the fishery, helps to identify the strength of each of the component stocks and relates distribution to the harvest process.”*

Subsequent Developments:

The concept of stock separation remains an important element in the harvest management strategy. All of the techniques mentioned above continue to be employed. In addition considerably more emphasis is being placed on genetic identification.

7.6.1.12 Off-shore Test Fishing

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project has been set up to provide early information on the sockeye salmon runs and enable the managers to adjust their day-to-day management accordingly. The catches from a vessel fishing a transect between Anchor Point and the Red River are analyzed, and the results are integrated with the results of the commercial catch and the escapement monitoring to create a broad profile of the timing and run strength of the Upper Cook Inlet sockeye salmon. “*

Subsequent Developments:

ADF&G began this project in 1979, and it continues annually. The data provided is very important for effective in-season management of the commercial fishery, and effective management is crucial to achieving appropriate escapements on which the strength of the resource depends.

7.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 - 2000*

Several projects were identified and implemented after the publication of the *Phase I Plan 1981 - 2000*, and they focused primarily on coho salmon production in various parts of the Knik Arm drainage.

7.6.2.1 Finger, Delyndia and Butterfly Lakes Coho Salmon Stocking

These lakes situated between the Susitna River and Big Lake were identified in the original plan as having potential for enhanced sockeye salmon production through the use of fertilization (see section 7.6.1.5). However, ADF&G initiated coho salmon stocking programs in each of these three lakes.

7.6.2.2 Eagle River King Salmon Stocking

In 1994 Eagle River was stocked from the Elmendorf Hatchery with an estimated 98,872 king salmon from the Ship Creek broodstock. This became a one-year program and has not been repeated.

7.6.2.3 Ship Creek King Salmon Stocking

In 1994 Ship Creek was stocked from the Elmendorf Hatchery with an estimated 199,830 king salmon from the Ship Creek broodstock. This began an annual program which continues today.

#### 7.6.2.4 Ship Creek Coho Salmon Stocking

In 1992 Ship Creek was stocked from the Elmendorf Hatchery with an estimated 67,168 coho salmon from the Ship Creek broodstock. This began an annual program which continued through 1995.

#### 7.6.2.5 Nancy Lake Coho Salmon Stocking

In 1992 Nancy Lake was stocked from the Fort Richardson Hatchery with an estimated 158,459 coho salmon from the Little Susitna River broodstock. The project continued annually through 1995.

#### 7.6.2.6 Moose Creek Fish Habitat and Population Restoration Project

The Chickaloon Village Traditional Council through a grant from the U.S. Fish and Wildlife Service has undertaken a project to “re-establish fish passage, and physical and biological function of the stream channel” in Moose Creek (AWC 247-50-10220-2085), a tributary of the Matanuska River.

Moose creek was re-routed at several locations in the early 1900’s to facilitate construction of a railroad line for transporting coal. Additional impacts resulted from coal mining activities at several sites in the Moose Creek valley. Channel alignment changes and related impacts resulted in the formation of several distinct waterfalls and a significant loss of in-stream aquatic habitat.

The first two phases of this project resulted in the restoration of the creek to a new channel that closely approximated the location and character of the original channel. Anadromous salmon, particularly king salmon and coho salmon, were seen to quickly take advantage of the improved passage and move upstream thus making greater use of Moose Creek and its restored habitat than had been the case in many years.

In 2006 the Alaska Railroad implemented another restoration project at the mouth of Moose Creek by removing in-stream pilings and bridge abutments that were installed by the railroad during the coal era and constricted the mouth of Moose Creek.

The efforts of the Chickaloon Village Traditional Council to restore some habitat and reopen access to still additional habitat in the Moose Creek drainage should contribute to the strengthening of the salmon resource base in the Knik Arm drainage. (See section 7.7.3.7)

## 7.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

### 7.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

#### 7.7.1.1 Impacts to Aquatic Environment of Big Lake

In January 2002 ADF&G published Regional Information Report No. 2A01-30 “*Fish Creek Sockeye Salmon – Technical Review*”. The report “...examined available limnological, juvenile, smolt, and adult salmon data to evaluate possible causes of a recent decline of sockeye salmon escapements into Fish Creek.”

“The aggregate survival of sockeye salmon (wild & hatchery combined) to the adult stage was inversely related to the estimated number of fry rearing in Big Lake and survivals have declined since the mid-1970’s. The causes of the decline in the survival of Fish Creek sockeye salmon over the past 25 years are unclear but a decline in the production of the wild stock seems most likely. A decline in the wild stock production may have resulted from installation of a cofferdam at the lake outlet reducing the productivity of the subpopulation spawning below the dam, and the practice of preventing adult salmon from utilizing spawning habitats in Meadow Creek above the Big Lake Hatchery. Low sockeye salmon escapements into Fish Creek since 1998 were associated with closure of the Big Lake Hatchery during which wells supplying water to lower Meadow Creek were shut off, and the number of hatchery-reared fry stocked in Blodgett Lake was increased. We recommend a five-year investigation of sockeye salmon production in the Big Lake watershed to determine spawner habitat utilization, embryo survival, egg-to-fall-fry survival, fall fry-to-smolt survival, and smolt-to-adult survival of both wild and hatchery salmon.”

#### 7.7.1.2 Impacts of Bank Degradation and Migration Barriers in the Eklutna River

Apparently salmon production, particularly sockeye salmon, in the Eklutna River is significantly less than it used to be. The riparian habitat along the Eklutna River has been degraded by both hydroelectric development and local waste disposal and is in need of rehabilitation. All water is diverted from the river at the upper Eklutna River dam. This leads to many problems in the river below the dam including low flows, turbidity and insufficient flushing flows that allow substrate fines to accumulate. The lower Eklutna River dam, now unused, is about a mile above the Glenn Highway and blocks the upstream migration of anadromous salmon at that location. It is also backfilled with sediment, starving the downstream reach for gravel. Further downstream Thunderbird Creek contributes high quality water and gravels that improve fish habitat. A mile down river from the Glenn Highway the riparian zone was mined for gravel and left unrestored by the formerly federally owned railroad around 1980. The Native Village of Eklutna with help from the U.S. Army Corps of Engineers and others is assessing these impacts and developing restoration and enhancement recommendations.

#### 7.7.1.3 Impact of Highway Culverts

Culverts used to enable highway crossings of anadromous streams have the potential to substantially impact the migrations of fish in the stream. If the culvert is inappropriately sized and/or placed, it can create a situation where flows through the culvert are either too swift or insufficient to allow smooth passage of fish. Fish blocked

by the culvert may also be more susceptible to predation from various sources. As the amount of road building increases, the potential for this type of habitat issue increases.

#### 7.7.1.4 Impacts of Increased Development in River and Lake Riparian Zones

Bank conditions in lakes and streams are significant elements in the overall salmon productivity of the system. Loss of vegetation along the shores can increase the risk of erosion, affect water temperatures and increase runoff. Residential, commercial and recreational development in these same areas can mean the introduction of contaminants associated with paved surfaces, lawns and wastewater systems. Reducing the supportive capacity of the environment can lead directly to a weakening of the salmon resource base.

#### 7.7.1.5 Impacts of Increased Boat Traffic on Smaller River Systems

In larger river systems boat traffic may have the option of intentionally or fortuitously avoiding critical salmon spawning and rearing habitat. In the smaller systems there are simply not the options, and that critical habitat is at risk. Increases in that boat traffic in smaller systems magnifies the chance of significant to the resource base.

#### 7.7.1.6 Impacts of Dams on Ship Creek

Dams on Ship Creek limit the amount of habitat open to use by salmon returning to the system. Considerable effort is now directed at annual stocking of this system. If the system could be made larger and more hospitable to returning adult salmon, it could become a more self-sustaining component of anadromous salmon production.

#### 7.7.1.7 Impacts of Anchorage Port Expansion

Expansion of the Port of Anchorage, of necessity, means extensive work in the estuarine environment. In particular such work would be occurring very near the mouth of Ship Creek and in the area where the Knik Arm joins the main portion of Cook Inlet. The manner in which the work is done and the timing of such work will be major factors in the extent to which the work is a threat to anadromous salmon runs.

### 7.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of one specific anadromous salmon run and two more generalized run patterns in this unit for which there is insufficient data to make informed decisions.

#### 7.7.2.1 Big Lake Sockeye Salmon [AWC 247-50-10330-0010]

As has been pointed out in Section 7.7.1.1 Big Lake sockeye salmon have recently been failing to produce at a level that had come to be expected. The reasons are not yet clearly identified, and the potential loss is significant enough to warrant continued examination.

#### 7.7.2.2 Cottonwood Creek Sockeye Salmon Production [AWC 247-50-10300]

Chronic problems with the magnitude of the sockeye salmon return to Cottonwood Creek suggest investigation to determine what remedial measures might be effective in stabilizing this run at a satisfactory level would be in order.

### 7.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

#### 7.7.3.1 **ADF&G** Eklutna Tailrace King Salmon Stocking

In 2002 ADF&G began imprinting and releasing king salmon at the Eklutna tailrace in support of a recreational fishery where the tailrace joins the Knik River. The project has developed a constituency among those who previously fished in that location for other species and those who have been attracted by the presence of the king salmon. ADF&G plans to continue the work.

#### 7.7.3.2 **ADF&G** Ship Creek King Salmon Stocking

ADF&G has been stocking king salmon in Ship Creek since 1994 in support of what has become a well-publicized recreational fishery and plans to continue the work.

#### 7.7.3.3 **ADF&G** Eklutna Tailrace Coho Salmon Stocking

CIAA began stocking coho salmon in the tailrace in 1985, and that project was taken over by ADF&G when CIAA suspended operations at the Hatchery in 1998. ADF&G plans to continue the project.

#### 7.7.3.4 **ADF&G** Ship Creek Coho Salmon Stocking

ADF&G has been stocking coho salmon in Ship Creek since 1987 in support of what has become a well-publicized recreational fishery and plans to continue the work.

#### 7.7.3.5 **CIAA** Big Lake Sockeye Salmon Stocking and Smolt / Adult Weir Operation

The Big Lake sockeye salmon stocking and the related operation of a smolt trap and an adult weir started by ADF&G and subsequently taken over by CIAA will continue.

#### 7.7.3.6 **CIAA** Maintenance of the Eklutna Salmon Hatchery as a Back-up / Satellite Facility

The Eklutna Hatchery suspended full operations in 1998. Its future was uncertain, and CIAA retained the facility as a hedge against future contingencies. As early as 2001 ADF&G used the tailrace as a site to collect coho salmon eggs, and in 2002 they began to pond and release king salmon at the site. They have undertaken a substantial upgrade of the recreational area where the tailrace joins the Knik River and where the recreational fishery takes place. In 2005 and 2006 water shortages at Trail Lakes Hatchery caused CIAA to make use of the Eklutna Hatchery to complete the rearing of several lots of sockeye salmon and coho salmon.

The Eklutna Hatchery retains the ability to fully function as an incubation and rearing facility and to support both on-site and remote releases. With predictable source of operational revenue and a full project program it could make a significant contribution to the salmon resources of the region.

7.7.3.7 **CVTC** Moose Creek Fish Habitat and Population Restoration Project

As a continuation of this project (See section 7.6.2.6) a proposal is being considered to implement the population restoration portion of the project. The Chickaloon Village Traditional Council in conjunction with Alaska Resource and Economic Development, Inc. is examining speeding up the king salmon and coho salmon repopulation of Moose Creek through a short-term supplementing of salmon production. The techniques, timing and other details of this program are now being evaluated.

7.7.3.8 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

7.7.4 Proposed New Anadromous Salmon Projects

7.7.4.1 **NVE** Eklutna River Habitat Restoration

There is an effort underway by the Native Village of Eklutna to spearhead a cooperative effort to accomplish some habitat rehabilitation. If there is in fact an opportunity to bring the resources of several groups together to accomplish some rehabilitative goals in the Eklutna River and thereby restore some of its salmon productivity, the salmon resource base would benefit.

7.7.4.2 **MSB** Big Lake Habitat Investigation

It would be instructive to determine the cause or causes for the apparent inability of the sockeye salmon fry to thrive in the Big Lake drainage. ADF&G, CIAA and the Matanuska-Susitna Borough are each looking at a variety of elements that may be contributing to this current situation. The results of this effort could be helpful in recognizing and addressing similar situations in other locations.

7.7.4.3 **MSB** Construction and/or Improvement of Roads

Rapid new development in the Knik-Goose Bay and Big Lake areas will result in the public having greater access to area waters, particularly the Little Susitna River; and this will pose greater threats to the habitat and probably raise additional harvest management concerns.

7.7.4.4 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.



## CHAPTER 8.0

### TURNAGAIN ARM UNIT ANALYSIS

#### 8.1 OVERVIEW

The Turnagain Arm drainage is an area of contrasts. On one side of the mouth of the Arm is the most populous city in the state, and on the other side – twelve miles away - is the Lowland Wilderness Unit of the Kenai National Wildlife Refuge. On one side is a highway, while on the other there is essentially no road. In some areas there has been considerable salmon enhancement, in others none at all.

The majority of the land in this unit falls within the boundaries of one of the following three entities, the Chugach State Park, the Chugach National Forest and the Kenai National Wildlife Refuge; therefore, fisheries issues such as access and habitat degradation frequently associated with private land holdings are not a major concern in this unit. The exception would be within the Municipality of Anchorage in the far northwestern corner of the unit.

The road system follows the northern shore of the Turnagain Arm and in so doing makes the mouths of virtually every stream on that side of the Arm readily accessible. With the exception of the relatively small segment of shoreline between the mouth of Sixmile Creek and the mouth of Resurrection Creek the southern shore of the Turnagain Arm is devoid of roads and, therefore, quite inaccessible.

There is no commercial or subsistence fishery in the Turnagain Arm. Recreational fishing pressure is focused on Campbell Creek, Bird Creek, Twentymile River, Ingram Creek, Sixmile Creek and Resurrection Creek.

#### 8.2 RELEVANT LAND USE POLICIES

Because so much of the watershed of the Turnagain Arm is held in the jurisdictions of three governmental units, it is important to identify what affect the policies of those agencies or bodies may have on fish production and fishery operation.

##### 8.2.1 State of Alaska, Department of Natural Resources, Division of Parks

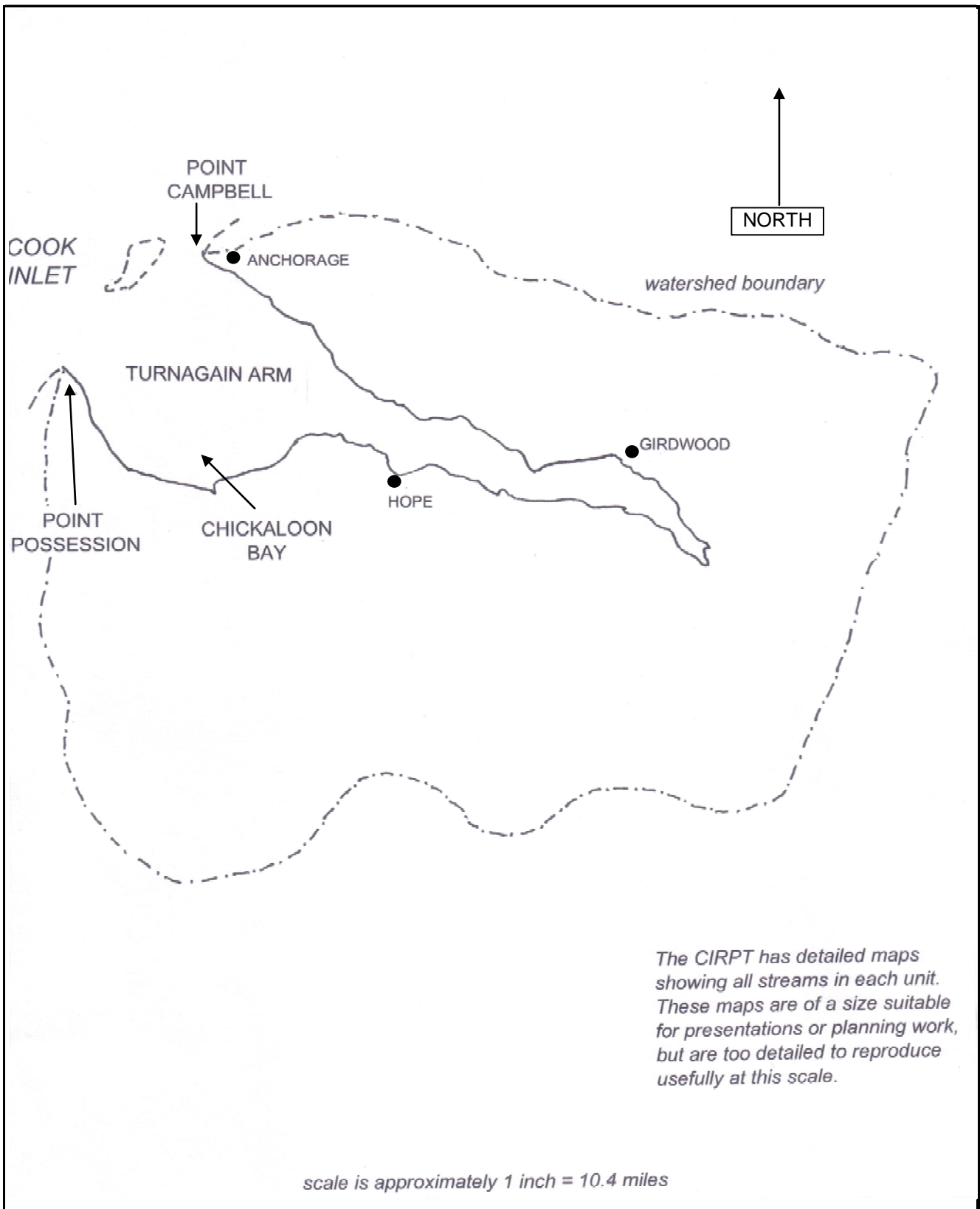
The Department of Natural Resources (ADNR) is an arm of State government, and the State's role in fisheries maintenance and enhancement is handled by the Department of Fish and Game (ADF&G). Although ADNR oversees a major landholding in the Turnagain Arm drainage - the Chugach State Park, it has no active program for fisheries maintenance or enhancement on these lands. ADNR assumes a relatively passive role and would await a site-specific proposal by ADF&G and then review it for its associated impacts such as access, parking, litter control, etc.

##### 8.2.2 United States Forest Service

A large portion of Turnagain Arm is bounded by the Kenai Peninsula portion of the Chugach National Forest. These lands are managed for a variety of uses including recreational and commercial fisheries. The 2002 Revised Land and Resource Management Plan directs the

**EXHIBIT 8-1**

**TURNAGAIN ARM UNIT MAP**



*The CIRPT has detailed maps showing all streams in each unit. These maps are of a size suitable for presentations or planning work, but are too detailed to reproduce usefully at this scale.*

*scale is approximately 1 inch = 10.4 miles*

the U.S. Forest Service to provide for the sustainability of fish resources. Furthermore, the Plan emphasizes recovery of impacted fish populations and improvement of fish habitat values for commercial, subsistence, or sport fish opportunities.

### 8.2.3 United States Fish and Wildlife Service

The policies of the U.S. Fish and Wildlife Service come into play because a number of streams on the south side of the Turnagain Arm including the largest tributary system of the Arm, the Chickaloon River, originate on and run through the lands of the Kenai National Wildlife Refuge. More specifically Bedlam Creek and the waters west of it and the middle portion of the Chickaloon River fall within the Lowland Wilderness Unit. The upper portions of the Chickaloon River system (the Thurman Creek area) and the headwaters of Mystery Creek (the Dike Creek area) fall within the Mystery Creek Wilderness Unit. The remainder of the waters from Pincher Creek east to and including Johnson Creek are in an area designated for "minimal management", which is just slightly less restrictive than the "wilderness" designation.

The policy set forth in Comprehensive Conservation Plan for the Kenai National Wildlife Refuge states that in minimal management and wilderness areas fish egg takes would be allowed "in the field for hatchery use in developing population for use in re-establishing historic populations and population levels." Subsequent discussions with USFWS staff have led to belief this statement means that with genetic approval from ADF&G and appropriate consultation with USFWS those eggs would be available for "out stocking" in systems outside the Refuge. With respect to on-site fisheries enhancement work the same document states that "actions taken to increase fisheries stocks above historic levels" including "lake fertilization, stocking, building hatcheries and fish passages, and artificially incubating fish in streams" will not be permitted.

However, a 1987 memorandum which has as a subject "Clarification of Region 7 Fisheries Management Policies for Refuge Comprehensive Conservation Plans (CCP's)" makes the following points.

- \* On all refuge lands in Alaska (including designated wilderness) maintaining, rehabilitating, and enhancing existing fish populations is permitted, where compatible with the purpose of the refuge.
- \* In general, restoration activities will be looked upon more favorably than enhancement activities on refuges in Alaska.
- \* Long-term (i.e., permanent) facilities may be permitted outside designated wilderness areas for maintenance, restoration and enhancement activities.
- \* In designated wilderness areas, temporary facilities may be permitted to maintain, restore or enhance fisheries if the stocks have been reduced or are threatened as long as the facilities do not significantly detract from wilderness values.
- \* New permanent facilities will not be permitted in designated wilderness for fisheries management purposes unless they are essential to accomplish refuge objectives.
- \* Existing facilities may remain and new facilities may be built for fisheries research and monitoring on all refuge lands in Alaska.

\* In making compatibility determinations in designated wilderness areas the Service will consider wilderness values.

The following definitions meet the Service's needs within the CCP's and may be compared to the definitions being used by the CIRPT as described in Chapter 3.0 of this document:

\* Enhancement - Procedures applied to a fish stock to supplement numbers of harvestable fish to a level beyond what could be naturally produced based upon a determination or reasonable estimate of historic levels. This could be accomplished by artificial production systems. It can also be an increase of the amount of productive habitat in the natural environment through physical or chemical change.

\* Restoration - Increasing fishery resources to allow full utilization of available habitat or to a population objective based on a determination or reasonable estimate of historic levels. While the goal of restoration is self sustaining populations, situations will exist where the impact (e.g., habitat degradation) is such that some form of fishery management or mitigation activity could continue indefinitely."

Recent input from the U.S. Fish and Wildlife Service indicates that all activities are now subject to consistency reviews and any proposed fisheries work in wilderness areas would be reviewed on a case-by-case basis and considered only under exceptional circumstances.

#### 8.2.4 Municipality of Anchorage

The Municipality of Anchorage has jurisdiction over selected portions of land along the northern shore of the Turnagain Arm; however, the Municipality is not known to have any policies which specifically encourage or discourage appropriate salmon enhancement work.

#### 8.2.5 Kenai Peninsula Borough:

Virtually all of the land on the southern side of Turnagain Arm within the boundaries of the Kenai Peninsula Borough is within the Chugach National Forest and the Kenai National Wildlife Refuge. There are small parcels near the mouths of Resurrection Creek and Sixmile Creek that are owned by the Borough, city or private individuals.

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation. In addition it makes consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program.

### 8.3 ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT

The tables that constitute EXHIBITS 8-2A through 8-2E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G's historical escapement counts.

**KEY FOR EXHIBITS 8A THROUGH 8E**

In the following exhibits there are numbers of fish cited under two headings, “*Highest Number of Fish Reported for the System*” (column 3) and “*Most Recent Number of Fish Reported for the System*” (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 8-2A		TURNAGAIN ARM UNIT KING SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Campbell C.	247-60-10340	349 TCU 1977	0 RH 2003					
Unnamed Tributary	247-60-10340-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
South Campbell C.	247-60-10340-2020	UNKNOWN	UNKNOWN					
North Campbell C.	247-60-10340-2021	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10340-2021-3021	UNKNOWN	UNKNOWN					
Rabbit C.	247-60-10320	UNKNOWN	< 500					
Little Rabbit C.	247-60-10318	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10316	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10316-2011	UNKNOWN	UNKNOWN					
Potter C.	247-60-10310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
McHugh C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Indian C.	247-60-10290	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Bird C.	247-60-10280	13 RH 2003	13 RH 2003					
Penguin C.	247-60-10280-2008	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10253	UNKNOWN	UNKNOWN					
Glacier C.	247-60-10250	4 TCU 1978	0 RH 2003					
Unnamed Tributary	247-60-10316-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2003-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
California C.	247-60-10316-2007	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10316-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2018-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10248	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Peterson C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 8-2A		TURNAGAIN ARM UNIT KING SALMON						
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
						MAY	JUNE	JULY
Unnamed Tributary			247-60-10240	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Twenty-mile R.			247-60-10230	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary			247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2009-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Glacier R.			247-60-10230-2028	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
South Fork Glacier R.			247-60-10230-2028-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2050-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Portage C.			247-60-10220	350 MC 1950	350 MC 1950	TIMING UNKNOWN		
Unnamed Tributary			247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2021-3006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2021-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2027	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2027-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2027-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Placer C.			247-60-10230-2035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10230-2035-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10210	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10210-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary			247-60-10210-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Skookum C.			247-60-10210-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				

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**EXHIBIT 8-2A** [ continued from preceding page ] **TURNAGAIN ARM UNIT KING SALMON**

Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
				MAY	JUNE	JULY	AUG. SEPT.
Placer R.	247-60-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-60-10200-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Ingram C.	247-60-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-60-10190-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Seattle C.	247-60-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Sixmile C.	247-60-10170	30 TCU 1986	0 RH 2003				
Canyon C.	247-60-10170-2030	UNKNOWN	UNKNOWN				
Silvertip C.	247-60-10170-2036	UNKNOWN	UNKNOWN				
Granite C.	247-60-10170-2041	UNKNOWN	UNKNOWN				
Center C.	247-60-10170-2044	UNKNOWN	UNKNOWN				
Bench C.	247-60-10170-2044-3008	UNKNOWN	UNKNOWN				
Bear C.	247-60-10160	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-60-10160-2008	UNKNOWN	UNKNOWN				
Resurrection C.	247-60-10150	UNKNOWN	UNKNOWN				
Palmer C.	247-60-10150-2025	UNKNOWN	UNKNOWN				
Porcupine C.	247-60-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Little Indian C.	247-60-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Big Indian C.	247-60-10120	UNKNOWN	UNKNOWN				
Chickaloon C.	247-60-10110	4,000	4,000				
Unnamed Tributary	247-60-10110-2011	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-60-10110-2063	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Mystery C.	247-60-10110-2080	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-60-10110-2080-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-60-10110-2080-3019	UNKNOWN	UNKNOWN				
Thurman C.	247-60-10110-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-60-10110-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Pincher C.	247-60-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	247-60-10100-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					



**EXHIBIT 8-2B** **TURNAGAIN ARM UNIT SOCKEYE SALMON**

Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Campbell C.	247-60-10340	< 100	0 RH 2003					
Unnamed Tributary	247-60-10340-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
South Campbell C.	247-60-10340-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
North Campbell C.	247-60-10340-2021	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10340-2021-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Rabbit C.	247-60-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Little Rabbit C.	247-60-10318	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Potter C.	247-60-10310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
McHugh C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Indian C.	247-60-10290	< 100	< 100					TIMING UNKNOWN
Bird C.	247-60-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10280-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10253	12 RH 2003	12 RH 2003					TIMING UNKNOWN
Glacier C.	247-60-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2003-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
California C.	247-60-10316-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2018-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10248	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Peterson C.	no AWC number	36 RH 2003	36 RH 2003					TIMING UNKNOWN

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EXHIBIT 8-2B [ continued from preceding page ]									
TURNAGAIN ARM UNIT SOCKEYE SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-60-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Twentymile R.	247-60-10230	603 TCU 1978	603 TCU 1978						
Unnamed Tributary	247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2009-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2022	UNKNOWN	UNKNOWN						
Glacier R.	247-60-10230-2028	UNKNOWN	UNKNOWN						
South Fork Glacier R.	247-60-10230-2028-3018	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2033	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2050-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Portage C.	247-60-10220	650 MC 1952	650 MC 1952						
Unnamed Tributary	247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2021	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2021-3006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2021-3010	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2027	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2027-3010	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2027-3014	UNKNOWN	UNKNOWN						
Placer C.	247-60-10230-2035	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10230-2035-3009	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10210	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10210-2015	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10210-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Skookum C.	247-60-10210-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 8-2B [ continued from preceding page ]									
TURNAGAIN ARM UNIT SOCKEYE SALMON									
USGS Name [ locally used name ]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
Placer R.		247-60-10200	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10200-2045	UNKNOWN	UNKNOWN					
Ingram C.		247-60-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-60-10190-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Seattle C.		247-60-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Sixmile C.		247-60-10170	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Canyon C.	247-60-10170-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Silvertip C.	247-60-10170-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Granite C.	247-60-10170-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Center C.	247-60-10170-2044	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Bench C.	247-60-10170-2044-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bear C.		247-60-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-60-10160-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Resurrection C.		247-60-10150	43 RH 2003	43 RH 2003	TIMING UNKNOWN				
	Palmer C.	247-60-10150-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Porcupine C.		247-60-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Little Indian C.		247-60-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Big Indian C.		247-60-10120	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Chickaloon C.		247-60-10110	20,000 MC 1947	6,500					
	Unnamed Tributary	247-60-10110-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-60-10110-2063	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Mystery C.	247-60-10110-2080	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10110-2080-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-60-10110-2080-3019	UNKNOWN	UNKNOWN					
	Thurman C.	247-60-10110-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-60-10110-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Pincher C.		247-60-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	247-60-10100-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

TURNAGAIN ARM UNIT COHO SALMON									
USGS Name [ locally used name ]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
Campbell C.		247-60-10340	1,457 RH 2003	1,457 RH 2003					
	Unnamed Tributary	247-60-10340-2018	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10340-2018-3005	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10340-2018-3005-4011	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10340-2018-3010	UNKNOWN	UNKNOWN					
	South Campbell C.	247-60-10340-2020	UNKNOWN	UNKNOWN					
	North Campbell C.	247-60-10340-2021	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10340-2021-3021	UNKNOWN	UNKNOWN					
Rabbit C.		247-60-10320	100 EHO no date	< 500					
Little Rabbit C.		247-60-10318	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-60-10316	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-60-10316-2011	UNKNOWN	UNKNOWN					
Potter C.		247-60-10310	< 500	< 500					
McHugh C.		no AWC number	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Indian C.		247-60-10290	UNKNOWN	UNKNOWN					
Bird C.		247-60-10280	776 RH 2003	776 RH 2003					
	Penguin C.	247-60-10280-2008	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary		247-60-10253	UNKNOWN	UNKNOWN					
Glacier C.		247-60-10250	543 RH 2003	543 RH 2003					
	Unnamed Tributary	247-60-10316-2003	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10316-2003-3005	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10316-2004	UNKNOWN	UNKNOWN					
	California C.	247-60-10316-2007	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10316-2018	UNKNOWN	UNKNOWN					
	Unnamed Tributary	247-60-10316-2018-3007	UNKNOWN	UNKNOWN					
Unnamed Tributary		247-60-10248	UNKNOWN	UNKNOWN					TIMING UNKNOWN
Peterson C.		no AWC number	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						

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EXHIBIT 8-2C [ continued from preceding page ]									
TURNAGAIN ARM UNIT COHO SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	247-60-10240	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Twentymile R.	247-60-10230	2,116 RH 2003	2,116 RH 2003						
Unnamed Tributary	247-60-10230-2009	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2009-3007	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2022	UNKNOW	UNKNOW						
Glacier R.	247-60-10230-2028	UNKNOW	UNKNOW						
South Fork Glacier R.	247-60-10230-2028-3018	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2033	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2050	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2050-3003	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2056	UNKNOW	UNKNOW						
Portage C.	247-60-10220	200 HEO no date	200 HEO no date						
Unnamed Tributary	247-60-10230-2009	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2015	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2016	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2021	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2021-3006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-60-10230-2021-3010	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2027	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2027-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-60-10230-2027-3014	UNKNOW	UNKNOW						
Placer C.	247-60-10230-2035	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10230-2035-3009	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10210	UNKNOW	UNKNOW						
Unnamed Tributary	247-60-10210-2015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	247-60-10210-2019	UNKNOW	UNKNOW						
Skookum C.	247-60-10210-2025	UNKNOW	UNKNOW						

[ continued on following page ]

TURNAGAIN ARM UNIT COHO SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Placer R.	247-60-10200	200	200						
Unnamed Tributary	247-60-10200-2045	UNKNOWN	UNKNOWN						
Ingram C.	247-60-10190	< 1,000	< 1,000						TIMING UNKNOWN
ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Seattle C.	247-60-10180	present 1976	UNKNOWN						TIMING UNKNOWN
Sixmile C.	247-60-10170	1,025 SH 2003	1,025 SH 2003						
Canyon C.	247-60-10170-2030	UNKNOWN	UNKNOWN						
Silvertip C.	247-60-10170-2036	UNKNOWN	UNKNOWN						
Granite C.	247-60-10170-2041	UNKNOWN	UNKNOWN						
Center C.	247-60-10170-2044	UNKNOWN	UNKNOWN						
Bench C.	247-60-10170-2044-3008	UNKNOWN	UNKNOWN						
Bear C.	247-60-10160	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	247-60-10160-2008	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Resurrection C.	247-60-10150	114 RH 2003	114 RH 2003						TIMING UNKNOWN
Palmer C.	247-60-10150-2025	UNKNOWN	UNKNOWN						TIMING UNKNOWN
ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Porcupine C.	247-60-10140								
Little Indian C.	247-60-10130	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Big Indian C.	247-60-10120	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Chickaloon C.	247-60-10110	6,500	6,500						
ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-60-10110-2011	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10110-2063	UNKNOWN	UNKNOWN						
Mystery C.	247-60-10110-2080	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10110-2080-3010	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10110-2080-3019	UNKNOWN	UNKNOWN						
Thurman C.	247-60-10110-2120	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-60-10110-2141	UNKNOWN	UNKNOWN						
Pincher C.	247-60-10100	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	247-60-10100-2016	UNKNOWN	UNKNOWN						TIMING UNKNOWN

**EXHIBIT 8-2D** **TURNAGAIN ARM UNIT PINK SALMON**

Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Campbell C.	247-60-10340	5,000 EHO no date	61 RH 2003					
Unnamed Tributary	247-60-10340-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
South Campbell C.	247-60-10340-2020	UNKNOWN	UNKNOWN					
North Campbell C.	247-60-10340-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2021-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Rabbit C.	247-60-10320	500 EHO no date	< 500					
Little Rabbit C.	247-60-10318	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10316	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Potter C.	247-60-10310	UNKNOWN	UNKNOWN					
McHugh C.	no AWC number	PRESENT ?	UNKNOWN	TIMING UNKNOWN				
Indian C.	247-60-10290	238 MC 1968	238 MC 1968					
Bird C.	247-60-10280	6,000 MC 1964	1,033 RH 2003					
Penguin C.	247-60-10280-2008	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10253	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Glacier C.	247-60-10250	919 TCU 1978	29 RH 2003					
Unnamed Tributary	247-60-10316-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2003-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
California C.	247-60-10316-2007	UNKNOWN	UNKNOWN					
Unnamed Tributary	247-60-10316-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2018-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10248	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Peterson C.	no AWC number	PRESENT ?	UNKNOWN	TIMING UNKNOWN				

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Stream USGS Name [locally used name]		Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
					MAY	JUNE	JULY	AUG. SEPT.
Turnagain Arm Unit Pink Salmon								
Unnamed Tributary	247-60-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Twentymile R.	247-60-10230	43 RH 1980	0 RH 2003	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2009-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Glacier R.	247-60-10230-2028	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
South Fork Glacier R.	247-60-10230-2028-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2050-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Portage C.	247-60-10220	5,000	5,000	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2021	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2021-3006	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2021-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2027	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2027-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2027-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Placer C.	247-60-10230-2035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2035-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10210	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10210-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10210-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Skookum C.	247-60-10210-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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**EXHIBIT 8-2D** [ continued from preceding page ] **TURNAGAIN ARM UNIT PINK SALMON**

Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
				MAY	JUNE	JULY	AUG. SEPT.
Placer R.	247-60-10200	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-60-10200-2045	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Ingram C.	247-60-10190	489 TCU 1976	489 TCU 1976				
Unnamed Tributary	247-60-10190-2005	UNKNOWN	UNKNOWN				
Seattle C.	247-60-10180	600 TCU 1976	< 1,000				
Sixmile C.	247-60-10170	1,200 TCU 1,978	48 SH 2003				
Canyon C.	247-60-10170-2030	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Silvertip C.	247-60-10170-2036	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Granite C.	247-60-10170-2041	UNKNOWN	UNKNOWN				
Center C.	247-60-10170-2044	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Bench C.	247-60-10170-2044-3008	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Bear C.	247-60-10160	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-60-10160-2008	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Resurrection C.	247-60-10150	80,000 MC 1960	2,362 RH 2003				
Palmer C.	247-60-10150-2025	UNKNOWN	UNKNOWN				
Porcupine C.	247-60-10140	UNKNOWN	UNKNOWN				
Little Indian C.	247-60-10130	UNKNOWN	UNKNOWN				
Big Indian C.	247-60-10120	UNKNOWN	UNKNOWN				
Chickaloon C.	247-60-10110	75,000 MC 1960	75,000 MC 1960				
Unnamed Tributary	247-60-10110-2011	UNKNOWN	UNKNOWN				
Unnamed Tributary	247-60-10110-2063	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Mystery C.	247-60-10110-2080	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-60-10110-2080-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-60-10110-2080-3019	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Thurnan C.	247-60-10110-2120	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-60-10110-2141	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Pincher C.	247-60-10100	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	247-60-10100-2016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					

TURNAGAIN ARM UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Campbell C.	247-60-10340		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3005-4011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2018-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
South Campbell C.	247-60-10340-2020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
North Campbell C.	247-60-10340-2021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10340-2021-3021		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Rabbit C.	247-60-10320	UNKNOWN	UNKNOWN						
Little Rabbit C.	247-60-10318		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Potter C.	247-60-10310		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
McHugh C.	no AWC number		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Indian C.	247-60-10290		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bird C.	247-60-10280	155 RH 2003	155 RH 2003						
Penguin C.	247-60-10280-2008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10253		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Glacier C.	247-60-10250	28 RH 2003	28 RH 2003						
Unnamed Tributary	247-60-10316-2003		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2003-3005		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2004		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
California C.	247-60-10316-2007		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2018		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10316-2018-3007		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10248	UNKNOWN	UNKNOWN						
Peterson C.	no AWC number		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 8-2E		TURNAGAIN ARM UNIT CHUM SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	247-60-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Twentymile R.	247-60-10230	43 RH 1980	25 RH 2003	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2009-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Glacier R.	247-60-10230-2028	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
South Fork Glacier R.	247-60-10230-2028-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2050-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Portage C.	247-60-10220	5,000	5,000	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2021	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2021-3006	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2021-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2027	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2027-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10230-2027-3014	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Placer C.	247-60-10230-2035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10230-2035-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-60-10210	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10210-2015	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
Unnamed Tributary	247-60-10210-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Skookum C.	247-60-10210-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

[ continued on following page ]

EXHIBIT 8-2E		[ continued from preceding page ]					TURNAGAIN ARM UNIT CHUM SALMON			
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Placer R.	247-60-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10200-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Ingram C.	247-60-10190	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-60-10190-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Seattle C.	247-60-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Sixmile C.	247-60-10170	54 RH 2003	54 RH 2003							
Canyon C.	247-60-10170-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Silvertip C.	247-60-10170-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Granite C.	247-60-10170-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Center C.	247-60-10170-2044	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bench C.	247-60-10170-2044-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bear C.	247-60-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10160-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Resurrection C.	247-60-10150	65 RH 2003	65 RH 2003	TIMING UNKNOWN						
Palmer C.	247-60-10150-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Porcupine C.	247-60-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Little Indian C.	247-60-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Big Indian C.	247-60-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Chickaloon C.	247-60-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10110-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10110-2063	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Mystery C.	247-60-10110-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10110-2080-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10110-2080-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Thurman C.	247-60-10110-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10110-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Pincher C.	247-60-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	247-60-10100-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

**8.4 SIGNIFICANT STOCKS**

Based on the available data, the following stocks are known to fit the size criterion for local significance as discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0 of this document. The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

EXHIBIT 8-3		SIGNIFICANT STOCKS				
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM
Campbell Creek	247-60-10340			significant	significant	
Bird Creek	247-60-10280			significant	significant	
Twentymile River	247-60-10230			significant		
Portage Creek	247-60-10220				significant	significant
Sixmile Creek	247-60-10170			significant		
Resurrection Creek	247-60-10150				significant	
Chickaloon River	247-60-10110	significant	significant	significant	significant	

Non-italics = stream name appearing on USGS maps    *Italics = Unnamed on USGS map but identified by its locally-used name*

AWC = Anadromous Waters Catalog

significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.
significant	Historic count meets minimum size criteria, but the most recent count does not.

	Minimum significant stock size criteria:	Generalized period for two life cycles:
King Salmon	400 fish	12 years
Sockeye Salmon	2,000 fish	10 years
Coho Salmon	800 fish	8 years
Pink Salmon	5,000 fish	4 years
Chum Salmon	800 fish	8 years

**8.5 WILD STOCK SANCTUARIES / STOCK RESERVES**

A review of the various stocks of salmon found in the Turnagain Arm Unit leads the CIRPT to make the following determinations with respect to the designation of "wild stock sanctuaries / stock reserves" in the Turnagain Arm system. This concept is described and recommended for adoption in the ADF&G *Genetics Policy* where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0, section 3.3.3.5 of this document as it is applied in Cook Inlet.

8.5.1 King Salmon

Stock identified: Chickaloon River early run stock  
[AWC 247-6-10110]

Rationale: It has no record of king salmon rehabilitation or enhancement. There are a sufficient number of these fish to serve as a broodstock source. The protection afforded their habitat through Kenai National Wildlife Refuge suggests there will be a perpetuation of the stock.

8.5.2 Sockeye Salmon

Stock identified: Chickaloon River early run stock  
[AWC 247-6-10110]

Rationale: It has no record of sockeye salmon rehabilitation or enhancement. There are a sufficient number of these fish to serve as a broodstock source. The protection afforded their habitat through Kenai National Wildlife Refuge suggests there will be a perpetuation of the stock.

8.5.3 Coho Salmon

Stock identified: Chickaloon River early run stock  
[AWC 247-6-10110]

Rationale: It has no record of coho salmon rehabilitation or enhancement. There are a sufficient number of these fish to serve as a broodstock source. The protection afforded their habitat through Kenai National Wildlife Refuge suggests there will be a perpetuation of the stock.

8.5.4 Pink Salmon

Stock identified: Chickaloon River stock  
[AWC 247-6-10110]

Rationale: It has no record of pink salmon rehabilitation or enhancement. There are a sufficient number of these fish to serve as a broodstock source. The protection afforded their habitat through Kenai National Wildlife Refuge suggests there will be a perpetuation of the stock.

8.5.5 Chum Salmon

Stock identified: None

Rationale: After reviewing the information about chum salmon in the Turnagain Arm system, the CIRPT determined there was no recognized significant chum salmon "stock" which could be designated as a "wild stock sanctuary / stock reserve".

**8.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

8.6.1 Projects Identified in the Phase I Plan 1981 – 2000

8.6.1.1 Upper Cook Inlet Run Modeling

This project was described in the Phase I Plan 1981 – 2000 in the following way.

*“There are serious time constraints on the data acquisition / management decision process which is central to the effective management of the Upper Cook Inlet fisheries. The continued development and refinement of a computer simulation model for the Upper Cook Inlet salmon stocks would be of marked assistance in data compilation and analysis.*

*“The types of data to be processed include catch, escapement, off-shore test fishing results, and in-district test fishing results. A management system has been developed to make possible in-season data analysis. The simulation techniques will allow the managers to evaluate variations in run timing, stock abundance, and harvest management tactics so that there can be appropriate applications of fishing times and area schedules.”*

Subsequent Developments:

ADF&G has continued to examine and refine its run modeling process. The use of the off-shore test fishery and the sonar derived escapement counts continue to be the main components of this ongoing, in-season program.

8.6.1.2 Sixmile Creek King Salmon and Coho Salmon Study

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“During 1980 and 1981 the U.S. Forest Service undertook a project to determine the run size and behavior of adult king and coho salmon returning to Sixmile Creek. The Alaska Field Station of the National Fisheries Research Center assisted with this study in 1980. A velocity barrier in the Creek had already been identified as an impediment to at least some of the adult salmon. The three major points of this project were: (1) to determine the size of the king and coho salmon runs to the Creek, (2) to determine how many salmon are able to negotiate the velocity barrier and (3) to determine portions of the upstream habitat which they use for spawning. The observation of adult salmon above the velocity barrier indicated that significant numbers of fish make it through the barrier and make use of the upstream habitat.”*

Subsequent Developments:

The U.S. Forest Service work included radio tagging, juvenile studies and habitat evaluations. There were several conclusions. There are two barriers to upstream migration, a complete barrier on Canyon Creek and a velocity barrier on the East Fork of Sixmile Creek. The “most promising opportunities” were on Granite Creek. There was a need for a value to improving existing habitat and creating additional rearing habitat. There was also a recommendation to stock the system in attempt to develop a recreational fishery. (see sections 8.6.1.3. and 8.6.2.3.)

8.6.1.3 Sixmile Creek King Run Development

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status described in*

*Chapter 5 and attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

King salmon from Crooked Creek broodstock were stocked into the system in 1984 through 1988 at locations variously described as Sixmile Creek, Upper Summit Lake, Bench Creek, Summit Lake and Granite Creek. A total of 1,142,000 fish were stocked in this five-year period for an annual average of 228,000.

8.6.1.4 Portage Ponds Development

This project was described in the *Phase I Plan 1981 – 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status described in Chapter 5 and attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The Portage Valley has experienced considerable disruption in the form of such developments as the railroad, the road, various pullouts and gravel extraction. The meandering and sometimes braided Portage Creek system with its associated ponds is juxtaposed with unconnected ponds resulting from a combination of gravel extraction and a relatively high water table. Over the years the U.S. Forest Service in cooperation with state agencies and private organizations has implemented individual projects in an attempt to make this a more integrated and productive system with particular emphasis given to favorable and accessible anadromous salmon habitat.

The Williwaw spawning channel and rearing pond project was initiated in the early 1980's. There was some assessment of existing salmon production through smolt enumeration as early as 1981. The actual construction was accomplished in 1984 and 1985, and an extensive site revegetation was carried out between 1987 and 1989. Approximately 23,000 coho salmon were stocked into the project site in 1988.

In the late 1980's another project involving the construction of a spawning channel connecting existing ponds and/or rearing ponds was examined.

8.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 – 2000*

Several projects were identified and implemented after the publication of the *Phase I Plan 1981 – 2000*, and they focused primarily on king, coho and pink salmon production in various parts of the Turnagain Arm drainage.

8.6.2.1 Campbell Creek Coho Salmon Stocking

ADF&G has noted that as the population of the greater Anchorage area grew so did the pressure for more recreational fishing opportunities. A coho salmon stocking



program started in 1992 to attempt to meet this increasing pressure, and Campbell Creek was one of the stream systems involved in this program.

#### 8.6.2.2 Bird Creek Coho Salmon Stocking

ADF&G has noted that as the population of the greater Anchorage area grew so did the pressure for more recreational fishing opportunities. A coho salmon stocking program started in 1992 to attempt to meet this increasing pressure, and Bird Creek was one of the stream systems involved in this program.

#### 8.6.2.3 Sixmile Creek Coho Salmon Stocking

Coho salmon from Crooked Creek broodstock were stocked into the Sixmile Creek system in 1984 and 1986 through 1988 at locations variously described as East Fork of Sixmile Creek, Lower Summit Lake, Silvertip Creek, Summit Lake, Lyon Creek and Granite Creek. A total of 564,000 fish were stocked in this four-year period for an annual average of 141,000.

In addition a rearing pond complex was constructed near the confluence of Lyon Creek and Granite Creek in 1986 and revegetated in 1987. The complex was stocked with coho salmon in 1987 and 1988.

#### 8.6.2.4 Resurrection Creek Habitat Rehabilitation

A very large habitat restoration project was undertaken on Resurrection Creek under the general coordination of the U.S. Forest Service. Federal and state agencies, private foundations and corporations and interested private non-profit organizations contributed to the overall project in various ways.

Resurrection Creek was the site of habitat alteration associated with various forms of mining for a century following the gold strike in Resurrection Valley in 1893. During this period there was substantial disruption of the floodplain and detachment of segments of the creek from the balance of the drainage. The end result was a potential project site that included 2.25 miles of main stem and side stream channel and 52 acres of floodplain.

After completion of the overall planning and permitting, work began on this project in May 2005. In broad terms the project involved recreating meandering stream channel including the installation of log-jam habitat and regarding disrupted floodplain. Following the reconfiguration of the land an extensive revegetation will be completed.

The overall intent is to restore the habitat value of this stream and floodplain and allow the Resurrection Creek to regain its salmon production capacity. All five species of anadromous Pacific salmon are reported in the project area.

#### 8.6.2.5 Ingram Creek Stocking

In 1985 the U.S. Forest Service excavated a shallow channel between a 78 acre pond and the mouth of Ingram Creek to facilitate fish movement between the stream and the rearing area. ADF&G stocked both pink salmon and coho salmon in Ingram Creek between 1985 and 1990.

Coho salmon Crooked Creek broodstock were stocked in 1985, 1986, 1987, 1988 and 1990. A total of 482,000 fish were stocked in five years or an average of about 96,000 each of the four years.

Pink salmon from Tutka Lagoon broodstock were stocked in 1987 through 1990. A total of 1,148,000 fish were stocked in four years or an average of about 287,000 each of the four years.

## **8.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING**

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

### **8.7.1 Anadromous Salmon Habitat Issues**

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

#### **8.7.1.1 Impacts of Seward Highway Construction**

The Seward Highway crosses many streams, and the substantial nature of the work being done to upgrade that highway presents the opportunity for both positive and negative impacts to anadromous salmon. A potential causeway from Kern Creek to Turnagain Pass is simply one example of such work.

### **8.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation**

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of one specific anadromous salmon run and two more generalized run patterns in this unit for which there is insufficient data to make informed decisions.

#### **8.7.2.1 Twentymile River Coho Salmon [AWC 247-60-10230]**

Twentymile River coho salmon have recently been failing to produce at a level that had come to be expected. The reasons are not yet clearly identified, and the potential loss is significant enough to warrant examination.

### **8.7.3 Continuation of Existing Anadromous Salmon Projects**

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

8.7.3.1 **ADF&G** Aerial Stream Surveys

The Department will continue to seasonally conduct aerial surveys of streams in this unit to assess the magnitude of escapements and identify particular habitat issues.

8.7.3.2 **ADF&G** Campbell Creek Coho Salmon Stocking

ADF&G has been stocking coho salmon in Campbell Creek since 1992 in support of a recreational fishery and plans to continue the work.

8.7.3.3 **ADF&G** Bird Creek Coho Salmon Stocking

ADF&G has been stocking coho salmon in Bird Creek since 1992 in support of a recreational fishery and plans to continue the work.

8.7.3.4 **USFS** Resurrection Creek Habitat Restoration

The U.S. Forest Service with direct and indirect participation from other groups has been engaged in a large scale habitat restoration project in Resurrection Creek. The Creek had previously been the scene of extensive mining activity that caused rechanneling portions of the stream and isolating others. The stream has been returned to a more natural channel. Although the major elements of the first phases of this project are largely complete, there are plans to continue similar restoration work on additional reaches of the creek.

8.7.3.5 **USFS** Resurrection Creek Nutrient Enrichment

The U.S. Forest Service is conducting an administrative study to determine the effectiveness of using salmon carcasses and/or salmon analogues to boost ecosystem recovery in newly constructed restoration areas. In cooperation with the U.S. Fish and Wildlife Service Cooperative Unit at the University of Alaska Fairbanks the Forest Service is evaluating production at the primary, secondary and tertiary biotic levels.

8.7.3.6 **USFS** Granite Creek Habitat Restoration

There is a 60-acre gravel extraction pit at mile 62 of the Seward Highway. Flow from the area enters the East Fork of Granite Creek. This area is currently under construction with several fish rearing ponds in various stages of completion.

8.7.3.7 **USFS** Public Education – Invasive Fish Species

In cooperation with ADF&G and the U.S. Fish and Wildlife Service the U.S. Forest Service will post signs in FY 07 and 08 at popular fishing areas to educate the public on the effects of spreading invasive species. The goal is to make the public aware of the possible disastrous effects to commercial, sport and subsistence fisheries caused by illegal introductions of pike and perch.

8.7.3.8 **USFS** Public Outreach and Education

The U.S. Forest Service provides for annual in-school programs. The programs address the importance of healthy ecosystems for fish, the fish life cycle, the role of

carcasses and the nutrient cycle, basic hydrology and many other related issues. The program reaches over a thousand youth per year in the schools of the affected areas.

8.7.3.9 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

8.7.4 Proposed New Anadromous Salmon Projects

8.7.4.1 **ADF&G** Twentymile River Creel Survey

ADF&G plans to conduct a creel survey on the Twentymile River.

8.7.4.2 **USFS** Placer River Gravel Extraction and Habitat Restoration

The U.S. Forest Service is planning a very large gravel extraction project amounting to 10 – 15 million cubic yards of gravel over the next 10 – 20 years. The site is located in the upper Placer River drainage near Spencer Lake. Opportunities exist to coordinate with gravel extraction activities to build salmon spawning channels and ponds over the 600-acre project area. The project is planned to start in FY 08 – 09.

8.7.4.3 **USFS** Portage Creek Enhancement

Several enhancement projects are in the planning stages for the Portage Creek drainage. They involve channel redesign and construction in locations including the upper Railroad Ponds tributary, Williwaw Creek and Explorer Creek.

8.7.4.4 **USFS** Ingram Creek Enhancement

In cooperation with ADF&G this project would investigate use of a smolt stocking program to develop a terminal coho salmon fishery. The available habitat is not substantial enough to support a large recreational fishery.

8.7.4.5 **USFS** Public Education – Invasive Species

In cooperation with ADF&G and other agencies the U.S. Forest Service is in the process of publishing an invasive species plan to address the risks of invasive plants and animals to the aquatic and terrestrial environments.

8.7.4.6 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

## CHAPTER 9.0

### UPPER PENINSULA / KENAI RIVER UNIT ANALYSIS

#### 9.1 OVERVIEW

While this unit contains several smaller streams that enter Cook Inlet between Point Possession and the City of Kenai, the dominant feature of the unit is the Kenai River. In the regional context it is both the largest single contributor to the commercial harvest of salmon and the focus of the most publicized and used recreational salmon fishery.

There are four anadromous salmon stream systems in this unit that enter Cook Inlet to the north of the Kenai River; and they are Seven Egg Creek, Otter Creek, Swanson River and Bishop Creek. The largest and most productive of these is the Swanson River system. These systems flow out of the lowlands area that contains are relatively flat and contain hundreds of small lakes. This is also the area where gas and oil resources are extracted.

The Kenai River system is generally aligned in an east-west direction and is located about mid-way up Cook Inlet on the east side of the Inlet. From its mouth at the City of Kenai it stretches over 100 miles to the upper end of Kenai Lake and its tributary system.

The Kenai River system is subject to fairly extensive tidal influence in about the lower 13 miles of the River.

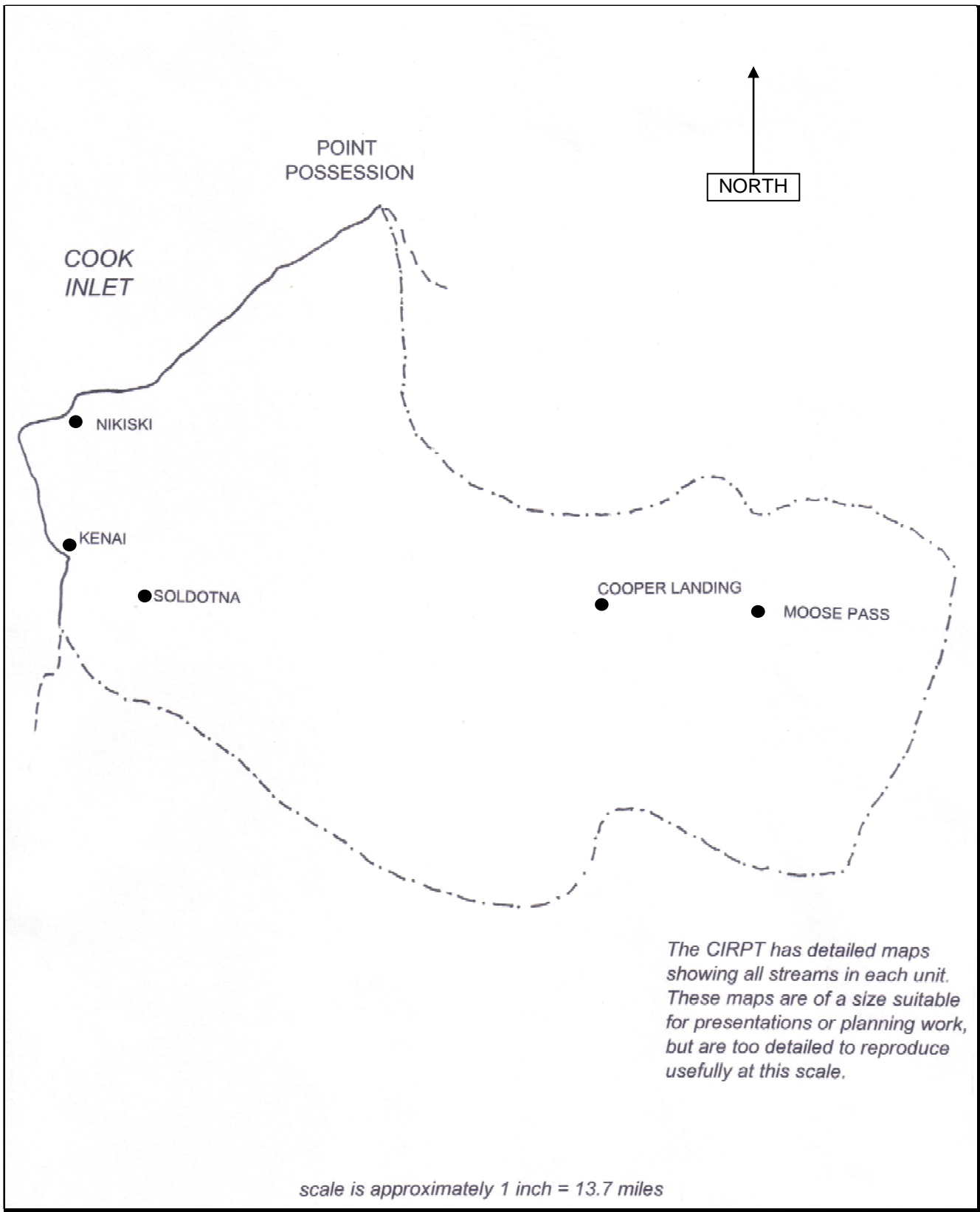
The Kenai River watershed is characterized by generally steep slopes (the Kenai Mountains) in the upper portion beginning at about river mile 62 at the inlet to Skilak Lake. Prevalent steep slopes place substantial restrictions on the ability of many of the tributaries to produce anadromous salmon and on the ability to site major areas on those tributaries for recreational harvest of anadromous salmon.

Another notable element affecting both the ability to conduct project work and the facility with which adult fish can be harvested is the presence of the Seward Highway and the Sterling Highway in the Kenai River watershed. The Seward Highway enters the watershed in the upper reaches of the Quartz Creek watershed where it parallels the Creek in close proximity. It then turns east and enters the Trail River watershed where it runs next to the water in the Trail River system, along the eastern shore of Kenai Lake; and it exits the watershed along the Snow River and its South Fork. The Sterling Highway runs westward from the Seward Highway at Tern Lake in the Quartz Creek watershed until it turns south, crosses Slikok Creek and exits the watershed. Throughout the watershed the Highway is in proximity to the River or connects to secondary roads which reach the River (see Exhibit 5).

Mining in tributaries, particularly in the upper reaches of the Kenai River watershed, will have significance in direct relation to the numbers of sites being worked and the scale of the work at any individual site.

At several points along the main stem of the River, there are substantial commercial/residential developments. This occurs most notably from the outlet of Skilak Lake to the mouth of the River and includes the city of Soldotna. The potential for habitat loss or damage is increased in this area.

**EXHIBIT 9-1                      UPPER PENINSULA / KENAI RIVER UNIT MAP**



*The CIRPT has detailed maps showing all streams in each unit. These maps are of a size suitable for presentations or planning work, but are too detailed to reproduce usefully at this scale.*

*scale is approximately 1 inch = 13.7 miles*

The Trail Lakes Hatchery is located in the Kenai River system on the southwest shore of Upper Trail Lake adjacent to the Seward Highway.

The vast majority of the land in the Kenai River watershed is held by several public bodies or agencies. This makes land use decisions and sanction for enhancement projects matters of public policy at the local, borough, state or federal level.

The Kenai River main stem and its immediate vicinity are periodically inundated due to flooding caused by the "breakout" of a glacially dammed lake in the upper reaches of the Snow River at the upper end of the Kenai River watershed. This uncontrollable element will have to be considered for its potential to alter habitat and its potential impact on any proposed project.

The Kenai River is one of only four in the Cook Inlet drainage which has the benefit of in-season sonar to enumerate sockeye salmon escapement into the system. Additionally there is sonar to enumerate king salmon escapement. This provides a level of information precision which can be considered in enhancement planning.

The recreational fishing effort on the Kenai River is supplemented by an extensive and very active guiding corps. This segment of the recreational effort is significantly more efficient than individual anglers, and guides promote participation in this fishery.

## 9.2 RELEVANT LAND USE POLICIES

### 9.2.1 United States Fish and Wildlife Service

The policies of the U.S. Fish and Wildlife Service come into play because almost all of the streams that enter Cook Inlet from this Upper Kenai Peninsula Unit originate in and lie largely within the lands of the Kenai National Wildlife Refuge. In addition the upper portions of the Seven Egg Creek and the Swanson River systems are within the boundaries of the Lowland Wilderness Unit of the Refuge. The segments of these two systems that are within the Refuge but not within the Lowland Wilderness Unit are in one or more of the following categories, Intensive Management, Moderate Management and or Traditional Management. The taking of eggs for hatchery incubation and stocking could be permitted in all three management categories, and enhancement could be permitted in the first two.

A 1987 memorandum which has as a subject "Clarification of Region 7 Fisheries Management Policies for Refuge Comprehensive Conservation Plans (CCP's)" makes the following points.

- \* On all refuge lands in Alaska (including designated wilderness) maintaining, rehabilitating, and enhancing existing fish populations is permitted, where compatible with the purpose of the refuge.
- \* In general, restoration activities will be looked upon more favorably than enhancement activities on refuges in Alaska.
- \* Long-term (i.e., permanent) facilities may be permitted outside designated wilderness areas for maintenance, restoration and enhancement activities.
- \* In designated wilderness areas, temporary facilities may be permitted to maintain, restore or enhance fisheries if the stocks have been reduced or are threatened as long as the facilities do not significantly detract from wilderness values.

- \* New permanent facilities will not be permitted in designated wilderness for fisheries management purposes unless they are essential to accomplish refuge objectives.
- \* Existing facilities may remain and new facilities may be built for fisheries research and monitoring on all refuge lands in Alaska.
- \* In making compatibility determinations in designated wilderness areas the Service will consider wilderness values.

The following definitions meet the Service's needs within the CCP's and may be compared to the definitions being used by the CIRPT as described in the INTRODUCTION of this document:

- \* Enhancement - Procedures applied to a fish stock to supplement numbers of harvestable fish to a level beyond what could be naturally produced based upon a determination or reasonable estimate of historic levels. This could be accomplished by artificial production systems. It can also be an increase of the amount of productive habitat in the natural environment through physical or chemical change.
- \* Restoration - Increasing fishery resources to allow full utilization of available habitat or to a population objective based on a determination or reasonable estimate of historic levels. While the goal of restoration is self sustaining populations, situations will exist where the impact (e.g., habitat degradation) is such that some form of fishery management or mitigation activity could continue indefinitely."

Recent input from the U.S. Fish and Wildlife Service indicates that all activities are now subject to consistency reviews and any proposed fisheries work in wilderness areas would be reviewed on a case-by-case basis and considered only under exceptional circumstances.

### 9.2.2 United States Forest Service

The western portion of the Kenai River system is within Kenai Peninsula portion of the Chugach National Forest. These lands are managed for a variety of uses including recreational and commercial fisheries. The 2002 Revised Land and Resource Management Plan directs the U.S. Forest Service to provide for the sustainability of fish resources. Furthermore, the Plan emphasizes recovery of impacted fish populations and improvement of fish habitat values for commercial, subsistence or sport fish opportunities.

### 9.2.3 Kenai Peninsula Borough

All of the land in this unit is within the boundaries of the Kenai Peninsula Borough although most of it is also within the Chugach National Forest and the Kenai National Wildlife Refuge. There are relatively narrow bands of land along the highway that are owned by the Borough, city or private individuals.

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation. In addition it makes consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program.



**9.3 ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 9-2A through 9-2E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G’s historical escapement counts.

**KEY FOR EXHIBITS 9A THROUGH 9E**

In the following exhibits there are numbers of fish cited under two headings, *“Highest Number of Fish Reported for the System”* (column 3) and *“Most Recent Number of Fish Reported for the System”* (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 9-2A UPPER PENINSULA / KENAI RIVER UNIT KING SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Seven Egg C.	247-80-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Otter C.	247-80-10015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Swanson R.	247-90-10020	5 WC 1988	5 WC 1988						TIMING UNKNOWN
Unnamed Tributary	247-90-10020-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Swan C.	247-90-10020-2058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2058-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2058-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2068	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bishop C.	247-90-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2032	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kenai R.	244-30-10010	77,439 SC 1996	71,703 SC 2004						
Unnamed Tributary	244-30-10010-2001	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	244-30-10010-2001-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2007	UNKNOWN	UNKNOWN						TIMING UNKNOWN

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EXHIBIT 9-2A [continued from preceding page] UPPER PENINSULA / KENAI RIVER UNIT KING SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-30-10010-2008	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2010	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Beaver C.	244-30-10010-2025	7 TCU 1982	7 TCU 1982						
Unnamed Tributary	244-30-10010-2025-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2025-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2025-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2025-3049	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2026	UNKNOW	UNKNOW						
Unnamed Tributary	244-30-10010-2031	UNKNOW	UNKNOW						
Unnamed Tributary	244-30-10010-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2036	UNKNOW	UNKNOW	TIMING UNKNOWN					
Silkok C.	244-30-10010-2030	40 PC 1982	2 GS 1989						
Unnamed Tributary	244-30-10010-2030-3025	UNKNOW	UNKNOW						
Unnamed Tributary	244-30-10010-2030-3025-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2030-3060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Soldotna C.	244-30-10010-2039	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2039-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2039-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2039-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10010-2039-3053	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 9-2A [continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT KING SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Funny R.	244-30-10010-2050	2,779 WCVC 2006	2,779 WCVC 2006					
Unnamed Tributary	244-30-10010-2057	UNKNOWN	UNKNOWN					
Moose R.	244-30-10010-2063	2 WC 1985	2 WC 1985					
West Fork Moose R.	244-30-10010-2063-3025			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2063-3025-4010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
East Fork Moose R.	244-30-10010-2063-3036			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2063-3041			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2063-3041-4015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2063-3048			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Killey R.	244-30-10010-2076	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2076-3050	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2076-3067	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2076-3070	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2076-3072	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-11010-2076-3072-4008	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2076-3085	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2076-3085-4010	UNKNOWN	UNKNOWN					
Benjamin C.	244-30-10010-2076-3095	500 TCU 1982	500 TCU 1982					
Unnamed Tributary	244-30-10010-2076-3110	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2082	UNKNOWN	UNKNOWN					
Olson C.	no AWC number	1,229 GS 1977	30 GS 1983					
King County C.	244-30-10010-2096			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2110			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Cottonwood C.	244-30-10010-2120			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Pipe C.	244-30-10010-2130			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				

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**EXHIBIT 9-2A** [continued from preceding page] **UPPER PENINSULA / KENAI RIVER UNIT KING SALMON**

Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
				MAY	JUNE	JULY	AUG.
Skiak R.	no AWC number	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Hidden C.	244-30-10010-2137	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Jean C.	244-30-10011-2145	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	244-30-10010-2151	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Russian R.	244-30-10010-2158	2,100 MC 1958	92 WC 2004				
Unnamed Tributary	244-30-10010-2158-3029	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Cooper C.	244-30-10010-2162	35 AS 1950	2 WC 2001				
Juneau C.	244-30-10010-2165	177 GS 2004	177 GS 2004				
Bean C.	244-30-10010-2169	UNKNOWN	UNKNOWN				
Quartz C.	244-30-10010-2177	497 TCU 1984	3 GS 2005				
Unnamed Tributary	244-30-10010-2177-3003	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Dry C.	244-30-10010-2177-3006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Crescent C.	244-30-10010-2177-3012	500 MC 1947	28 GS 2004				
Unnamed Tributary	244-30-10010-2177-3017	UNKNOWN	UNKNOWN				
Daves C.	244-30-10010-2177-3020	42 GS 1980	12 GS 1983				
Unnamed Tributary	244-30-10010-2177-3020-4015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	244-30-10010-2177-3030	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	244-30-10010-2177-3063	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Porcupine C.	244-30-10010-2188	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Ship C.	no AWC number	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Trail R.	244-30-10010-2225	UNKNOWN	UNKNOWN				
Falls C.	244-30-10010-2225-3010	UNKNOWN	UNKNOWN				
Grant C.	244-30-10010-2225-3020	54 TCU 1982	2 TCU 1985				
Moose C.	244-30-10010-2225-3013	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Carter C.	244-30-10010-2225-3013-4009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					

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EXHIBIT 9-2A [continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT KING SALMON						
USGS Name [locally used name]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
					MAY	JUNE	JULY	AUG.
	Unnamed Tributary	244-30-10010-2225-3013-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2225-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Railroad C.	244-30-10010-2225-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2225-3021-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Johnson C.	244-30-10010-2225-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2225-3031-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Trail C.	244-30-10010-2225-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2225-3040-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2225-3040-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Plairmigan C.	244-30-10010-2231	300 TCU 1948	5 GS 1994				
	Rocky C.	No AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Primrose C.	244-30-10010-2246	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Snow R.	244-30-10010-2250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2250-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2250-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2250-3024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	East Fork Snow R.	244-30-10010-2250-3030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2250-3030-4014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2250-3030-4024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
	Unnamed Tributary	244-30-10010-2250-3030-4041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

EXHIBIT 9-2B		UPPER PENINSULA / KENAI RIVER UNIT SOCKEYE SALMON									
		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
						MAY	JUNE	JULY	AUG.	SEPT.	
Seven Egg C.	247-80-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Otter C.	247-80-10015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Swanson R.	247-90-10020	1,542 WC 1988	1,542 WC 1988	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-90-10020-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-90-10020-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-90-10020-2040	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2046	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Swan C.	247-90-10020-2058	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2058-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-90-10020-2058-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-90-10020-2064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	247-90-10020-2068	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Bishop C.	247-90-10030	7,800 AS 1984	4,536 AS 1986	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2016	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2029	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2032	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	247-90-10020-2041	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Kenai R.	244-30-10010	1,599,959 SC 1989	1,376,452 SC 1989								
Unnamed Tributary	244-30-10010-2001	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	244-30-10010-2001-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	244-30-10010-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	244-30-10010-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	244-30-10010-2007	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
[ continued on following page ]											

<b>EXHIBIT 9-2B</b>		<b>UPPER PENINSULA / KENAI RIVER UNIT SOCKEYE SALMON</b>						
[continued from preceding page]								
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Unnamed Tributary	244-30-10010-2008	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2010	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2015	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2020	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2022	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Beaver C.	244-30-10010-2025	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2025-3011	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2025-3040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2025-3045	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2025-3049	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2026	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2031	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2033	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2034	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2035	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2036	UNKNOWN	UNKNOWN					
Slikok C.	244-30-10010-2030	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2030-3025	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2030-3025-4010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2030-3060	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Soldotna C.	244-30-10010-2039	UNKNOWN	UNKNOWN					
Unnamed Tributary	244-30-10010-2039-3029	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2039-3040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2039-3045	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2039-3053	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
[ continued on following page ]								



EXHIBIT 9-2B		UPPER PENINSULA / KENAI RIVER UNIT SOCKEYE SALMON							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Funny R.	244-30-10010-2050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2057	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Moose R.	244-30-10010-2063	2,788 WC 1985	1,292 WC 1986	TIMING UNKNOWN			
		West Fork Moose R.	244-30-10010-2063-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2063-3025-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		East Fork Moose R.	244-30-10010-2063-3036	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	244-30-10010-2063-3041	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	244-30-10010-2063-3041-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2063-3048	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Killey R.	244-30-10010-2076	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3067	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3072	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-11010-2076-3072-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3085-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Benjamin C.	244-30-10010-2076-3095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2076-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-30-10010-2082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Olson C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		King County C.	244-30-10010-2096	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	244-30-10010-2110	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Cottonwood C.	244-30-10010-2120	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Pipe C.	244-30-10010-2130	UNKNOWN	UNKNOWN	TIMING UNKNOWN			

[ continued on following page ]

EXHIBIT 9-2B		[continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT SOCKEYE SALMON				
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Skilak R.	no AWC number	959 TCU 2004	959 TCU 2004	TIMING UNKNOWN				
Hidden C.	244-30-10010-2137	112,792 WC 1991	13,000 WC 2005					
Jean C.	244-30-10011-2145	26,880 WC 1974	3,038 WC 1983	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2151	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Russian R.	244-30-10010-2158	386,755 TLR 1987	140,702 TLR 2003	EARLY		LATE		
Unnamed Tributary	244-30-10010-2158-3029	UNKNOWN	UNKNOWN	EARLY		LATE		
Cooper C.	244-30-10010-2162	300 AS 1950	60 GS 2005	TIMING UNKNOWN				
Juneau C.	244-30-10010-2165	200 GS 1952	52 GS 2001	TIMING UNKNOWN				
Bean C.	244-30-10010-2169	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Quartz C.	244-30-10010-2177	73,345 WC 1983	6,580 GS 2005					
Unnamed Tributary	244-30-10010-2177-3003	UNKNOWN	UNKNOWN					
Dry C.	244-30-10010-2177-3006	UNKNOWN	UNKNOWN					
Crescent C.	244-30-10010-2177-3012	313 GS 2004	313 GS 2004					
Unnamed Tributary	244-30-10010-2177-3017	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Daves C.	244-30-10010-2177-3020	4,337 GS 1982	970 GS 1992					
Unnamed Tributary	244-30-10010-2177-3020-4015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2177-3030	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2177-3063	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Porcupine C.	244-30-10010-2188	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Ship C.	no AWC number	20 GS 2004	20 GS 2004	TIMING UNKNOWN				
Trail R.	244-30-10010-2225	10,000 TCU 1977	71 TCU 1978	TIMING UNKNOWN				
Falls C.	244-30-10010-2225-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Grant C.	244-30-10010-2225-3020	324 TCU 1962	1 TCU 1985	TIMING UNKNOWN				
Moose C.	244-30-10010-2225-3013	10,250 TCU 1963	2,132 GS 2004	TIMING UNKNOWN				
Carter C.	244-30-10010-2225-3013-4009	250 MC 1967	250 MC 1967	TIMING UNKNOWN				

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EXHIBIT 9-2B [continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT SOCKEYE SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	244-30-10010-2225-3013-4011	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	244-30-10010-2225-3019	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Railroad C.	244-30-10010-2225-3021	4,959	TCU 1989	610	TCU 1994			
Unnamed Tributary	244-30-10010-2225-3021-4008	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN			
Johnson C.	244-30-10010-2225-3031	2,276	GS 1989	705	TCU 1994			
Unnamed Tributary	244-30-10010-2225-3031-4010	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN			
Trail C.	244-30-10010-2225-3040	196	TCU 1977	196	TCU 1977			
Unnamed Tributary	244-30-10010-2225-3040-4010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2225-3040-4017	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Platnigan C.	244-30-10010-2231	31,696	TCU 1988	4,428	GS 2004			
Rocky C.	No AWC number	163	TCU 1981	163	TCU 1981	TIMING UNKNOWN		
Primrose C.	244-30-10010-2246	15	TCU 1990	15	TCU 1990	TIMING UNKNOWN		
Snow R.	244-30-10010-2250	6,000	TCU 1987	6,000	TCU 1987	TIMING UNKNOWN		
Unnamed Tributary	244-30-10010-2250-3012	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2250-3018	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2250-3024	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
East Fork Snow R.	244-30-10010-2250-3030	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	244-30-10010-2250-3030-4014	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	244-30-10010-2250-3030-4024	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	244-30-10010-2250-3030-4041	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		

EXHIBIT 9-2C		UPPER PENINSULA / KENAI RIVER UNIT COHO SALMON									
		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
MAY	JUNE					JULY	AUG.	SEPT.			
Seven Egg C.	247-80-10010	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Otter C.	247-80-10015	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Swanson R.	247-90-10020	23,514 WC 1988	23,514 WC 1988	23,514 WC 1988	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2002	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2011	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2036	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	247-90-10020-2046	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	247-90-10020-2056	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Swan C.	247-90-10020-2058	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2058-3018	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2058-3018-4011	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2064	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2068	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Bishop C.	247-90-10030	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2016	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2029	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	247-90-10020-2032	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	247-90-10020-2041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Kenai R.	244-30-10010	28,206 SC 2004	28,206 SC 2004	28,206 SC 2004	TIMING UNKNOWN						
Unnamed Tributary	244-30-10010-2001	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	244-30-10010-2001-3004	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	244-30-10010-2003	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	244-30-10010-2005	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	244-30-10010-2007	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN						

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EXHIBIT 9-2C [continued from preceding page] UPPER PENINSULA / KENAI RIVER UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-30-10010-2008	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2010	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2015	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2020	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2022	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Beaver C.	244-30-10010-2025	133 TCU 1982	133 TCU 1982						
Unnamed Tributary	244-30-10010-2025-3011	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-30-10010-2025-3040	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-30-10010-2025-3045	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-30-10010-2025-3049	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-30-10010-2026	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2031	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2033	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2034	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2035	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2036	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Silkok C.	244-30-10010-2030	50 GS 1984	50 GS 1984						
Unnamed Tributary	244-30-10010-2030-3025	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-30-10010-2030-3025-4010	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-30-10010-2030-3060	UNKNOWWN	UNKNOWWN						
Soldotna C.	244-30-10010-2039	18 TCU 1982	18 TCU 1982						
Unnamed Tributary	244-30-10010-2039-3029	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2039-3040	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2039-3045	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2039-3053	UNKNOWWN	UNKNOWWN	TIMING UNKNOWN					

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EXHIBIT 9-2C [continued from preceding page]										
UPPER PENINSULA / KENAI RIVER UNIT COHO SALMON										
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Funny R.	244-30-10010-2050	1,909 WCVC 2006	1,909 WCVC 2006							
Unnamed Tributary	244-30-10010-2057	UNKNOW	UNKNOW	TIMING UNKNOWN						
Moose R.	244-30-10010-2063	3,969 WC 1986	3,969 WC 1986							
West Fork Moose R.	244-30-10010-2063-3025	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2063-3025-4010	UNKNOW	UNKNOW							
East Fork Moose R.	244-30-10010-2063-3036	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2063-3041	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2063-3041-4015	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2063-3048	UNKNOW	UNKNOW							
Killey R.	244-30-10010-2076	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3050	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3067	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3070	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3072	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-11010-2076-3072-4008	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3085	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3085-4010	UNKNOW	UNKNOW							
Benjamin C.	244-30-10010-2076-3095	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2076-3110	UNKNOW	UNKNOW							
Unnamed Tributary	244-30-10010-2082	UNKNOW	UNKNOW							
Olson C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
King County C.	244-30-10010-2096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	244-30-10010-2110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Cottonwood C.	244-30-10010-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Pipe C.	244-30-10010-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
[ continued on following page ]										

EXHIBIT 9-2C [continued from preceding page] UPPER PENINSULA / KENAI RIVER UNIT COHO SALMON									
USGS Name [locally used name]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
	Skilak R.	no AWC number	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Hidden C.	244-30-10010-2137	307 WC 1980	307 WC 1980					
	Jean C.	244-30-1001-2145	2,389 WC 1974	6 WC 1980					
	Unnamed Tributary	244-30-10010-2151	UNKNOWN	UNKNOWN					
	Russian R.	244-30-10010-2158	9,888 WC 2001	545 WC 2003					
	Unnamed Tributary	244-30-10010-2158-3029	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Cooper C.	244-30-10010-2162	4 WC 1999	1 WC 2001					
	Juneau C.	244-30-10010-2165	2 GS 2000	2 GS 2000					
	Bean C.	244-30-10010-2169	UNKNOWN	UNKNOWN					
	Quartz C.	244-30-10010-2177	3,693 WC 1984	7 GS 2005					
	Unnamed Tributary	244-30-10010-2177-3003	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Dry C.	244-30-10010-2177-3006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Crescent C.	244-30-10010-2177-3012	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-30-10010-2177-3017	UNKNOWN	UNKNOWN					
	Daves C.	244-30-10010-2177-3020	151 GS 1990	151 GS 1990					
	Unnamed Tributary	244-30-10010-2177-3020-4015	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-30-10010-2177-3030	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-30-10010-2177-3063	UNKNOWN	UNKNOWN					
	Porcupine C.	244-30-10010-2188	UNKNOWN	UNKNOWN					
	Ship C.	no AWC number	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Trail R.	244-30-10010-2225	UNKNOWN	UNKNOWN					
	Falls C.	244-30-10010-2225-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Grant C.	244-30-10010-2225-3020	UNKNOWN	UNKNOWN					
	Moose C.	244-30-10010-2225-3013	42 TCU 1981	42 TCU 1981					
	Carter C.	244-30-10010-2225-3013-4009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						

[ continued on following page ]

EXHIBIT 9-2C [continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT COHO SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	244-30-10010-2225-3013-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2225-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Railroad C.	244-30-10010-2225-3021	13 TCU 1987	7 TCU 1989	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2225-3021-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Johnson C.	244-30-10010-2225-3031	98 TCU 1978	8 GS 1989	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2225-3031-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Trail C.	244-30-10010-2225-3040	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2225-3040-4010	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2225-3040-4017	UNKNOW	UNKNOW	TIMING UNKNOWN				
Plairmigan C.	244-30-10010-2231	UNKNOW	UNKNOW	TIMING UNKNOWN				
Rocky C.	No AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Primrose C.	244-30-10010-2246	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Snow R.	244-30-10010-2250	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2250-3012	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2250-3018	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2250-3024	UNKNOW	UNKNOW	TIMING UNKNOWN				
East Fork Snow R.	244-30-10010-2250-3030	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2250-3030-4014	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2250-3030-4024	UNKNOW	UNKNOW	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2250-3030-4041	UNKNOW	UNKNOW	TIMING UNKNOWN				



EXHIBIT 9-2D UPPER PENINSULA / KENAI RIVER UNIT PINK SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Seven Egg C.	247-80-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Otter C.	247-80-10015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Swanson R.	247-90-10020	72 WC 1988	72 WC 1988						
Unnamed Tributary	247-90-10020-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Swan C.	247-90-10020-2058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2058-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2058-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2068	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bishop C.	247-90-10030	UNKNOWN	UNKNOWN						
Unnamed Tributary	247-90-10020-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2032	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	247-90-10020-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Kenai R.	244-30-10010	262,394 SC 1980	117,561 SC 2004						
Unnamed Tributary	244-30-10010-2001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2001-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
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EXHIBIT 9-2D [continued from preceding page]									
UPPER PENINSULA / KENAI RIVER UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-30-10010-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2010	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-30-10010-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Beaver C.	244-30-10010-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2025-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2025-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2025-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2025-3049	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Slikok C.	244-30-10010-2030	5 MC 1957	5 MC 1957						
Unnamed Tributary	244-30-10010-2030-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2030-3025-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2030-3060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Soldotna C.	244-30-10010-2039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2039-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2039-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2039-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2039-3053	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 9-2D [continued from preceding page]										UPPER PENINSULA / KENAI RIVER UNIT PINK SALMON				
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing										
				MAY	JUNE	JULY	AUG.	SEPT.						
Funny R.	244-30-10010-2050	7 MC 1952	7 MC 1952	TIMING UNKNOWN										
Unnamed Tributary	244-30-10010-2057	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Moose R.	244-30-10010-2063	13 WC 1985	4 WC 1986	TIMING UNKNOWN										
West Fork Moose R.	244-30-10010-2063-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2063-3025-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
East Fork Moose R.	244-30-10010-2063-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2063-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2063-3041-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2063-3048	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Killey R.	244-30-10010-2076	100 MC 1960	100 MC 1960	TIMING UNKNOWN										
Unnamed Tributary	244-30-10010-2076-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2076-3067	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2076-3070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2076-3072	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-11010-2076-3072-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2076-3085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2076-3085-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Benjamin C.	244-30-10010-2076-3095	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2076-3110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2082	UNKNOWN	UNKNOWN	TIMING UNKNOWN										
Olson C.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
King County C.	244-30-10010-2096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Unnamed Tributary	244-30-10010-2110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Cottonwood C.	244-30-10010-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												
Pipe C.	244-30-10010-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT												

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EXHIBIT 9-2D [continued from preceding page]										UPPER PENINSULA / KENAI RIVER UNIT PINK SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Skilak R.	no AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Hidden C.	244-30-10010-2137	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Jean C.	244-30-1001-2145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	244-30-10010-2151	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Russian R.	244-30-10010-2158	100 MC 1958	2 WC 1976						TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2158-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Cooper C.	244-30-10010-2162	1 WC 1999	1 WC 1999						TIMING UNKNOWN				
Juneau C.	244-30-10010-2165	5 GS 1999	1 GS 2000						TIMING UNKNOWN				
Bean C.	244-30-10010-2169	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Quartz C.	244-30-10010-2177	107 WC 1984	4 GS 2004						TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2177-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Dry C.	244-30-10010-2177-3006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Crescent C.	244-30-10010-2177-3012	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2177-3017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Daves C.	244-30-10010-2177-3020	1 TCU 1980	1 TCU 1980						TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2177-3020-4015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	244-30-10010-2177-3030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	244-30-10010-2177-3063	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Porcupine C.	244-30-10010-2188	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Ship C.	no AWC number	650 MC 1951	650 MC 1951						TIMING UNKNOWN				
Trail R.	244-30-10010-2225	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Falls C.	244-30-10010-2225-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Grant C.	244-30-10010-2225-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Moose C.	244-30-10010-2225-3013	2 TCU 1978	1 TCU 1981						TIMING UNKNOWN				
Carter C.	244-30-10010-2225-3013-4009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											

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EXHIBIT 9-2D [continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT PINK SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	244-30-10010-2225-3013-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2225-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Railroad C.	244-30-10010-2225-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2225-3021-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Johnson C.	244-30-10010-2225-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2225-3031-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Trail C.	244-30-10010-2225-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2225-3040-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2225-3040-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Plairmigan C.	244-30-10010-2231	15 TCU 2004	15	TCU 2004	TIMING UNKNOWN			
Rocky C.	No AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Primrose C.	244-30-10010-2246	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Snow R.	244-30-10010-2250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2250-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2250-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2250-3024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
East Fork Snow R.	244-30-10010-2250-3030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2250-3030-4014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2250-3030-4024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	244-30-10010-2250-3030-4041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

EXHIBIT 9-2E UPPER PENINSULA / KENAI RIVER UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Seven Egg C.	247-80-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Otter C.	247-80-10015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Swanson R.	247-90-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2056	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Swan C.	247-90-10020-2058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2058-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2058-3018-4011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2068	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Bishop C.	247-90-10030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2032	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	247-90-10020-2041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Kenai R.	244-30-10010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	244-30-10010-2001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	244-30-10010-2001-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	244-30-10010-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	244-30-10010-2005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	244-30-10010-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					

[ continued on following page ]

EXHIBIT 9-2E [continued from preceding page]							UPPER PENINSULA / KENAI RIVER UNIT CHUM SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Unnamed Tributary	244-30-10010-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Beaver C.	244-30-10010-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2025-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2025-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2025-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2025-3049	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2033	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2035	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Silkok C.	244-30-10010-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2030-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2030-3025-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2030-3060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Soldotna C.	244-30-10010-2039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2039-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2039-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2039-3045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	244-30-10010-2039-3053	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							

[ continued on following page ]

<b>EXHIBIT 9-2E</b> [continued from preceding page] <b>UPPER PENINSULA / KENAI RIVER UNIT CHUM SALMON</b>								
USGS Name [locally used name]	Catalog Number	Highest Number for the System	Most Recent Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Funny R.	244-30-10010-2050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2057		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Moose R.	244-30-10010-2063		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
West Fork Moose R.	244-30-10010-2063-3025		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2063-3025-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
East Fork Moose R.	244-30-10010-2063-3036		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2063-3041		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2063-3041-4015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2063-3048		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Killey R.	244-30-10010-2076		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3067		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3072		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-11010-2076-3072-4008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3085		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3085-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Benjamin C.	244-30-10010-2076-3095		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2076-3110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2082		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Olson C.	no AWC number		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
King County C.	244-30-10010-2096		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2110		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Cottonwood C.	244-30-10010-2120		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Pipe C.	244-30-10010-2130		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]



EXHIBIT 9-2E		[continued from preceding page]		UPPER PENINSULA / KENAI RIVER UNIT CHUM SALMON				
USGS Name [locally used name]	Catalog Number	Highest Number for the System	Most Recent Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Skilak R.	no AWC number			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Hidden C.	244-30-10010-2137			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Jean C.	244-30-10011-2145			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2151			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Russian R.	244-30-10010-2158	77 TCU 1970	77 TCU 1970	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2158-3029			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Cooper C.	244-30-10010-2162			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Juneau C.	244-30-10010-2165			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Bean C.	244-30-10010-2169			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Quartz C.	244-30-10010-2177	10 MC 1954	1 GS 1981	TIMING UNKNOWN				
Unnamed Tributary	244-30-10010-2177-3003			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Dry C.	244-30-10010-2177-3006			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Crescent C.	244-30-10010-2177-3012			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2177-3017			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Daves C.	244-30-10010-2177-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2177-3020-4015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2177-3030			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-30-10010-2177-3063			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Porcupine C.	244-30-10010-2188			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Ship C.	no AWC number			UNKNOWN TIMING UNKNOWN				
Trail R.	244-30-10010-2225			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Falls C.	244-30-10010-2225-3010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Grant C.	244-30-10010-2225-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Moose C.	244-30-10010-2225-3013	3 MC 1954	3 MC 1954	TIMING UNKNOWN				
Carter C.	244-30-10010-2225-3013-4009			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				

[ continued on following page ]

EXHIBIT 9-2E [continued from preceding page] UPPER PENINSULA / KENAI RIVER UNIT CHUM SALMON							
USGS Name [locally used name]	Catalog Number	Highest Number for the System	Most Recent Reported for the System	Run Timing			
				MAY	JUNE	JULY	AUG.
Unnamed Tributary	244-30-10010-2225-3013-4011	1 TCU 1985	1 TCU 1985	TIMING UNKNOWN			
Unnamed Tributary	244-30-10010-2225-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Railroad C.	244-30-10010-2225-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2225-3021-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Johnson C.	244-30-10010-2225-3031	1 TCU 1981	1 TCU 1981	TIMING UNKNOWN			
Unnamed Tributary	244-30-10010-2225-3031-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Trail C.	244-30-10010-2225-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2225-3040-4010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2225-3040-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Plarmigan C.	244-30-10010-2231	4 TCU 1983	4 TCU 1983	TIMING UNKNOWN			
Rocky C.	No AWC number	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Primrose C.	244-30-10010-2246	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Snow R.	244-30-10010-2250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2250-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2250-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2250-3024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
East Fork Snow R.	244-30-10010-2250-3030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2250-3030-4014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2250-3030-4024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-30-10010-2250-3030-4041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

9.4 SIGNIFICANT STOCKS

Based on the available data, the following stocks are known to fit the size criterion for local significance as discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0 of this document. The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

EXHIBIT 9-3		SIGNIFICANT STOCKS																												
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM																								
Swanson River	247-90-10020			significant																										
Bishop Creek	247-90-10030		significant																											
Kenai River	244-30-10010	significant	significant	significant	significant																									
Moose River	244-30-10010-2063		significant	significant																										
Killey River	244-30-10010-2076	significant																												
Benjamin Creek	244-30-10010-2076-3095	significant																												
Olson Creek	no AWC number	significant																												
Hidden Creek	244-30-10010-2137		significant																											
Jean Creek	244-30-10010-2135		significant	significant																										
Russian River	244-30-10010-2158	significant	significant	significant																										
Quartz Creek	244-30-10010-2177	significant	significant	significant																										
Crescent Creek	244-30-10010-2177-3012	significant																												
Moose Creek	244-30-10010-2225-3013		significant																											
<i>Railroad Creek</i>	244-30-10010-2225-3021		significant																											
Johnson Creek	244-30-10010-2225-3031		significant																											
Ptarmigan Creek	247-60-10110-2231		significant																											
Snow River	247-60-10110-2231		significant																											
Non-italics = stream name appearing on USGS maps <i>Italics = Unnamed on USGS map but identified by its locally-used name</i> AWC = Anadromous Waters Catalog <table border="1"> <tr> <td>significant</td> <td>Most recent count meets minimum size criteria, and it is less than two life cycles old.</td> </tr> <tr> <td>significant</td> <td>Most recent count meets minimum size criteria, but it is more than two life cycles old.</td> </tr> <tr> <td>significant</td> <td>Historic count meets minimum size criteria, but the most recent count does not.</td> </tr> </table> <table border="1"> <tr> <td></td> <td>Minimum significant stock size criteria:</td> <td>Generalized period for two life cycles:</td> </tr> <tr> <td>King Salmon</td> <td>400 fish</td> <td>12 years</td> </tr> <tr> <td>Sockeye Salmon</td> <td>2,000 fish</td> <td>10 years</td> </tr> <tr> <td>Coho Salmon</td> <td>800 fish</td> <td>8 years</td> </tr> <tr> <td>Pink Salmon</td> <td>5,000 fish</td> <td>4 years</td> </tr> <tr> <td>Chum Salmon</td> <td>800 fish</td> <td>8 years</td> </tr> </table>							significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.	significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.	significant	Historic count meets minimum size criteria, but the most recent count does not.		Minimum significant stock size criteria:	Generalized period for two life cycles:	King Salmon	400 fish	12 years	Sockeye Salmon	2,000 fish	10 years	Coho Salmon	800 fish	8 years	Pink Salmon	5,000 fish	4 years	Chum Salmon	800 fish	8 years
significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.																													
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.																													
significant	Historic count meets minimum size criteria, but the most recent count does not.																													
	Minimum significant stock size criteria:	Generalized period for two life cycles:																												
King Salmon	400 fish	12 years																												
Sockeye Salmon	2,000 fish	10 years																												
Coho Salmon	800 fish	8 years																												
Pink Salmon	5,000 fish	4 years																												
Chum Salmon	800 fish	8 years																												

9.5 WILD STOCK SANCTUARIES / STOCK RESERVES

A review of the various stocks of salmon found in the Upper Peninsula / Kenai River Unit leads the CIRPT to make the following determinations with respect to the designation of "wild stock sanctuaries / stock reserves" in the Upper Peninsula / Kenai River systems. This concept is described and recommended for adoption in the ADF&G *Genetics Policy* where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0, section 3.3.3.5 of this document as it is applied in Cook Inlet.

9.5.1 King Salmon

Stock identified: Benjamin Creek early run stock  
[AWC 244-30-10010-2076-3095]

Rationale: It has no record of king salmon rehabilitation or enhancement. There are a sufficient number of these fish to serve as a broodstock source. The protection afforded their habitat through Kenai National Wildlife Refuge suggests there will be a perpetuation of the stock.

Stock identified: late run Kenai River drainage stocks spawning above Skilak Lake inlet

Rationale: There are a sufficient number of these fish to serve as a broodstock source, and some disease screening work has already been done on Kenai River and Quartz Creek king salmon. Protection afforded a portion of this habitat through Kenai National Wildlife Refuge is supports this designation.

9.5.2 Sockeye Salmon

Stock identified: Russian River stock (late run) that spawns below the falls  
[AWC 244-30-10010-2158]

Rationale: There are a sufficient number of these fish to serve as a broodstock source, and some disease screening work has already been done on Russian River sockeye salmon.

9.5.3 Coho Salmon

Stock identified: Killey River stock of coho salmon (early run)  
[AWC 244-30-10010-2076]

Rationale: There are a sufficient number of these fish to serve as a broodstock source. The protection afforded their habitat through Kenai National Wildlife Refuge suggests there will be a perpetuation of the stock.

9.5.4 Pink Salmon

Stock identified: pink salmon stocks spawning in the mainstem Kenai River between the outlet of Skilak Lake and the confluence with the Killey River.

Rationale: There are a sufficient number of these fish to serve as a broodstock source. Protection afforded a portion of this habitat through Kenai National Wildlife Refuge is supports this designation.

## 9.5.5 Chum Salmon

Stock identified: None

Rationale: After reviewing the information about chum salmon in the Kenai River system, the CIRPT determined there was no recognized significant chum salmon "stock" which could be designated as a "wild stock sanctuary / stock reserve".

## 9.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT

### 9.6.1 Projects Identified in the Phase I Plan 1981 - 2000

#### 9.6.1.1 Spawning Ground Survey

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"This project would deal with only Upper Cook Inlet and would be carried out primarily by the research arm of the Commercial Fish Division. The thrust of the project is to verify and explore the ramifications of sonar escapement counts where they exist and develop comparable monitoring where it would be useful and is not now in place. Three specific elements have now been defined within this general project. First, because of problems with migration outside the sonar counter verification of the counts on the Kasilof River is necessary. Second, there should be a program to assess the distribution of spawners in the Kenai, Kasilof and Susitna River systems. Finally, it would be useful to develop an historical perspective on previous escapements in the Susitna system where sonar has only been in operation for two years."*

#### Subsequent Developments:

A large number of stream surveys were conducted in the 1980's and early 1990's when they were suspended for budgetary reasons. Although there are essentially continuous attempts to refine the existing sonar systems, the use of this type of apparatus to enumerate escapements has not been expanded beyond the four river systems involved in the early 1980's.

One specific portions of this original project involved the Kenai River, assessment of the distribution of spawners in the Kenai River system.

In 2006 a very aggressive program is being proposed to verify escapements in the Kenai River system.

#### 9.6.1.2 Upper Cook Inlet Run Modeling

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"There are serious time constraints on the data acquisition / management decision process which is central to the effective management of the Upper Cook Inlet fisheries. The continued development and refinement of a computer simulation model for the Upper Cook Inlet salmon stocks would be of marked assistance in data compilation and analysis."*

*“The types of data to be processed include catch, escapement, off-shore test fishing results, and in-district test fishing results. A management system has been developed to make possible in-season data analysis. The simulation techniques will allow the managers to evaluate variations in run timing, stock abundance, and harvest management tactics so that there can be appropriate applications of fishing times and area schedules.”*

Subsequent Developments:

ADF&G has continued to examine and refine its run modeling process. The use of the off-shore test fishery and the sonar derived escapement counts continue to be the main components of this ongoing, in-season program.

9.6.1.3 Evaluation of Hatchery Stocked Fry Survival – Kenai Lake

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“When funded, this high priority project will assess the freshwater survival of sockeye, king, and coho salmon fry released from the Trail Lakes Hatchery into Kenai Lake and its tributaries. The work will involve estimating the number of smolts resulting from the release of sockeye fry and king and coho fingerlings. Additionally there will be identification of the contribution of Trail Lakes Hatchery salmon fry to the total smolt outmigration from Kenai Lake and the optimum time, location and developmental stage for fry/fingerling release.”*

Subsequent Developments:

No sockeye salmon, king salmon or coho salmon fry or fingerlings were released directly into Kenai Lake from Trail Lakes Hatchery or any other hatchery. Additionally there has been no evaluation of the smolt migration from Kenai Lake.

Stocking of sockeye salmon in Quartz Creek (see section 9.6.2.1) and in Ptarmigan Lake (see section 9.6.1.9) did take place, and both are tributaries of Kenai Lake.

Stocking of coho salmon in Quartz Creek (see section 9.6.2.2), Tern Lake (see section 9.6.2.3) and in Grant Lake (see section 9.6.2.4) did take place, and all are tributaries of Kenai Lake. Tern Lake is in the Quartz Creek system, and Grant Lake is in the Trail River system which also is a tributary of Kenai Lake.

King salmon eggs were taken by ADF&G in anticipation of stocking back into the Kenai system, but that position was reversed by the Commissioner; and the fish were ultimately released in Resurrection Bay.

9.6.1.4 Hidden Lake Assessment

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This ongoing F.R.E.D. project is directed at gathering the requisite information to plan, implement and evaluate efforts to enhance the Hidden Lake sockeye salmon run to an optimum level commensurate with its high productivity and potential rearing capacity. Detailed information will be gathered on the significant characteristics of the adult run into Hidden Lake and the out-migrating smolt. At the same time data will be gathered*

*to develop a limnological profile of the Lake to determine lake productivity and optimum timing for fry release into the Lake.”*

Subsequent Developments:

The project was in operation when the original plan was written and has continued since. ADF&G, through its F.R.E.D. Division, ran the project from 1970 through 1988. When CIAA took over operation of the Trail Lakes Hatchery in 1988, it also took over implementation of the Hidden Lake project. ADF&G conducted limnological studies from 1976 to 1989. CIAA resumed the annual limnological studies in 1991 to monitor the compatibility of the project and the Hidden lake environment.

CIAA annually operates a weir on Hidden Creek to enumerate and sample both the migrating smolt and the returning adults.

9.6.1.5 Quartz Creek Broodstock Evaluation

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The object of this funded and ongoing F.R.E.D. project is to provide a broodstock source for Trail Lakes Hatchery and to assess the rearing potential and survival of salmon fry to smolt in the Quartz Creek system. Adult escapement to and smolt outmigration from the Quartz Creek system will be evaluated with particular reference to wild stocks of sockeye, king and coho salmon. Similar outmigration data will be collected for hatchery stocked sockeye, king and coho salmon in the Quartz Creek system. Finally there will be an evaluation of the escapement levels, rearing capability, and other biological, chemical and physical data on the Quartz Creek system to determine a management program for this system.”*

Subsequent Developments:

The initial studies were conducted from 1981 to 1985. Using a weir it was possible to determine the run timing and enumerate the adult sockeye salmon, king salmon and coho salmon and to sample the fish for age, weight, length and fecundity.

Eggs were collected from 1982 to 1985 and taken to Trail Lakes Hatchery for incubation and short-term rearing before being returned to the Quartz Creek system.

Smolt traps were operated at Dave’s Creek in the upper portion of the Quartz Creek drainage and in Quartz Creek in the lower portion of the drainage. Minnow traps were also used throughout the drainage in an attempt to determine the distribution of the supplementally produced fish.

This project was not funded beyond 1984.

9.6.1.6 Kenai River Spawning and Rearing Study

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The Alaska Field Station of the National Fisheries Research Center, under contract with their Division of Ecological Services, and with assistance from the Sport Fish and F.R.E.D. Divisions of ADF&G has been conducting studies on salmon in the Kenai*

*River System. The studies cover two broad areas of concern: (1) the spawning areas, travel timing and patterns of returning adults, and (2) the identification and definition of preferred habitat for juvenile salmon. In both cases the data were sought as a means of identifying impacts on the salmon resource from development and to provide management data for ADF&G biologists.*

*Adult king and coho salmon were tagged to determine their rate of upstream movement and spawning destination. The project has already identified significant differences between the early and late runs of king salmon in the Kenai River. Early run salmon preferred tributaries for spawning, while late run fish preferred the Kenai River proper. In addition a clearer picture of the characteristics of the preferred habitat and the extent of habitat usage in the Killey River system (a Kenai tributary used by early run kings) has begun to emerge.*

*The second portion of this work was also going on in 1979, 1980 and 1981 through studies to determine the habitat requirements of juvenile king, coho and sockeye salmon in the Kenai River. The project included data collection for the development of preference curves for velocity range, depth range, food and cover. Major rearing areas were identified through catch-per-unit-of-effort analysis.”*

Subsequent Developments:

A team led by Carl V. Burger did conduct the described salmon investigations from 1979-1981. The three-year study gathered baseline data on salmon spawning and rearing areas. No further studies occurred after 1981.

9.6.1.7 Genetics of Russian River Sockeye Salmon

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“Since 1978 the Alaska Field Station of the National Fisheries Research Center, in cooperation with the Sport Fish Division of ADF&G, has studied the genetics of Russian River sockeye salmon. In each of four years a major genetic difference was found between early and late run sockeye, thus a potential exists for future stock separation. This study is being continued.”*

Subsequent Developments:

A study published in 1980 identified separate genetic stocks of sockeye salmon for the Upper and Lower Russian lakes. Another study was published in 1985 also identifying significant differences in allele frequencies between the early and late runs of the Russian River sockeye salmon. Two other published studies include data on the Russian River runs, but there are no specific on-going stock separation research efforts in this system.

9.6.1.8 Trail Lakes Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“Construction of this F.R.E.D. facility began in the spring of 1981. While three salmon species may be handled by the hatchery (sockeye, coho, and king), sockeye salmon*



*will be the dominant species accounting for about 69 percent of the annual production. The facility located in the eastern portion of the Kenai Peninsula near Kenai Lake is expected to be at full capacity by 1992. This would mean the annual production of 243,000 adult sockeye salmon, 92,000 adult coho salmon, and 18,000 adult king salmon. It is anticipated that the facility will function as a central incubation facility, receiving eggs from as yet undesignated sites and returning fry to as yet undesignated locations. The assumption is that sufficient funding will be made available for the hatchery to proceed as now envisioned.”*

Subsequent Developments:

The construction of the hatchery was completed and the facility made its first releases in 1983. The 1983 releases were both coho and sockeye salmon. In the period 1984 through 1988 annual releases were comprised of three species, sockeye, coho and king salmon. In 1988 operation of the Trail Lakes Hatchery was transferred from ADF&G to CIAA. In 1989 only sockeye salmon were released, but from 1990 on the annual program has called for the release of both sockeye and coho salmon.

9.6.1.9 Ptarmigan Lake

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This 640 acre lake just to the east of Kenai Lake could provide production through the installation of a fish pass, some stocking and potentially fertilization. F.R.E.D. Division and the U.S. Forest Service are cooperatively involved in this project. After the fish pass is built, it is expected that it would take four or five years of stocking to establish the run of sockeye salmon which would account for about 19,000 adult fish annually.”*

Subsequent Developments:

The evaluation work was done on Ptarmigan Lake in the mid 1980's. Sockeye salmon eggs were taken in 1982, and 1,120,000 sockeye salmon fry were stocked back into the system in 1983. No further project work was done. The U.S. Forest Service looked at the Ptarmigan Creek system again in depth in 2002 and determined that further work was still unfeasible. It was believed that the relatively small amount of habitat that would be opened up was not sufficient to warrant the costs associated with the installation of a fishpass around the waterfalls in the system.

9.6.1.10 Birch Hill Hatchery

This project was described in the *Phase I Plan 1981 - 2000* under the heading “Suspected Projects” in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here. These projects are located and identified on Exhibit HH in the 1981-2000 plan.”*

Subsequent Developments:

This site is located near the mouth of Seven Egg Creek and has received no further attention in the form of project development investigations since the publication of the original plan.

## 9.6.1.11 Early Russian River Sockeye Salmon Enhancement

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This presently unfunded project would provide an additional harvest of 20,000 sockeye salmon to satisfy 33,000 man-days of effort. It would initiate studies on the types of sockeye salmon egg incubation systems or flood bypass systems that would provide stable fry production from Upper Russian Creek. The early run of Russian River sockeye salmon has been selected by the Trail Lakes broodstock planning team as a primary broodstock for the hatchery.”*

Subsequent Developments:

There are no records indicating that such a on a sockeye salmon enhancement project was ever undertaken on the Russian River. Early Russian River sockeye salmon were never developed as an annual broodstock source for the Trail Lakes Hatchery.

## 9.6.1.12 Early Kenai River King Salmon Enhancement

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project will provide an additional harvest of 5,000 king salmon to satisfy 25,000 man-days of effort. Optimal king salmon smolt release size and timing must be determined. Additionally, a trap has been constructed in the lower Kenai River to assess supplemental king salmon production utilizing tag and recovery methods.”*

Subsequent Developments:

A study to determine the optimal king salmon smolt release size and timing was implemented by ADF&G in which they tagged chinook fingerlings in the Killey River and looked for them the following spring in the Killey and also in the mainstem of the Kenai River. The subsequent enhancement possibilities for early Kenai River king salmon were not approved

## 9.6.1.13 Late Kenai River Coho Salmon Enhancement

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project will provide an additional harvest of 10,000 coho salmon to satisfy 20,000 man-days of effort. It will require identification of major concentration areas of late run spawning coho salmon for brood stock development and determination of optimal coho salmon smolt release size and timing.”*

Subsequent Developments:

Coho salmon were stocked in the Kenai River system in Grant Lake, Quartz Creek, and Tern Lake. Engineer Lake was believed to be landlocked, and it was stocked with Coho, by ADF&G. It appears that over time a connection may have developed between Engineer Lake and Hidden Lake. ADF&G staff observed several large coho in Hidden Creek, a tributary to Kenai River. There is a possibility that cohos that were seen in Hidden Creek were there as a result of certain flow conditions which may connect Engineer Lake to the portions of the Kenai River system that are open to anadromous salmon. Engineer is no longer stocked.

9.6.2 Projects Identified and Implemented After Publication of the Phase I Plan 1981 - 2000

Several projects were identified and implemented after the publication of the Phase I Plan 1981 - 2000, and they were all in the Kenai River system within the Upper Peninsula / Kenai River Unit.

## 9.6.2.1 Quartz Creek Sockeye Salmon Stocking

Quartz Creek was stocked with sockeye salmon once in 1983 (1,230,000 fry). There does not appear to be any record of an evaluation of the project, but it was terminated after the 1983 stocking.

## 9.6.2.2 Quartz Creek Coho Salmon Stocking

Quartz Creek was stocked with coho salmon in 1983 (38,200 fry), 1984 (38,000 fry) and 1985 (38,400 fry). There does not appear to be any record of an evaluation of the project, but it was terminated after the 1985 stocking.

## 9.6.2.3 Tern Lake Coho Salmon Stocking

Tern Lake in the upper part of the Quartz Creek drainage was stocked with coho salmon in 1983 (37,000 fry), 1984 (37,000 fry) and 1985 (37,800 fry). There does not appear to be any record of an evaluation of the project, but it was terminated after the 1985 stocking.

## 9.6.2.4 Grant Lake Coho Salmon Stocking

In a cooperative project between the U.S. Forest Service, ADF&G and CIAA Grant Lake was stocked with coho salmon in 1983 (518,000 fry), 1984 (699,000 fry), 1985 (495,000 fry) and 1986 (230,000 fry). A waterfall about 0.5 miles downstream from the Lake prevents adult salmon from reaching the Lake. The intent of this project was to evaluate how well the natural rearing capacity of the Lake might be used to increase the overall return of adult coho salmon to the Kenai River system. CIAA operated a weir in Grant Creek in 1985, 1986 and 1987 to enumerate the adult return; and the adult counts were respectively 1,113, 846 and 1,816. The project was terminated following the 1987 adult enumeration.

#### 9.6.2.5 Dave's Creek King Salmon Spawning Pools

In 1983 the U.S. Forest Service and CIAA cooperated in constructing several step-pools in Dave's Creek at the outlet of Tern Lake in the Quartz Creek drainage. The intent of the pools was to create additional king salmon spawning area.

#### 9.6.2.6 Daniels Lake Flow Control Structure

Sockeye salmon migrate up Bishop Creek and then Daniels Creek into Daniels Lake to spawn. Several years of observation revealed that inadequate flows in Daniels Creek frequently impaired the ability of adult salmon to make it into the Lake. In one year as many as 2,000 carcasses of adult fish that were unable to reach the Lake were found in the Creek. In 1986 a small flow control structure was designed for installation at the outlet of Daniels Lake so that some water could be stored in the lake for release at a time when it would enable successful migration for the returning salmon. In 1987 CIAA installed that structure and has operated it annually since that time.

#### 9.6.2.7 Cooperative Daniels Lake Habitat Project

The Natural Resources Conservation Service (NRCS), a part of the U.S. Department of Agriculture, oversees the Wildlife Habitat Incentives Program (WHIP). In 2000 a cooperative agreement between the NRCS and CIAA to carry out a habitat rehabilitation and improvement project at the outlet of Daniels Lake was signed. The downstream side of the embankment where the road crosses Daniels Creek had eroded to the point that it was restricting passage of fish. A habitat project that involved stabilization and revegetation of that embankment was implemented and completed.

#### 9.6.2.8 Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems

This investigation is being conducted by the Kachemak Bay Research Reserve in cooperation with the University of Alaska, Fairbanks; the University of Alaska, Anchorage and the U.S. Geological Survey and is funded by the Exxon Valdez Oil Spill Trustee Council. It is a three-year study (2004 – 2006) to develop monitoring tools for tracking marine derived nutrients in Alaskan watersheds. The Russian River, Quartz Creek and Ptarmigan Creek were the systems in the Upper Peninsula / Kenai River Unit to be included in the study, but there were an additional eight rivers in four of the other units described in this *Phase II Plan 2006 – 2025*.

#### 9.6.2.9 Russian River Bank Stabilization

The U.S. Forest Service has an ongoing project to stabilize the banks of the Russian River in the area where there is the very popular recreational fishery.

### 9.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

9.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

9.7.1.1 River Bank Degradation on the Kenai River

River bank degradation primarily from development and foot traffic causes the loss of habitat particularly valuable to immature salmon. In addition it can increase both the rate of erosion and the volume and nature of runoff. These types of alterations of the water quality and the perhaps the localized course of the river are also threatening to the river's anadromous salmon production.

9.7.1.2 Hydrocarbon Levels in the Kenai River and Uplands

The loss of water quality through the introduction of hydrocarbons either directly into the water through engine use or less directly through runoff is a significant issue for anadromous salmon production.

9.7.1.3 Impacts of ATV Use in All Areas

All-terrain vehicles (ATV's) can break down vegetation both on the stream bank and in the more upland areas. This can have the types of effects described in Section 9.7.1.1 above. In addition they have the ability to operate directly in the water column in the smaller tributary systems. This is an issue for continued anadromous salmon production.

9.7.1.4 Impacts of Migration Barriers Such as Culverts

The main streams and many of their tributaries are crossed by the primary road system in the area and many of the secondary and private roads. Each such crossing presents an opportunity for the creation of a barrier to salmon migration.

9.7.1.5 Impacts of Invasive Plants

The potential damage done by various invasive plant species is gaining wider attention. The ability of invading plants to out compete native species and substantially alter the environment is well documented. To the extent that the "new" environment is less hospitable to anadromous salmon the change threatens anadromous salmon production.

9.7.1.6 Impacts of Increasing Water Temperatures

Salmon are sensitive to changes in temperature regimes, and it appears that water temperatures in the lakes of the Upper Peninsula systems and Kenai River system are increasing. These lakes are particularly important to the spawning and rearing of sockeye salmon, and temperatures that would result in negative impacts to these juvenile fish pose a threat to overall anadromous sockeye salmon production.

### 9.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of one specific anadromous salmon run and two more generalized run patterns in this unit for which there is insufficient data to make informed decisions.

#### 9.7.2.1 Skilak Lake Sockeye Salmon [AWC 247-60-10230]

Recent studies point to a smaller number of sockeye salmon fry in Skilak Lake and a much smaller size for the fry that are there. It will be significant to identify the causes and develop recommendations for remedial actions.

#### 9.7.2.2 Bishop Creek Sockeye Salmon [AWC 247-90-10030]

This project is in the scoping phase of studies that could determine the reasons for the apparent continual decline in the health of the salmon stocks returning to Bishop Creek. Studies could include: adult salmon enumeration weir; smolt out migration monitoring; limnological assessment of the watershed; radio telemetry; genetic sampling; investigation of the watershed for invasive species specifically northern pike and introduced aquatic plant life; and other projects which would collect data which would assist in providing insight as to why the fish populations in Bishop Creek may be in decline.

### 9.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

#### 9.7.3.1 ADF&G Moose River Coho Salmon Smolt Weir

This project is designed to estimate the coho salmon smolt abundance within the Kenai River drainage using mark-recapture methodology. This project provides for the marking of juvenile coho salmon in the drainage, which is an integral step to estimating smolt abundance. Juvenile coho salmon will be captured as smolt in the Moose River (a Kenai River tributary) and marked with coded, microwire tags. The recapture event is a companion fishwheel project that samples adults in-river to estimate the fraction of the population carrying a tag.

#### 9.7.3.2 ADF&G Kenai River Coho Fishwheel Index

Beginning in 2005, a fishwheel index project was implemented that discriminates Kenai River coho salmon spawner abundance into three classifications (low, medium, and high). The index of return strength is based on fishwheel data and abundance estimates obtained during 1999-2004. This fishwheel index project will use a regression of historic estimated abundance and the natural logarithm on the cumulative catch-per-unit-of-effort (CCPUE) to assign a general spawner abundance classification. This index project provides a useful in-season assessment tool for managers while

providing a post season spawner abundance classification. Companion projects estimate in-river harvest and smolt abundance providing complimentary information with which to assess the population. Together with estimates of smolt production from a companion project, the information from this project will also provide perspective with which to interpret smolt abundance trends.

9.7.3.3 **ADF&G** Northern Pike Predator Control and Removal in Peninsula Lakes

This project is intended to assess the spread of northern pike in the Northern Kenai Peninsula, Anchorage, North Cook Inlet and potentially other management areas; and investigate potential means of control. Support for the work will be sought through grant proposals and cooperative agreements with agencies such as USFWS. Control has primarily been with overnight gill net sets. Lakes with invasive northern pike are being surveyed for volume, inflow and outflow, and water chemistry for possible application of rotenone in the near future.

9.7.3.4 **ADF&G** Russian River Sockeye Salmon Weir

A weir located at the outlet of Lower Russian Lake is used to enumerate the spawning escapement as well as provide a means to trap fish and collect age, sex, and length information. Estimates of sport harvest, in-river return, and the age-sex composition of each run provide information to evaluate spawner/return relationships. These data are necessary to estimate appropriate levels of spawning escapement.

9.7.3.5 **ADF&G** Kenai River King Salmon Genetic Stock Identification

ADF&G will collect baseline information to implement a genetic stock identification program for Kenai River king salmon. King salmon that spawn in the mainstem and in tributaries of the Kenai River will be sampled to develop a genetic baseline database. In subsequent years king salmon will be captured in the lower Kenai River to estimate and determine overlap in the return timing and in-river harvest of tributary and mainstem spawning fish. The baseline data will be added to the coast-wide genetic database maintained by the Pacific Salmon Commission Chinook Technical Committee.

9.7.3.6 **ADF&G** Kenai River Sockeye Salmon Population Estimate

A capture-recapture experiment will be conducted cooperatively by ADF&G Commercial Fisheries Division, ADF&G Sport Fish Division and Cook Inlet Aquaculture Association (CIAA) to estimate passage (abundance) of Kenai River sockeye salmon at river mile 19. Assessment of sockeye salmon from the Kenai Rivers is important. Knowledge of annual run size and total returns from a given spawning escapement will provide better information on stock productivity, maximum sustained yield, and escapement goals.

9.7.3.7 **ADF&G** Late Russian River Sockeye Salmon Genetic Stock Identification

Assessment of sockeye salmon from both the Kenai and Russian rivers is important. Knowledge of annual run size and total returns from a given spawning escapement will provide better information on stock productivity, maximum sustained yield, and escapement goals. Run-size of late-run Russian River sockeye salmon is unknown because there is no information on the harvest of these fish in the commercial or

mainstem Kenai recreational fisheries. Genetic characteristics of late-run Russian River sockeye salmon will be used to estimate harvest of the stock in the mixed-stock commercial and recreational fisheries.

9.7.3.8 **ADF&G** Kenai River King Salmon Sonar

A sonar installation at river mile 8.6 on the Kenai River is used to assess the escapements of king salmon in both the early run and the late run. This project has been operating since 1987, and its continued operation is planned.

9.7.3.9 **ADF&G** Kenai River King Salmon Creel Survey

The Kenai River Chinook salmon fishery sustains in excess of 125,000 angler-days of effort annually. Ability to sustain effort is contingent upon achieving and refining escapement goals and meeting management plan guidelines. This project provides funding for operating an onsite creel survey in the lower Kenai River that provides in-season estimates of catch, harvest, and angler effort.

9.7.3.10 **ADF&G** Kenai River King Salmon Sampling

The Kenai River Chinook salmon fishery sustains in excess of 125,000 angler-days of effort. Ability to sustain effort is contingent upon achieving and refining escapement goals and meeting management plan guidelines. This project provides funding to sample the inriver return as well as the commercial and sport harvest of Chinook salmon to estimate the age, sex, and length composition of each component. In addition, the project funds a drift-netting project to estimate the species composition and relative abundance of fish passing the Chinook salmon sonar

9.7.3.11 **ADF&G** Stocked Lakes Evaluation

The stocked lakes on the Kenai Peninsula are surveyed to assess what fish species are present and provide the age and length composition of each species. The information gained from this program provides information for the sport fishing public, therefore, maximizing sport fishing opportunities. In addition, these data can be used as a yardstick for measuring stocking success and fine-tuning stocking effort on the Kenai Peninsula's stocked lakes.

9.7.3.12 **ADF&G** Kenai River Sockeye Salmon Sonar

ADF&G has been operating the Kenai River sockeye sonar project since 1970. The escapement information gathered through this project is critical to the management of the various fisheries that harvest this anadromous salmon resource. ADF&G plans to continue this project.

9.7.3.13 **CIAA** Daniels Lake Flow Control Structure

The purpose of the Daniels Lake flow control structure was to assure that there would be sufficient flow in Daniels Creek to allow adult salmon back upstream into Daniels Lake. CIAA had the structure designed and installed in 1987 and has operated it annually since then. It plans to continue that project.



9.7.3.14 **CIAA** Hidden Lake Sockeye Salmon Stocking

This stocking project was designed to make use of excess rearing capacity in Hidden Lake. Although ADF&G started the project in 1970, it has been a CIAA project since 1988. Annual limnological work is conducted in conjunction with the stocking, and CIAA plans to continue the project.

9.7.3.15 **USFS** Russian River Bank Stabilization

The U.S. Forest Service has an ongoing project to stabilize the banks of the Russian River in the area where there is the very popular recreational fishery and plans to continue that work.

9.7.3.16 **USFS** Public Education – Invasive Fish Species

In cooperation with ADF&G and the U.S. Fish and Wildlife Service the U.S. Forest Service will post signs in FY 07 and 08 at popular fishing areas to educate the public on the effects of spreading invasive species. The goal is to make the public aware of the possible disastrous effects to commercial, sport and subsistence fisheries caused by illegal introductions of pike and perch.

9.7.3.17 **USFS** Public Outreach and Education

The U.S. Forest Service provides for annual in-school programs. The programs address the importance of healthy ecosystems for fish, the fish life cycle, the role of carcasses and the nutrient cycle, basic hydrology and many other related issues. The program reaches over a thousand youth per year in the schools of the affected areas.

9.7.3.18 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

## 9.7.4 Proposed New Anadromous Salmon Projects

9.7.4.1 **ADF&G** Kenai River King Salmon Population Estimate

This project would use radio telemetry to estimate the exploitation rate of the in-river sport fishery; by relating exploitation rate to an estimate of sport harvest a second estimate (first estimate provided by sonar) of abundance for early and late run king salmon in the Kenai River would be generated. The marking would take place in the lower Kenai River where king salmon would be captured with drift gillnets, sampled for age-sex-length, fitted with a radio tag and released. Recapture would be in the in-river sport fishery. Crews would sample the sport fishery harvest for age, sex, length and marks. An existing floating weir operated by the USFWS on a tributary (Funny River) could also be used as a secondary recapture location for an early run population estimate.

9.7.4.2 **ADF&G** Stormy Lake Northern Pike Barrier

Funding of this project would be used to have an engineering plan for a control structure or blocking structure at the outlet of Stormy Lake. Stormy Lake is known to

have invasive northern pike, and has a short (~1/4 mile) ephemeral outlet to the Swanson River drainage. The Swanson River has large wild populations of coho and sockeye salmon, Dolly Varden and rainbow trout that would be severely impacted if northern pike moved into this system. This study would include evaluating the total blockage of fish passage into and out of Stormy Lake versus the installation of a fish barrier structure that would selectively allow for restricted fish passage into and out of the lake.

9.7.4.3 **ADF&G** West Fork Moose River Northern Pike Survey

Assess presence of invasive northern pike in the West Fork Moose River drainage. Lakes in this drainage were surveyed in the mid-1990's by the USFWS with hoop nets; no northern pike were captured. If this project were funded, lakes would be sampled with gillnets for northern pike. The Moose River has large, wild populations of juvenile coho and sockeye salmon, Dolly Varden and rainbow trout that would be severely impacted if northern pike moved into this system. The Department has had credible reports of northern pike sightings in the Moose River drainage for over twenty years.

9.7.4.4 **ADF&G** Kenai River Bank Erosion Assessment

This project uses historical photography (1975 and 1984) and a recent set (1998) to assess habitat changes along the lower 50 miles of the Kenai River. Photos will be ortho-corrected to the same scale and change detection will be performed to assess bank position changes (erosion) and riparian cover changes by various cover classes within 200ft of each river bank. Currently, we do not have funding to complete this project.

9.7.4.5 **ADF&G** Slikok Creek Culvert Assessment

Using PIT technologies, we will monitor juvenile fish passage at an existing culvert, rated as a barrier, on Slikok Creek. The culvert will be replaced with an improved culvert in June 2007 and we will repeat the study. We will compare the proportion of successful passages for the existing culvert with those of the replacement culvert as well as relating passage with hydraulic conditions of the stream.

9.7.4.6 **USFWS** Funny River King Salmon Weir

Starting in 2006 the U.S. Fish and Wildlife Service installed and operated a weir in Funny River for the purpose of determining the abundance and run timing of king salmon in that system. The four specific objectives of the project are (1) to enumerate adult king salmon entering Funny River; (2) to determine the run timing of adult king salmon entering Funny River; (3) to estimate the age and sex composition of the king salmon escapement into Funny River from May 15 through July 31 such that the estimates for each group are within 10 percentage points of the true values 95 percent of the time; and (4) to collect genetic tissue samples from a sample of 202 king salmon that spawn in Funny River.

The project site where the weir and the video system are located is about one half mile above the intersection of Funny River Road and Funny River.

This is a cooperative project between the Service and ADF&G and is scheduled to continue through 2008. It is hoped that information from this project will refine data

previously gathered in the 1980's and 1990's in other projects. Among the questions needing further resolution are the degree of overlap between the early-run and the late-run and the abundance of tributary stocks.

9.7.4.7 **USFS** Cooper Creek Habitat Restoration

The lower half mile of Cooper Creek was severely disturbed by placer mining at the turn of the century. The U.S. Forest Service plans to design and rebuild the channel so that it is appropriate for the current flow regime and the lost fish habitat is restored. The work is planned for FY 08.

9.7.4.8 **USFS** Tern Lake Culvert Replacement

The culvert at Tern Lake is in need of replacement, and the U.S. Forest Service is planning to use a new design that is even more fish friendly. The work is planned for FY 09.

9.7.4.9 **USFS** Dave's Creek Habitat Restoration

Near the outlet of Tern Lake, meanders of Dave's Creek have been isolated and the stream channel straightened as a result of highway construction. The U.S. Forest Service plans to redesign the channel in FY 09 to the proper gradient and sinuosity to restore fish habitat in this important spawning and rearing area.

9.7.4.10 **USFS** Quartz Creek Bank Stabilization

This stream has been increasing dramatically in popularity with recreational fishermen, and consequently the banks are eroding near angler access points. The USFS is planning to stabilize these areas as needed on an annual or semi-annual basis.

9.7.4.11 **USFS** Public Education – Invasive Species

In cooperation with ADF&G and other agencies the U.S. Forest Service is in the process of publishing an invasive species plan to address the risks of invasive plants and animals to the aquatic and terrestrial environments.

9.7.4.12 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

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## CHAPTER 10.0

### KASILOF RIVER / MID-PENINSULA UNIT ANALYSIS

#### 10.1 OVERVIEW

There are only five drainage systems that empty into Cook Inlet from this unit; and only one of those, the Kasilof River system, is considered a major salmon producer in Cook Inlet. The remaining four are the Ninilchik River, Deep Creek, Stariski Creek and the Anchor River. While each of these has localized recreational importance, the number of salmon each produces is limited.

The Sterling Highway transects each of these systems relatively near their mouths, and this makes them very accessible for recreational users. This use is supported by a series of strategically placed state-owned and state-operated campgrounds.

One of the more publicly visible and recognized hatcheries was situated where the Sterling Highway crosses Crooked Creek, a tributary of the Kasilof River. Operational responsibility for that facility was transferred from the State to CIAA in 1993, and it was eventually closed in 1997. Although the site still functions as an egg-take location, the hatchery has been demobilized in a fashion that largely precludes its reopening for supplemental production.

#### 10.2 RELEVANT LAND USE POLICIES

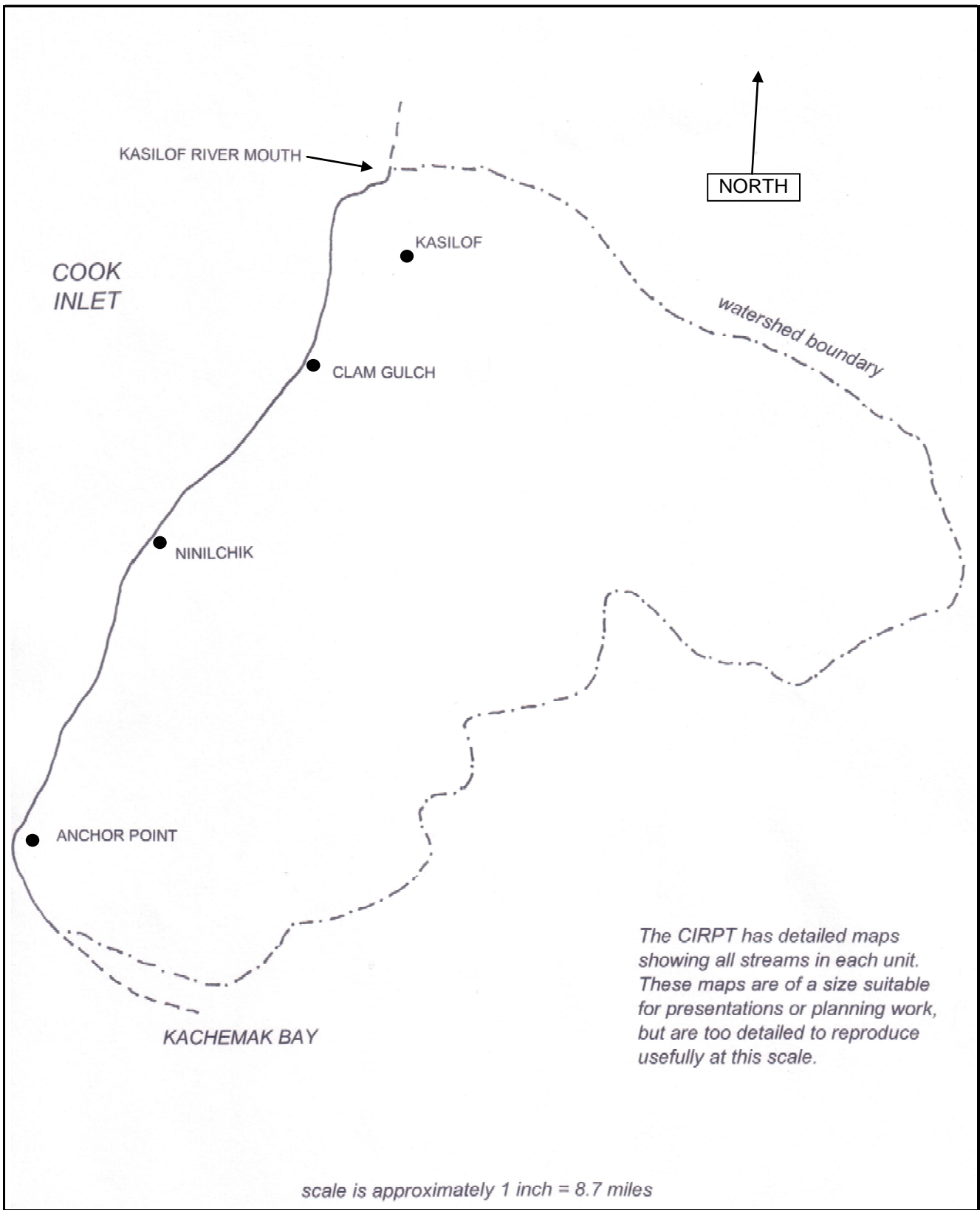
##### 10.2.1 United States Fish and Wildlife Service

The policies of the U.S. Fish and Wildlife Service come into play largely because the Kasilof River originates on the Kenai National Wildlife Refuge and so much of the river's drainage rests within the boundaries of the Refuge and more specifically within the Andrew Simons Wilderness Unit. While the uppermost reaches of the Ninilchik River and Deep Creek are inside the boundaries of the Refuge, for purposes of this planning effort the constraints on enhancement activities imposed by the U.S. Fish and Wildlife Service are not a factor for these streams. Both Stariski Creek and Anchor River are outside the boundaries of the Refuge.

A sockeye salmon stocking project that had been going on in Tustumena Lake since 1974 was suspended by a December 30, 2003 decision by the 9<sup>th</sup> Circuit Court of Appeals in a case brought against the U.S. Fish and Wildlife Service by the Alaska Center for the Environment and the Wilderness Society. The decision held the project was "a commercial enterprise" and, therefore, should not have been permitted in a wilderness area by the U.S. Fish and Wildlife Service.

The policy set forth in Comprehensive Conservation Plan for the Kenai National Wildlife Refuge states that in wilderness areas fish egg takes would be allowed "in the field for hatchery use in developing population for use in re-establishing historic populations and population levels." Subsequent discussions with USFWS staff have led to belief this statement means that with genetic approval from ADF&G and appropriate consultation with USFWS those eggs would be

**EXHIBIT 10-1 KASILOF RIVER /MID-PENINSULA UNIT MAP**



available for "out stocking" in systems outside the Refuge. With respect to on-site fisheries enhancement work the same document states that "actions taken to increase fisheries stocks above historic levels" including "lake fertilization, stocking, building hatcheries and fish passages, and artificially incubating fish in streams" will not be permitted.

However, a 1987 memorandum which has as a subject "Clarification of Region 7 Fisheries Management Policies for Refuge Comprehensive Conservation Plans (CCP's)" makes the following points.

- \* On all refuge lands in Alaska (including designated wilderness) maintaining, rehabilitating, and enhancing existing fish populations is permitted, where compatible with the purpose of the refuge.
- \* In general, restoration activities will be looked upon more favorably than enhancement activities on refuges in Alaska.
- \* Long-term (i.e., permanent) facilities may be permitted outside designated wilderness areas for maintenance, restoration and enhancement activities.
- \* In designated wilderness areas, temporary facilities may be permitted to maintain, restore or enhance fisheries if the stocks have been reduced or are threatened as long as the facilities do not significantly detract from wilderness values.
- \* New permanent facilities will not be permitted in designated wilderness for fisheries management purposes unless they are essential to accomplish refuge objectives.
- \* Existing facilities may remain and new facilities may be built for fisheries research and monitoring on all refuge lands in Alaska.
- \* In making compatibility determinations in designated wilderness areas the Service will consider wilderness values.

The following definitions meet the Service's needs within the CCP's and may be compared to the definitions being used by the CIRPT as described in the INTRODUCTION of this document:

- \* Enhancement - Procedures applied to a fish stock to supplement numbers of harvestable fish to a level beyond what could be naturally produced based upon a determination or reasonable estimate of historic levels. This could be accomplished by artificial production systems. It can also be an increase of the amount of productive habitat in the natural environment through physical or chemical change.
- \* Restoration - Increasing fishery resources to allow full utilization of available habitat or to a population objective based on a determination or reasonable estimate of historic levels. While the goal of restoration is self sustaining populations, situations will exist where the impact (e.g., habitat degradation) is such that some form of fishery management or mitigation activity could continue indefinitely."

Recent input from the U.S. Fish and Wildlife Service indicates that all activities are now subject to consistency reviews and any proposed fisheries work in wilderness areas would be reviewed on a case-by-case basis and considered only under exceptional circumstances.

10.2.2 Alaska Department of Natural Resources:

The Alaska Department of Natural Resources through its Division of Parks has responsibility for the various recreation areas / campgrounds sited on or near the rivers in this unit.

In conjunction with its general responsibilities for State lands the Alaska Department of Natural Resources (ADNR) published the *Kenai Area Plan* (KAP) in 2000. The boundaries of the area covered by this plan are coincidental with the boundaries of the Kenai Peninsula Borough; therefore, all of the Kasilof River / Mid-Peninsula Unit is covered by the ADNR plan. The KAP is probably the best consolidated reference for land ownership patterns in the Unit.

The plan directs how ADNR will manage state uplands, tidelands, and submerged lands within the area it covers. In addition to its general management intent and management guidelines the KAP specifically addresses the Kasilof River / Mid-Peninsula Unit in the sections designated Region 6 – Kasilof River Drainage and Region 7 – Homer.

10.2.3 Kenai Peninsula Borough:

All of the Kasilof River / Mid-Peninsula Unit is within the Kenai Peninsula Borough, only a very small portion of the land is actually owned by the Borough. The Borough does, however, plan for the development and use of resources within the Borough boundaries on land held by others.

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue such things as land use permits through which it can have an influence on project implementation.

In addition it makes consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program.

**10.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 10-2A through 10-2E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G’s historical escapement counts.

**KEY FOR EXHIBITS 10A THROUGH 10E**

In the following exhibits there are numbers of fish cited under two headings, *“Highest Number of Fish Reported for the System”* (column 3) and *“Most Recent Number of Fish Reported for the System”* (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations



GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 10-2A										KASILOF RIVER / MID-PENINSULA UNIT KING SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Kasilof R. (mainstem)	244-30-10050	20,746 SC 1990	20,746 SC 1990																
Coal C.	244-30-10050-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Crooked C.	244-30-10050-2024	12,656 WC 1986	5,191 WC 2004																
Unnamed Tributary	244-30-10050-2024-3058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2024-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Shantatalik C.	244-30-10050-2059	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2059-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Nikolai C.	244-30-10050-2060	3 GS 1977	2 GS 1983																
Unnamed Tributary	244-30-10050-2060-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Fox C.	244-30-10050-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Bear C.	244-30-10050-2075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2075-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Pipe C.	244-30-10050-2085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Moose C.	244-30-10050-2099	6 GS 1977	2 GS 1983																
Unnamed Tributary	244-30-10050-2099-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2099-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Indian C.	244-30-10050-2115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Glacier C.	244-30-10050-2121	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Seepage C.	244-30-10050-2127	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2127-3006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2127-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Crystal C.	244-30-10050-2134	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Clear C.	244-30-10050-2135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Nimlichik R.	244-20-10090	2,400 TCU 1993	2,400 TCU 1993																

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EXHIBIT 10-2A		KASIOLOF RIVER / MID-PENINSULA UNIT KING SALMON							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Unnamed Tributary	244-20-10090-2030	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10090-2030-3019	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-20-10090-2030-3036	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-20-10090-2057	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-20-10090-2070	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10090-2096	UNKNOWN	UNKNOWN					
	Deep C.	244-20-10100	4,773 SH 1979	1,305 TCU 1993					
	Clam C.	244-20-10100-2010	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10100-2010-3041	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-20-10100-2019	UNKNOWN	UNKNOWN					
	South Fork	244-20-10100-2030	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10100-2030-3013	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10100-2030-3015	UNKNOWN	UNKNOWN					
	North Fork	244-20-10100-2045	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10100-2045-3016	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Cuter C.	244-20-10100-2065	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-20-10100-2070	UNKNOWN	UNKNOWN					
	Stariski C.	244-10-10050	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-10-10050-2012	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-10-10050-2040	UNKNOWN	UNKNOWN					
	Anchor R.	244-10-10010	5,250 TCU 1962	112 TCU 1995					
	North Fork	244-10-10010-2011	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-10-10010-2011-3008	UNKNOWN	UNKNOWN					
	Chakok R.	244-10-10010-2011-3031	UNKNOWN	UNKNOWN					
	Unnamed Tributary	244-10-10010-2011-3031-4022	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
[ continued on following page ]									

EXHIBIT 10-2A [continued from preceding page]									
KASIOF RIVER / MID-PENINSULA UNIT KING SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-10-10010-2011-3031-4038	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2021	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-10-10010-2088	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-10-10010-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Twitter C.	244-10-10010-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bridge C.	244-10-10010-2100-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-10-10010-2103	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2125	UNKNOWN	UNKNOWN						
Beaver C.	244-10-10010-2150	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2150-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-10-10010-2201	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2201-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-10-10010-2217	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

EXHIBIT 10-2B		KASILOF RIVER / MID-PENINSULA UNIT SOCKEYE SALMON									
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
MAY	JUNE					JULY	AUG.	SEPT.			
Kasilof R. (mainstem)	244-30-10050	577,581 SC 2004	348,012 SC 2005								
Coal C.	244-30-10050-2015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Crooked C.	244-30-10050-2024	1,100 GS 1990	1,100 GS 1990								
Unnamed Tributary	244-30-10050-2024-3058	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	244-30-10050-2024-3036	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	244-30-10050-2040	UNKNOWN	UNKNOWN								
Shantatalik C.	244-30-10050-2059	3,500 TCU 1960	3,500 TCU 1960								
Unnamed Tributary	244-30-10050-2059-3010	UNKNOWN	UNKNOWN								
Nikolai C.	244-30-10050-2060	63,723 WC 1994	1,342 GS 2004								
Unnamed Tributary	244-30-10050-2060-3015	UNKNOWN	UNKNOWN								
Fox C.	244-30-10050-2070	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Bear C.	244-30-10050-2075	127,532 WC 1988	31,084 GS 2005								
Unnamed Tributary	244-30-10050-2075-3025	UNKNOWN	UNKNOWN								
Pipe C.	244-30-10050-2085	1,377 GS 1986	1,377 GS 1986								
Moose C.	244-30-10050-2099	28,934 GS 2004	11,191 GS 2005								
Unnamed Tributary	244-30-10050-2099-3009	UNKNOWN	UNKNOWN								
Unnamed Tributary	244-30-10050-2099-3010	UNKNOWN	UNKNOWN								
Indian C.	244-30-10050-2115	1,000 TCU 2004	1,000 TCU 2004								
Glacier C.	244-30-10050-2121	UNKNOWN	UNKNOWN								
Seepage C.	244-30-10050-2127	25,000 TCU 1946	535 GS 2004								
Unnamed Tributary	244-30-10050-2127-3006	UNKNOWN	UNKNOWN								
Unnamed Tributary	244-30-10050-2127-3008	UNKNOWN	UNKNOWN								
Crystal C.	244-30-10050-2134	1,930 GS 1992	94 GS 2005								
Clear C.	244-30-10050-2135	7,704 GS 1987	167 GS 2005								
Nimlichik R.	244-20-10090	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									

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EXHIBIT 10-2B [continued from preceding page]										KASILOF RIVER / MID-PENINSULA UNIT SOCKEYE SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.		SEPT.				
Unnamed Tributary	244-20-10090-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10090-2030-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10090-2030-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10090-2057	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10090-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10090-2096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Deep C.	244-20-10100	2,000 TCU 1983	2,000 TCU 1983	TIMING UNKNOWN									
Clam C.	244-20-10100-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10100-2010-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10100-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
South Fork	244-20-10100-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10100-2030-3013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10100-2030-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
North Fork	244-20-10100-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10100-2045-3016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Cuter C.	244-20-10100-2065	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-20-10100-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Stariski C.	244-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-10-10050-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-10-10050-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Anchor R.	244-10-10010	212 WC 1989	73 TCU 1995	TIMING UNKNOWN									
North Fork	244-10-10010-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-10-10010-2011-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Chakok R.	244-10-10010-2011-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	244-10-10010-2011-3031-4022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
[ continued on following page ]													

EXHIBIT 10-2B		[continued from preceding page]		KASILOF RIVER / MID-PENINSULA UNIT SOCKEYE SALMON				
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			SEPT.	
				MAY	JUNE	JULY		AUG.
Unnamed Tributary	244-10-10010-2011-3031-4038	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2088	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Twitter C.	244-10-10010-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Bridge C.	244-10-10010-2100-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2103	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Beaver C.	244-10-10010-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2150-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2201	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2201-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2217	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

EXHIBIT 10-2C		KASLOF RIVER / MID-PENINSULA UNIT COHO SALMON							
USGS Name [ locally used name ]	Stream	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
					MAY	JUNE	JULY	AUG.	SEPT.
Kasilof R. (mainstem)		244-30-10050	689 SC 1985	369 SC 1989					
	Coal C.	244-30-10050-2015	UNKNOW	UNKNOW					
	Crooked C.	244-30-10050-2024	4,294 WC 1986	3,200 WC 1988					
	Unnamed Tributary	244-30-10050-2024-3058	UNKNOW	UNKNOW					
	Unnamed Tributary	244-30-10050-2024-3036	UNKNOW	UNKNOW					
	Unnamed Tributary	244-30-10050-2040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Shantatalik C.	244-30-10050-2059	UNKNOW	UNKNOW					
	Unnamed Tributary	244-30-10050-2059-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Nikolai C.	244-30-10050-2060	4 GS 1975	1 GS 1978					
	Unnamed Tributary	244-30-10050-2060-3015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Fox C.	244-30-10050-2070	UNKNOW	UNKNOW					
	Bear C.	244-30-10050-2075	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-30-10050-2075-3025	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Pipe C.	244-30-10050-2085	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Moose C.	244-30-10050-2099	1 GS 1976	1 GS 1976					
	Unnamed Tributary	244-30-10050-2099-3009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-30-10050-2099-3010	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Indian C.	244-30-10050-2115	UNKNOW	UNKNOW					
	Glacier C.	244-30-10050-2121	UNKNOW	UNKNOW					
	Seepage C.	244-30-10050-2127	1 GS 1972	1 GS 1972					
	Unnamed Tributary	244-30-10050-2127-3006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Unnamed Tributary	244-30-10050-2127-3008	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
	Crystal C.	244-30-10050-2134	1 GS 1972	1 GS 1972					
	Clear C.	244-30-10050-2135	4 GS 1975	1 GS 1979					
	Nimlichik R.	244-20-10090	UNKNOW	UNKNOW					

[ continued on following page ]



EXHIBIT 10-2C [continued from preceding page] KASIOF RIVER / MID-PENINSULA UNIT COHO SALMON									
Stream	Anadromous Waters Catalog Number	Historic High Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-20-10090-2030	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10090-2030-3019	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10090-2030-3036	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10090-2057	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10090-2070	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10090-2096	UNKNOWWN	UNKNOWWN						
Deep C.	244-20-10100	883 RH 1980	883 RH 1980						
Clam C.	244-20-10100-2010	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10100-2010-3041	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10100-2019	UNKNOWWN	UNKNOWWN						
South Fork	244-20-10100-2030	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10100-2030-3013	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10100-2030-3015	UNKNOWWN	UNKNOWWN						
North Fork	244-20-10100-2045	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10100-2045-3016	UNKNOWWN	UNKNOWWN						
Cuter C.	244-20-10100-2065	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-20-10100-2070	UNKNOWWN	UNKNOWWN						
Stariski C.	244-10-10050	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-10-10050-2012	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-10-10050-2040	UNKNOWWN	UNKNOWWN						
Anchor R.	244-10-10010	20,187 WC 1989	725 TCU 1995						
North Fork	244-10-10010-2011	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-10-10010-2011-3008	UNKNOWWN	UNKNOWWN						
Chakok R.	244-10-10010-2011-3031	UNKNOWWN	UNKNOWWN						
Unnamed Tributary	244-10-10010-2011-3031-4022	UNKNOWWN	UNKNOWWN						

[ continued on following page ]

EXHIBIT 10-2C [continued from preceding page] KASIOF RIVER / MID-PENINSULA UNIT COHO SALMON									
Stream	Anadromous Waters Catalog Number	Historic High Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-10-10010-2011-3031-4038	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2021	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2025	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2088	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2090	UNKNOWN	UNKNOWN						
Twitter C.	244-10-10010-2100	UNKNOWN	UNKNOWN						
Bridge C.	244-10-10010-2100-3011	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2103	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2125	UNKNOWN	UNKNOWN						
Beaver C.	244-10-10010-2150	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2150-3020	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2201	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2201-3021	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-10-10010-2217	UNKNOWN	UNKNOWN						

KASILOF RIVER / MID-PENINSULA UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Kasilof R. (mainstem)	244-30-10050	11,276 SC 1989	3,293 SC 1990						
Coal C.	244-30-10050-2015	UNKNOWN	UNKNOWN						
Crooked C.	244-30-10050-2024	3 GS 1990	3 GS 1990						
Unnamed Tributary	244-30-10050-2024-3058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10050-2024-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10050-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Shantatalik C.	244-30-10050-2059	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10050-2059-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Nikolai C.	244-30-10050-2060	179 GS 1975	50 GS 1983						
Unnamed Tributary	244-30-10050-2060-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Fox C.	244-30-10050-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Bear C.	244-30-10050-2075	60 GS 1972	40 GS 2005						
Unnamed Tributary	244-30-10050-2075-3025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Pipe C.	244-30-10050-2085	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Moose C.	244-30-10050-2099	52 MC 1957	50 GS 1985						
Unnamed Tributary	244-30-10050-2099-3009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	244-30-10050-2099-3010	UNKNOWN	UNKNOWN						
Indian C.	244-30-10050-2115	98 MC 1954	98 MC 1954						
Glacier C.	244-30-10050-2121	120 MC 1962	1 GS 2005						
Seepage C.	244-30-10050-2127	27 GS 1976	5 GS 1981						
Unnamed Tributary	244-30-10050-2127-3006	UNKNOWN	UNKNOWN						
Unnamed Tributary	244-30-10050-2127-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Crystal C.	244-30-10050-2134	9 GS 1989	9 GS 1989						
Clear C.	244-30-10050-2135	32 GS 1980	3 GS 1992						
Nimlichik R.	244-20-10090	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

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EXHIBIT 10-2D [continued from preceding page]									
KASLOF RIVER / MID-PENINSULA UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	244-20-10090-2030			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10090-2030-3019			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10090-2030-3036			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10090-2057			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10090-2070			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10090-2096			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Deep C.	244-20-10100	795 RH 1980	795 RH 1980	TIMING UNKNOWN					
Clam C.	244-20-10100-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	244-20-10100-2010-3041			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10100-2019	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
South Fork	244-20-10100-2030			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10100-2030-3013			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10100-2030-3015			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
North Fork	244-20-10100-2045			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10100-2045-3016			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Culter C.	244-20-10100-2065			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-20-10100-2070			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Stariski C.	244-10-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	244-10-10050-2012			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10050-2040			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Anchor R.	244-10-10010	4,729 WC 1989	1,094 WC 1995	TIMING UNKNOWN					
North Fork	244-10-10010-2011	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	244-10-10010-2011-3008			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Chakok R.	244-10-10010-2011-3031			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	244-10-10010-2011-3031-4022			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 10-2D		KASILOF RIVER / MID-PENINSULA UNIT PINK SALMON							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Unnamed Tributary	244-10-10010-2011-3031-4038	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2025	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2088	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Twitter C.	244-10-10010-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Bridge C.	244-10-10010-2100-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2103	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Beaver C.	244-10-10010-2150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2150-3020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2201	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2201-3021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	244-10-10010-2217	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

EXHIBIT 10-2E										KASILOF RIVER / MID-PENINSULA UNIT CHUM SALMON										
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing																
				MAY	JUNE	JULY	AUG.	SEPT.												
Kasilof R. (mainstem)	244-30-10050		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Coal C.	244-30-10050-2015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Crooked C.	244-30-10050-2024		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2024-3058		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2024-3036		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Shantatalik C.	244-30-10050-2059		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2059-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Nikolai C.	244-30-10050-2060	2 GS 1977	1 GS 1978																	
Unnamed Tributary	244-30-10050-2060-3015		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Fox C.	244-30-10050-2070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Bear C.	244-30-10050-2075	1 GS 1956	1 GS 1977																	
Unnamed Tributary	244-30-10050-2075-3025		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Pipe C.	244-30-10050-2085		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Moose C.	244-30-10050-2099	1 GS 1975	1 GS 1975																	
Unnamed Tributary	244-30-10050-2099-3009		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2099-3010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Indian C.	244-30-10050-2115		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Glacier C.	244-30-10050-2121	1 GS 1972	1 GS 1972																	
Seepage C.	244-30-10050-2127	1 GS 1977	1 GS 1977																	
Unnamed Tributary	244-30-10050-2127-3006		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	244-30-10050-2127-3008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Crystal C.	244-30-10050-2134		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Clear C.	244-30-10050-2135	4 GS 1975	1 GS 1978																	
Nimilchik R.	244-20-10090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
[ continued on following page ]																				

EXHIBIT 10-2E [continued from preceding page]										KASILOF RIVER / MID-PENINSULA UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Unnamed Tributary	244-20-10090-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10090-2030-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10090-2030-3036	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10090-2057	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10090-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10090-2096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Deep C.	244-20-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Clam C.	244-20-10100-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10100-2010-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10100-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
South Fork	244-20-10100-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10100-2030-3013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10100-2030-3015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
North Fork	244-20-10100-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10100-2045-3016	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Cuter C.	244-20-10100-2065	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-20-10100-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Stariski C.	244-10-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-10-10050-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-10-10050-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Anchor R.	244-10-10010	165 WC 1989	4 TCU 1995	TIMING UNKNOWN															
North Fork	244-10-10010-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-10-10010-2011-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Chakok R.	244-10-10010-2011-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	244-10-10010-2011-3031-4022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
[ continued on following page ]																			

EXHIBIT 10-2E		KASILOF RIVER / MID-PENINSULA UNIT CHUM SALMON						
[continued from preceding page]								
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Unnamed Tributary	244-10-10010-2011-3031-4038			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2021			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2025			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2088			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Twitter C.	244-10-10010-2100			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Bridge C.	244-10-10010-2100-3011			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2103			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2125			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Beaver C.	244-10-10010-2150			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2150-3020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2201			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2201-3021			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	244-10-10010-2217			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				





Rationale: After reviewing the information about king salmon in the Kasilof River / Mid-Peninsula systems, the CIRPT determined there was no king salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

10.5.2 Sockeye Salmon

Stock identified: None

Rationale: After reviewing the information about sockeye salmon in the Kasilof River / Mid-Peninsula systems, the CIRPT determined there was no sockeye salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

10.5.3 Coho Salmon

Stock identified: None

Rationale: After reviewing the information about coho salmon in the Kasilof River / Mid-Peninsula systems, the CIRPT determined there was no coho salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

10.5.4 Pink Salmon

Stock identified: None

Rationale: After reviewing the information about pink salmon in the Kasilof River / Mid-Peninsula systems, the CIRPT determined there was no pink salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

10.5.5 Chum Salmon

Stock identified: None

Rationale: After reviewing the information about chum salmon in the Kasilof River / Mid-Peninsula systems, the CIRPT determined there was no chum salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

**10.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

10.6.1 Projects Identified in the Phase I Plan 1981 - 2000

## 10.6.1.1 Spawning Ground Survey

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project would deal with only Upper Cook Inlet and would be carried out primarily by the research arm of the Commercial Fish Division. The thrust of the project is to verify and explore the ramifications of sonar escapement counts where they exist and develop comparable monitoring where it would be useful and is not now in place. Three specific elements have now been defined within this general project. First, because of problems with migration outside the sonar counter, verification of the counts on the Kasilof River is necessary. Second, there should be a program to assess the distribution of spawners in the Kenai, Kasilof and Susitna River systems. Finally, it would be useful to develop an historical perspective on previous escapements in the Susitna system where sonar has only been in operation for two years.”*

Subsequent Developments:

A large number of stream surveys were done in the 80's and concluded in the early 90's, due to budget constraints. In 1988, surveys on Tustumena Lake tributary creeks accounted for more sockeye than were counted through sonar so an adjustment in the escapement numbers was made post-season to reflect the stream survey results. The difference was attributed to an early push of fish that were missed, but ADF&G staff suggest that the idea not be discounted that some fish could have passed outside the counter as well, which was mounted on an artificial substrate at that time. A paper published in 1995 discusses investigations done in 1989-1992 regarding shoreline spawning of sockeye in the Tustumena Lake (includes Kasilof River) system, this could also account for the difference in counts, i.e. that a large number of fish spawned in the lake itself, and not in the lake's tributary streams. Sonar monitoring of sockeye runs began in the 1960's on the Kenai River. An upward-looking array of transducers was deployed in the early days of sonar. By the mid or late 70's, side-scanning sonar replaced the upward-looking array. The side-scanners were originally mounted on a 60 ft artificial substrate but eventually were tested and approved for use without a substrate. All sites except Kasilof went substrateless in the late 80's and early 90's. Kasilof was converted to substrateless in 2003.

Sonar was first deployed in the Kasilof River about 1978, below the outlet of Tustumena Lake then moved to the highway bridge about 1982 or 83 because of problems at the previous site.

## 10.6.1.2 Upper Cook Inlet Run Modeling

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“There are serious time constraints on the data acquisition / management decision process which is central to the effective management of the Upper Cook Inlet fisheries. The continued development and refinement of a computer simulation model for the Upper Cook Inlet salmon stocks would be of marked assistance in data compilation and analysis.*

*“The types of data to be processed include catch, escapement, off-shore test fishing results, and in-district test fishing results. A management system has been developed to make possible in-season data analysis. The simulation techniques will allow the*

managers to evaluate variations in run timing, stock abundance, and harvest management tactics so that there can be appropriate applications of fishing times and area schedules.”

Subsequent Developments:

ADF&G has continued to examine and refine its run modeling process. The use of the off-shore test fishery and the sonar derived escapement counts continue to be the main components of this ongoing, in-season program.

10.6.1.3 Crooked Creek King Salmon Enhancement

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The goal of this F.R.E.D. project is to enhance the run of king salmon to Crooked Creek and to maintain a viable broodstock source at this site. A related goal is to assess the survival of hatchery released king salmon smolts to adult stage. It will be necessary to assess fingerling and/or smolt survival of hatchery released king salmon to adult stage and to determine adult escapement, age composition, length and weight of returning king salmon. There will be an estimate of commercial, subsistence and sport utilization of hatchery released king salmon. Finally, there will be determination of optimum size, number and time of release for hatchery reared king salmon in order to manage the program with biological and economic efficiency.”*

Subsequent Developments:

The hatchery is no longer used for incubation or rearing. Chinook salmon smolt from the Anchorage Hatchery Complex are brought here for imprinting early in the season. In the fall adults are allowed into 3 of the 4 outdoor raceways in preparation for ADF&G’s annual egg take procedures. Currently counts are made of all the fish that come into the raceways headed upstream of the weir at the hatchery. No sockeye are allowed upstream of the weir, due to risk of IHNV.

10.6.1.4 Evaluation of Responses to Sockeye Fry Stocking in a Lake with Naturally Reproducing Sockeye Stocks -Tustumena Lake

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“This two-part research project involves the Commercial Fish and F.R.E.D. Divisions of ADF&G in Soldotna and the Fishery Resources Program of the U.S. Fish and Wildlife Service in Kenai. Part one of the project is to determine the potential of oxytetracycline (OTC) marking and recovery analysis as a technique for evaluating sockeye fry stocking in Tustumena Lake. Part two involves the use of hydroacoustics to estimate the spatial and temporal distribution of juvenile sockeye salmon in Tustumena Lake. The combination of the two parts of the project will lead to the determination of which stocking densities and procedures provide the maximal survival of stocked fry which can be obtained without detrimental impact to natural stocks. ADF&G has a long history of research work on Tustumena Lake, one of the major sockeye producing systems in Cook Inlet. This project was initiated in 1981 with hydroacoustical surveys, and it will be ongoing through early 1986. The information obtained from this study should have wide application in the State of Alaska and will be particularly useful in*

*future evaluations of major sockeye producing systems in Cook Inlet. Although Tustumena Lake is currently the only major lake in Cook Inlet receiving substantial stocking of hatchery reared sockeye fry, significant expansion of hatchery sockeye production will occur in the near future. The techniques developed for evaluating stocking responses in Tustumena Lake and the results obtained from this investigation should be very useful in planning, coordinating and implementing an effective stocking program for sockeye production.”*

Subsequent Developments:

The early studies on Tustumena Lake were conducted by ADF&G with help from the USFWS Kenai Field Office. Carl Burger did limited telemetry work in a study done from 1989 to 1991. The main focus of the hydroacoustical surveys in the latter study was to determine spawning patterns in the tributaries versus the lake shoreline. No documentation for OTC marking and recovery analysis projects was found.

Subsequent studies continued through 2003 (see section 10.2.1) and at various times involved the ADF&G FRED Division and CIAA. Although smolt and adult enumeration are still being carried out, investigatory work in the lake has essentially stopped.

(also see related sections 10.6.1.6 and 10.6.1.7)

10.6.1.5 Anchor River King Salmon Study

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The Sport Fish Division of ADF&G and the Alaska Field Station of the National Fisheries Research Center plan to undertake a radio tagging study in 1982 to investigate the behavior of king salmon in the Anchor River. The tagging, which would occur near the mouth of the Anchor River, would be designed to yield information on travel patterns and timing and to determine the vulnerability of king salmon to the anglers.”*

Subsequent Developments:

There was never a radio tagging study on kings in the Anchor River.

10.6.1.6 Kasilof Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The Kasilof Hatchery functions as a remote incubation facility for sockeye salmon and as an egg take site for king salmon and steelhead. Selected tributaries of Tustumena Lake are the sources of sockeye salmon eggs which are taken to the hatchery and reared to the fed fry stage. The hatchery will be at its capacity of 20 million eggs in 1981. Most of the fry are released in Tustumena Lake. It is a F.R.E.D. facility that will account for 160,000 adult sockeye salmon by 1990. This projection is based on the assumption that appropriate levels of funding and staffing will be continued.”*

Subsequent Developments:

The Kasilof Hatchery (aka Crooked Creek Hatchery) was operated from 1973 to 1997. Although Tustumena Lake remained the principal focus of sockeye salmon stocking from the Kasilof Hatchery, by 1980 other locations were receiving sockeye salmon of Tustumena Lake origin through the Kasilof Hatchery. Notable among those other locations were some barriered lakes in Lower Cook Inlet. Glacier Flats Creek and Bear Creek were the broodstock sources. The hatchery was transferred to the operational control of CIAA in 1993. When it became clear that decreasing budgets would require CIAA to return the facility to State control for closure in 1996, the programs were transferred to Trail Lakes Hatchery and Eklutna Hatchery.

The Hatchery is no longer used for incubation or rearing. King salmon smolt are brought from the Anchorage Hatchery Complex for imprinting early in the season, and then in the fall adults are allowed into the 3 of the 4 outdoor raceways in preparation for ADF&G's annual egg take procedures. The old hatchery buildings (incubation, well and pump, rearing raceways) are now used for maintenance and storage facilities. Structures at the facility that are used for the king egg take include the diversion gates that bring water from Crooked Creek to the raceways, the raceways themselves, the egg take shelter, the weir structure (part is temporary and part is a permanent structure) a channel for water to leave the raceways and for the salmon to come up with assistance from a fish ladder. Seasonally on-site ADF&G staff count all the fish that come into the raceways. No sockeye are allowed upstream of the weir, due to risk of IHNV.

(also see related sections 10.6.1.4 and 10.6.1.7)

## 10.6.1.7 Kasilof Hatchery Evaluation

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"The aim of this funded and ongoing F.R.E.D. project is to assess the freshwater survival of sockeye salmon released from the Kasilof Hatchery into Tustumena Lake. A related goal from a separate project is to determine the sockeye salmon rearing capacity of Tustumena Lake based on data collected through this project and through a cooperative study with the U.S. Fish and Wildlife Service. The project will determine adult escapements in selected inlet streams of Tustumena Lake. The spring-to-fall survival of both wild and hatchery sockeye salmon fry rearing in Tustumena Lake will be determined as will the fry-to-smolt survival of sockeye salmon migrating from the Lake. Finally there will also be the collection of limnological data to assess the productive potential of the Lake."*

Subsequent Developments:

Sockeye salmon egg takes were initiated in the Tustumena Lake tributaries at Glacier Creek (formerly called Glacier Flats) in 1974. Broodstock sources varied over the years in the following pattern: 1974 and 1975 Glacier Creek; 1976 Glacier Creek, Bear Creek and Seepage Creek; 1977 Glacier Creek; 1978 through 1987 Glacier Creek and Bear Creek; 1988 and 1989 Glacier Creek; 1990 through closure of this hatchery following release of fish from brood year 1992 Bear Creek. Bear Creek continued to be the broodstock source from the time the Tustumena Lake project was transferred to Trail Lakes Hatchery in 1993 until suspension of the project in 2003.

The Kasilof Hatchery released coho salmon from Kitoi Lake into Halibut Cove Lagoon and sockeye salmon from Packers Lake back into Packers Lake in 1974. In 1975 the facility released sockeye salmon from Glacier Creek in Kitoi Bay and in Halibut Cove Lagoon and pink salmon from the Kenai River at Halibut Cove Lagoon.

It was not until 1977 that sockeye salmon of Tustumena Lake (Glacier Creek) origin were released back into the Tustumena Lake system, and that began the annual stocking program that continued until 2003. Although there was incubation of sockeye salmon of Tustumena Lake origin for release at other sites and incubation of other species, the annual supplemental production for Tustumena Lake remained the core program of this hatchery.

(also see related sections 10.6.1.4 and 10.6.1.6)

#### 10.6.1.8 Ninilchik Native Association Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

##### Subsequent Developments:

No work has been done to develop this potential project beyond the original description cited above.

#### 10.6.1.9 Escapement Monitoring

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This tactic, which is the cornerstone of the harvest management strategy, is evidenced in an ongoing set of projects in the four major sockeye salmon producing river systems in the Inlet, the Kasilof, Kenai, Susitna and Crescent Rivers. Sonar counters are set up and manned annually on these four systems, and it is assumed that proper escapements into these four systems can be extrapolated to mean that the lesser systems are probably achieving appropriate escapements.”*

##### Subsequent Developments:

The escapements counts into the Kasilof River and the three other major systems are gathered annually and continue to be pivotal pieces of information in the harvest management strategy. An effective harvest management strategy is, in turn, important to the maintenance of a strong salmon resource.

#### 10.6.1.10 In-season Effort and Catch Monitoring

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project has several diverse elements all designed to improve the management of the salmon fishery in Upper Cook Inlet. The Commercial Fish Division would provide*

*in-season estimates of effort and catch by set gill netters and the drift gill netters by means of vehicle surveys on the eastside set nets and aerial catch estimating surveys of the drift fleet. These data can be supplemented through daily contact with processors and weekly collection of the fish tickets. This estimating would be refined to the level of period-by-period estimates on a district-by-district basis. Clear in-season marking of the sub-district boundaries on the west side of the Inlet would be a necessary corollary to complete the information gathering."*

Subsequent Developments:

In-season effort and catch monitoring continue to be pivotal pieces of information in the harvest management strategy. An effective harvest management strategy is, in turn, important to the maintenance of a strong salmon resource.

10.6.1.11 Upper Cook Inlet Central District Test Fishing

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"Large concentrations of sockeye salmon enter the Inlet and mill in the lower portion of the district in the middle part of July. This situation enhances the management problems which are inherent in the mixed stock fishery. Experience during 1979 showed that limited test fishing by drift gill netters during closed periods allowed more accurate monitoring of the movement of these stocks. In turn, managers were better able to set appropriate fishing times and areas for attainment of escapement goals."*

Subsequent Developments:

The off-shore test fishery using drift gill net boats in the central district was abandoned.

10.6.1.12 Upper Cook Inlet Stock Separation

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"This project also addresses the management problems posed by the mixed stock nature of the salmon fishery in Upper Cook Inlet. It is keyed to the ability to identify the various sockeye salmon stocks, to determine the portion of each stock that is being harvested, and ultimately to assure that escapement goals are attained on a stock-by-stock basis.*

*Sockeye salmon from the commercial catch as well as from the escapement are sampled for scales, length, and weight. Through a scale recognition pattern the Statewide Scale Lab can identify the stocks being handled. Under special conditions termed 'critical', this identification can be expedited; and the stock identity will be in the hands of the field manager within twenty-four hours of the sampling.*

*This continuing project aids in the regulation of the fishery, helps to identify the strength of each of the component stocks and relates distribution to the harvest process."*

Subsequent Developments:

The concept of stock separation remains an important element in the harvest management strategy. All of the techniques mentioned above continue to be



employed. In addition considerably more emphasis is being placed on genetic identification.

#### 10.6.1.13 Off-shore Test Fishing

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project has been set up to provide early information on the sockeye salmon runs and enable the managers to adjust their day-to-day management accordingly. The catches from a vessel fishing a transect between Anchor Point and the Red River are analyzed, and the results are integrated with the results of the commercial catch and the escapement monitoring to create a broad profile of the timing and run strength of the Upper Cook Inlet sockeye salmon.”*

#### Subsequent Developments:

ADF&G began this project in 1979, and it continues annually. The data provided is very important for effective in-season management of the commercial fishery, and effective management is crucial to achieving appropriate escapements on which the strength of the resource depends.

#### 10.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 - 2000*

Several projects were identified and implemented after the publication of the *Phase I Plan 1981 - 2000*, and they focused primarily on stocking salmon in various parts of the Kasilof River / Mid-Peninsula Unit drainages.

#### 10.6.2.1 Crooked Creek King Salmon Stocking

Beginning in 1980 Crooked Creek was stocked with king salmon by ADF&G in support of a recreational fishery. With the exception of 1982 the stocking continued at least through 1991 with numbers as high as 335,000 but averaging about 260,000 annually. It was also stocked in the period 1996 through 2005 with an average annual release of about 129,000. The program appears to have been successful in providing a recreational fishery with substantial participation levels.

#### 10.6.2.2 Crooked Creek Coho Salmon Stocking

Crooked Creek was stocked with coho salmon by ADF&G in 1979, 1983 and then annually from 1985 through 1993 in support of a recreational fishery. The largest release (588,740) was made in 1987, but the average annual release in the period 1988 through 1993 was about 70,000.

#### 10.6.2.3 Ninilchik River King Salmon Stocking

Beginning in 1988 the Ninilchik River was stocked with king salmon by ADF&G in support of a recreational fishery. Although that initial stocking was about 247,000 fish, the average release for the period 1997 through 2005 was about 52,000 fish. The program appears to have been successful in providing a recreational fishery with substantial participation levels.

## 10.6.2.4 Coal Creek Sockeye Salmon Smolt Release

In 1992 CIAA initiated a sockeye salmon smolt release project in Coal Creek, a tributary of the Kasilof River. Tustumena Lake sockeye salmon in 1990 were the broodstock for these fish, and the incubation and initial rearing took place at Trail Lakes Hatchery. The smolt were marked, transported to Coal Creek, held in net pens in the Creek for from four to twelve days and approximately 66,400 were released.

Outbreaks of the IHN virus caused the destruction of the smolt destined for Coal Creek in 1993 and 1994. The project was periodically refined and continued through

The second release took place in 1995. The fish were held in the Creek for from 16 to 19 days, and approximately 145,300 were released.

There was high mortality during the imprinting period in the Creek, and an adult weir set up to evaluate the adult return showed the returns to be much less than anticipated. Although the adult return was checked through 1997, the 1995 stocking was the last for this project.

## 10.6.2.5 Twin Falls King Salmon Smolt Release

There is a lake south of the mouth of the Kasilof River that empties into Cook Inlet over waterfalls that preclude anadromous fish from entering the lake. An experimental project was attempted here by ADF&G with the hope of creating a terminal, saltwater king salmon fishery. In 1993 about 93,000 king salmon smolt arising from Kasilof River broodstock were released into the lake. About one third of the fish had coded wire tags. The project was abandoned.

## 10.6.2.6 Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems

This investigation is being conducted by the Kachemak Bay Research Reserve in cooperation with the University of Alaska, Fairbanks; the University of Alaska, Anchorage and the U.S. Geological Survey and is funded by the Exxon Valdez Oil Spill Trustee Council. It is a three-year study (2004 – 2006) to develop monitoring tools for tracking marine derived nutrients in Alaskan watersheds. The Ninilchik River, Anchor River, Crooked Creek, Moose Creek and Tustumena Lake were the systems in the Kasilof River / Mid-Peninsula Unit to be included in the study, but there were an additional seven rivers in four of the other units described in this *Phase II Plan 2006 – 2025*. As part of this project a weir was operated on the North Fork of the Anchor River in 2004.

## 10.6.2.7 Evaluation of Landscape Setting on First-order Stream Support of Juvenile Coho Salmon in the Kenai Lowlands

This one-year investigation was conducted by the Kachemak Bay Research Reserve in cooperation with the Smithsonian Environmental Research Center and Baylor University and is funded by the U.S. Environmental Protection Agency. In the spring/summer of 2006 sampling was conducted at 40 first-order sites spread among the five major drainages of the lower Kenai Peninsula. Those five systems were Deep Creek, the Ninilchik River, Stariski Creek, the North Fork of the Anchor River and the South Fork of the Anchor River.

## 10.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

### 10.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

#### 10.7.1.1 Storm Damage to Tustumena Lake Tributaries

A number of the tributary systems feeding Tustumena Lake are subject to very destructive flooding. Most recently this has been true of Bear Creek, Moose Creek and Indian Creek. Depending on the time of year this occurs it may be either the loss of valuable spawning habitat or that loss compounded by the loss of the current year's egg production.

#### 10.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT is not aware of any anadromous salmon runs in this unit that are sufficiently outside their normal range to warrant recommendations for immediate investigation and/or remedial action.

#### 10.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

##### 10.7.3.1 ADF&G Operation of Kasilof River Sonar for Escapement Enumeration

It is anticipated that ADF&G will continue to operate the sonar system that enumerates sockeye salmon escapement into the Kasilof River system.

##### 10.7.3.2 CIAA Enumeration of Tustumena Lake Sockeye Salmon Smolt Migrations

Although CIAA is not currently stocking Tustumena Lake, it is continuing to enumerate the sockeye salmon smolt migration from the system.

##### 10.7.3.3 KWF Ranking of Culverts with Negative Impacts

The Kenai Watershed Forum is engaged in a project to evaluate the impact of existing culverts in various stream systems. This project will help to identify those culverts that have the most significant negative impact on successful fish migration.

10.7.3.4  OTHER None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

10.7.4 Proposed New Anadromous Salmon Projects

10.7.4.1  OTHER None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

## CHAPTER 11.0

### KACHEMAK BAY UNIT ANALYSIS

#### 11.1 OVERVIEW

The Kachemak Bay Unit consists of drainages that feed Kachemak Bay, a large estuarine unit at the mouth of the larger estuary that is Cook Inlet. The northern shore of the Bay is road accessible and substantially developed with the City of Homer being the largest single population center. The southern shore is punctuated with smaller bays and numerous remote recreational sites.

The eastern and southern portions of the Kachemak Bay watershed are largely controlled by State and federal agencies in various park units. This places some control on development and, therefore, offers a measure of protection to salmon habitat.

There are abundant and varied recreational and commercial uses of the waters of Kachemak Bay, and among them is the harvest of salmon in several different types of fisheries. In addition to the freshwater and saltwater recreational salmon fisheries, purse seine vessels, primarily based in Homer, commercially harvest salmon in waters of Kachemak Bay during open fishing periods. In addition, a limited commercial set gill net salmon fishery occurs along the south shore of Kachemak Bay, a personal use dipnet fishery in the central southern shore of the Bay, and small personal use and subsistence set gill net salmon fisheries also occur in the Bay.

A number of barriered lakes empty into bays that provide an opportunity for a terminal harvest of returning fish in Kachemak Bay. Such barriered lakes preclude access to adult salmon yet do provide rearing environments for stocked juvenile salmon. Some of the bays with sufficient available freshwater supplies have provided the opportunities for the construction and operation of salmon hatcheries.

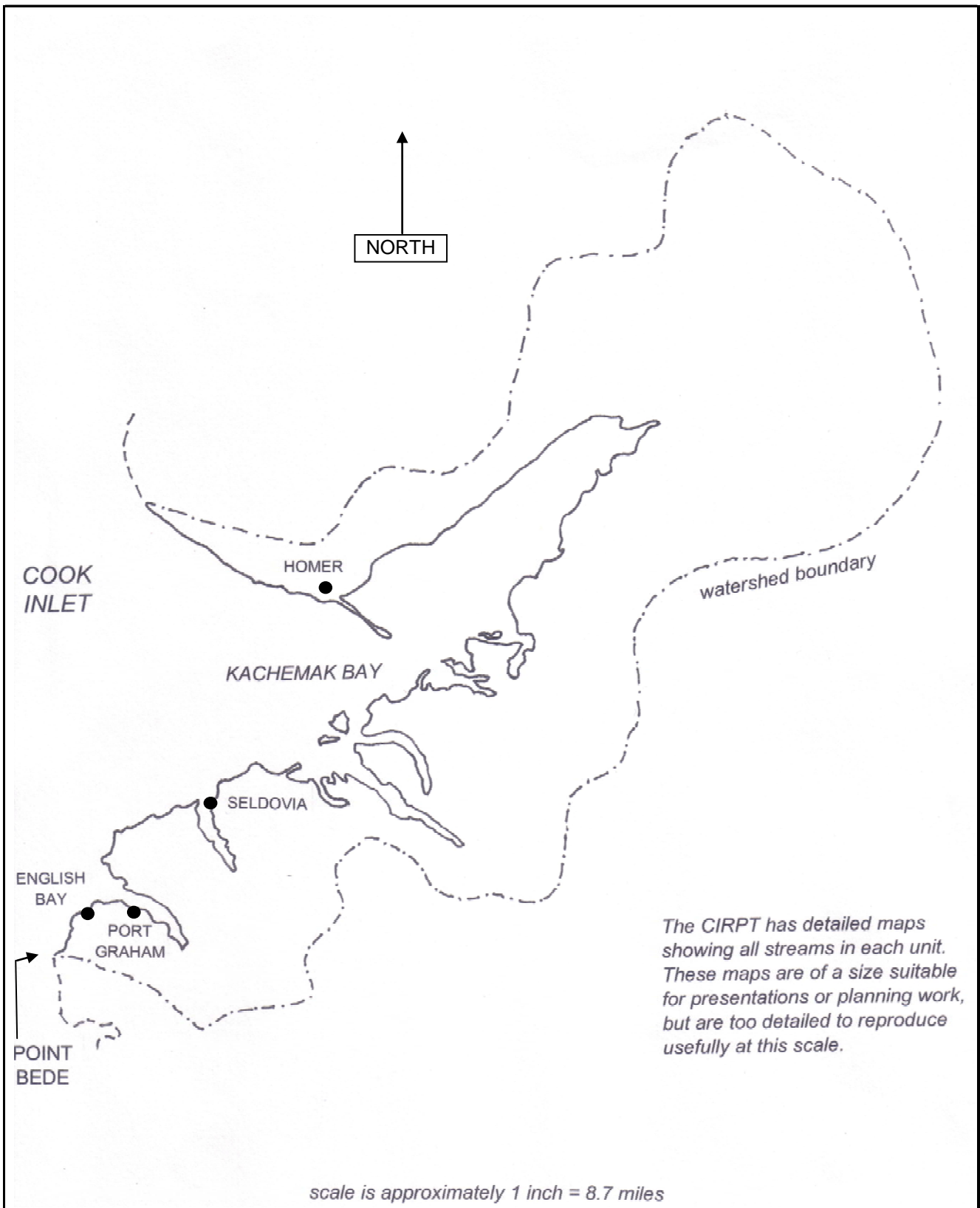
#### 11.2 RELEVANT LAND USE POLICIES

##### 11.2.1 United States Fish and Wildlife Service

The policies of the U.S. Fish and Wildlife Service come into play primarily because the upper reaches of the Fox River and the Bradley River are on the Kenai National Wildlife Refuge and more specifically within the Andrew Simons Wilderness Unit.

A sockeye salmon stocking project that had been conducted in Tustumena Lake since 1974 was suspended by a December 30, 2003 decision by the 9<sup>th</sup> Circuit Court of Appeals in a case brought against the U.S. Fish and Wildlife Service by the Alaska Center for the Environment and the Wilderness Society. The decision held the project was "a commercial enterprise" and, therefore, should not have been permitted in a wilderness area by the U.S. Fish and Wildlife Service. This ruling would probably make it difficult to initiate an enhancement project involving stocking in those portions of the Fox River and Bradley River within the Refuge.

**EXHIBIT 11-1** **KACHEMAK BAY UNIT MAP**



The policy set forth in Comprehensive Conservation Plan for the Kenai National Wildlife Refuge states that in wilderness areas fish egg takes would be allowed "in the field for hatchery use in developing population for use in re-establishing historic populations and population levels."

Subsequent discussions with USFWS staff led to the interpretation that, with genetic approval from ADF&G and appropriate consultation with USFWS, those eggs would be available for "out stocking" in systems outside the Refuge. With respect to on-site fisheries enhancement work the same document states that "actions taken to increase fisheries stocks above historic levels" including "lake fertilization, stocking, building hatcheries and fish passages, and artificially incubating fish in streams" will not be permitted.

However, a 1987 memorandum, which has as a subject "Clarification of Region 7 Fisheries Management Policies for Refuge Comprehensive Conservation Plans (CCP's)", makes the following points.

- \* On all refuge lands in Alaska (including designated wilderness) maintaining, rehabilitating, and enhancing existing fish populations is permitted, where compatible with the purpose of the refuge.
- \* In general, restoration activities will be looked upon more favorably than enhancement activities on refuges in Alaska.
- \* Long-term (i.e., permanent) facilities may be permitted outside designated wilderness areas for maintenance, restoration and enhancement activities.
- \* In designated wilderness areas, temporary facilities may be permitted to maintain, restore or enhance fisheries if the stocks have been reduced or are threatened as long as the facilities do not significantly detract from wilderness values.
- \* New permanent facilities will not be permitted in designated wilderness for fisheries management purposes unless they are essential to accomplish refuge objectives.
- \* Existing facilities may remain and new facilities may be built for fisheries research and monitoring on all refuge lands in Alaska.
- \* In making compatibility determinations in designated wilderness areas the Service will consider wilderness values.

The following definitions meet the Service's needs within the CCP's and may be compared to the definitions being used by the CIRPT as described in the INTRODUCTION of this document:

- \* Enhancement - Procedures applied to a fish stock to supplement numbers of harvestable fish to a level beyond what could be naturally produced based upon a determination or reasonable estimate of historic levels. This could be accomplished by artificial production systems. It can also be an increase of the amount of productive habitat in the natural environment through physical or chemical change.
- \* Restoration - Increasing fishery resources to allow full utilization of available habitat or to a population objective based on a determination or reasonable estimate of historic levels. While the goal of restoration is self sustaining populations, situations will exist where the impact (e.g., habitat degradation) is such that some form of fishery management or mitigation activity could continue indefinitely.

Recent input from the U.S. Fish and Wildlife Service indicates that all activities are now subject to consistency reviews and any proposed fisheries work in wilderness areas would be reviewed on a case-by-case basis and considered only under exceptional circumstances.

#### 11.2.2 Alaska Department of Natural Resources:

The Alaska Department of Natural Resources through its Division of Parks has responsibility for a large parcel of land in this unit.

The Kachemak Bay State Park, which was established in 1970, encompasses the majority of the watershed on the south side of the Bay from Bear Cove west to include Tutka Bay. Much smaller parcels of the same Park are located on the north shore of the Bay between McNeil Creek and Falls Creek. The Kachemak Bay State Park Management Plan recognizes the value of the salmon enhancement activities that occur in and near the Park and the role they play in public use of the Park.

In conjunction with its general responsibilities for State lands the Alaska Department of Natural Resources (ADNR) published the Kenai Area Plan (KAP) in 2000. The boundaries of the area covered by this plan are coincidental with the boundaries of the Kenai Peninsula Borough; therefore, all of the Kachemak Bay Unit is covered by the ADNR plan. The KAP is probably the best consolidated reference for land ownership patterns in the Unit.

The plan directs how ADNR will manage state uplands, tidelands, and submerged lands within the area it covers. In addition to its general management intent and management guidelines the KAP specifically addresses the Kachemak Bay Unit in the sections designated Region 7 – Homer and Kachemak Bay, Region 8 – Fritz Creek and Upper Kachemak Bay and Region 9 – South Side of Kachemak Bay and Chugach Islands.

#### 11.2.3 Kenai Peninsula Borough:

All of the Kachemak Bay Unit is within the Kenai Peninsula Borough, but only a very small portion of the land is actually owned by the Borough. The Borough does, however, plan for the development and use of resources within the Borough boundaries on land held by others.

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue land use permits that can influence project implementation.

In addition, the Borough conducts consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program. In conjunction with this program the Borough prepared and had approved The Port Graham / Nanwalek Area Which Merits Special Attention Plan, which became effective in March of 1992.

### 11.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT

The tables that constitute EXHIBITS 11-2A through 11-2E reflect current knowledge about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G's historical escapement counts.



**KEY FOR EXHIBITS 11A THROUGH 11E**

In the following exhibits there are numbers of fish cited under two headings, “*Highest Number of Fish Reported for the System*” (column 3) and “*Most Recent Number of Fish Reported for the System*” (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 11-2A										KACHEMAK BAY UNIT KING SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Fritz C.	241-13-10760	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Fox C.	241-14-10660	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Fox R.	241-14-10645	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Clearwater C.	241-14-10645-2060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10645-2060-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10645-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10645-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10645-2081	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10645-2101	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10645-2131	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10630	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Sheep C.	241-14-10625	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	241-14-10625-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Bradley R.	241-14-10625-2010	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	241-14-10625-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10625-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Battle C.	241-14-10610	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10610-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Martin R.	241-14-10600	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10540	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-14-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Humpy C.	241-14-10510	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	241-15-10450	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
Unnamed Tributary	241-15-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
China Foot C.	241-15-10370	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT										
[ continued on following page ]													

EXHIBIT 11-2A [continued from preceding page]										KACHEMAK BAY UNIT KING SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Silver C.	241-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Stonehocker C.	241-15-10345	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-15-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10245	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10130-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10130-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Tutka Lagoon C.	241-16-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Jaklof C.	241-16-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10040-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10040-2013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-16-10040-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Barbara C. (Barabara C.)	241-11-10800	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10800-2017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10800-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10800-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10770	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10770-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10740	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10740-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Seldovia R.	241-11-10730	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-11-10680	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-20-10650	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-20-10570	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										

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<b>KACHEMAK BAY UNIT KING SALMON</b>									
<b>EXHIBIT 11-2A</b>	<i>[continued from preceding page]</i>								
Stream	Anadromous Waters Catalog Number	Historic High Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	241-20-10560	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10560-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
<i>Port Graham R.</i>	241-20-10550	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2018-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10550-2024-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
English Bay R.	241-30-10500	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-30-10500-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

EXHIBIT 11-2B KACHEMAK BAY UNIT SOCKEYE SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Fritz C.	241-13-10760	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Fox C.	241-14-10660	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Fox R.	241-14-10645	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Clearwater C.	241-14-10645-2060	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-14-10645-2060-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10645-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10645-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10645-2081	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10645-2101	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10645-2131	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-14-10630	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Sheep C.	241-14-10625	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10625-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Bradley R.	241-14-10625-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10625-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10625-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Battle C.	241-14-10610	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-14-10610-2011	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Martin R.	241-14-10600	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-14-10540	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-14-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Humpy C.	241-14-10510	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-15-10450	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-15-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
China Foot C. (no lake escapement)	241-15-10370	UNKNOWN	1 GS 2005						

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EXHIBIT 11-2B [continued from preceding page]									
KACHEMAK BAY UNIT SOCKEYE SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Silver C.	241-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Stonehocker C.	241-15-10345	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-15-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-16-10245	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-16-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-16-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-16-10130-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-16-10130-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Tutka Lagoon C.	241-16-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Jaklof C.	241-16-10040	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	241-16-10040-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-16-10040-2013	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	241-16-10040-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Barbara C. (Barabara C.)	241-11-10800	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10800-2017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10800-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10800-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10770	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10770-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10740	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10740-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Seldovia R.	241-11-10730	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-11-10680	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10650	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	241-20-10570	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 11-2B		KACHEMAK BAY UNIT SOCKEYE SALMON						
[continued from preceding page]								
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Unnamed Tributary	241-20-10560	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10560-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Port Graham R.	241-20-10550	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2018-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10550-2024-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-20-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
English Bay R.	241-30-10500	22,500 WC 1995	8,200 WC 2005					
Unnamed Tributary	241-30-10500-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
Unnamed Tributary	241-30-10500-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					

EXHIBIT 11-2C										KACHEMAK BAY UNIT COHO SALMON									
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Fritz C.	241-13-10760	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Fox C.	241-14-10660	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Fox R.	241-14-10645	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Clearwater C.	241-14-10645-2060	3,230 AS/PC 2001	700 AS/PC 2005																
Unnamed Tributary	241-14-10645-2060-3004	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	241-14-10645-2060-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2071	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2081	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2101	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2131	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10630	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Sheep C.	241-14-10625	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2006	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Bradley R.	241-14-10625-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2030	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	241-14-10625-2045	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Battle C.	241-14-10610	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10610-2011	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Martin R.	241-14-10600	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	241-14-10540	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10530	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Humpy C.	241-14-10510	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-15-10450	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	241-15-10420	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
China Foot C.	241-15-10370	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
[ continued on following page ]																			



EXHIBIT 11-2C [continued from preceding page]									
KACHEMAK BAY UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Silver C.	241-15-10350	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Stonehocker C.	241-15-10345	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-15-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-16-10245	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-16-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-16-10130	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-16-10130-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-16-10130-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Tutka Lagoon C.	241-16-10090	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Jaklof C.	241-16-10040	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-16-10040-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-16-10040-2013	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-16-10040-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Barbara C. (Barabara C.)	241-11-10800	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-11-10800-2017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-11-10800-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-11-10800-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-11-10770	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-11-10770-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-11-10740	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-11-10740-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Seldovia R.	241-11-10730	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-11-10680	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-20-10650	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-20-10570	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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<b>EXHIBIT 11-2C</b> [continued from preceding page]									
<b>KACHEMAK BAY UNIT COHO SALMON</b>									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	241-20-10560			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
Unnamed Tributary	241-20-10560-2014			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>					
<b>Port Graham R.</b>	241-20-10550	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2009	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2014	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2018	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2018-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2019	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2021	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2022	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2023	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2024	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10550-2024-3012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-20-10530	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
<b>English Bay R.</b>	241-30-10500	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2009	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2014	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2018	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2031	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2039	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2051	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2061	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10500-2071	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

EXHIBIT 11-2D										KACHEMAK BAY UNIT PINK SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.		SEPT.										
Fritz C.	241-13-10760	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Fox C.	241-14-10660	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Fox R.	241-14-10645	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Clearwater C.	241-14-10645-2060	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2060-3004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10645-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10645-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10645-2081	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10645-2101	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10645-2131	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10630	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Sheep C.	241-14-10625	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2006	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Bradley R.	241-14-10625-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2030	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Battle C.	241-14-10610	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10610-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Martin R.	241-14-10600	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	241-14-10540	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Humpy C.	241-14-10510	200,000	EE 1979	93,800	EE 2005														
Unnamed Tributary	241-15-10450	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-15-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
China Foot C.	241-15-10370	26,000	EE 1962	9,200	EE 2005														

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EXHIBIT 11-2D [continued from preceding page]										KACHEMAK BAY UNIT PINK SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Silver C.	241-15-10350			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Stonehocker C.	241-15-10345			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	241-15-10340	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10245	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10240	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10130	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10130-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10130-2031	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Tutka Lagoon C.	241-16-10090	133,600 EE 2005	133,600 EE 2005										
Jaklof C.	241-16-10040	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10040-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-16-10040-2013			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	241-16-10040-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Barbara C. (Barabara C.)	241-11-10800	22,700 EE 1975	14,400 EE 2005										
Unnamed Tributary	241-11-10800-2017	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-11-10800-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-11-10800-2030	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-11-10770	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-11-10770-2010			<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	241-11-10740	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-11-10740-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Seidovia R.	241-11-10730	98,600 EE 2005	98,600 EE 2005										
Unnamed Tributary	241-11-10680	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-20-10650	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	241-20-10570	UNKNOWN	UNKNOWN	TIMING UNKNOWN									

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EXHIBIT 11-2D [continued from preceding page]							KACHEMAK BAY UNIT PINK SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Unnamed Tributary	241-20-10560	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	241-20-10560-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Port Graham R.	241-20-10550	69,100	EE 2005	69,100	EE 2005					
Unnamed Tributary	241-20-10550-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2018	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	241-20-10550-2018-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	241-20-10550-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-20-10550-2024	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	241-20-10550-2024-3012	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	241-20-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
English Bay R.	241-30-10500	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	241-30-10500-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	241-30-10500-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								

EXHIBIT 11-2E										KACHEMAK BAY UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Fritz C.	241-13-10760	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Fox C.	241-14-10660	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Fox R.	241-14-10645	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Clearwater C.	241-14-10645-2060	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2060-3004	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10645-2060-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10645-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10645-2081	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10645-2101	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10645-2131	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10630	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Sheep C.	241-14-10625	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Bradley R.	241-14-10625-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10625-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10625-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Battle C.	241-14-10610	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10610-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Martin R.	241-14-10600	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	241-14-10540	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-14-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Humpy C.	241-14-10510	700 EE 2005	700 EE 2005																
Unnamed Tributary	241-15-10450	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary	241-15-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
China Foot C.	241-15-10370	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																

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EXHIBIT 11-2E		KACHEMAK BAY UNIT CHUM SALMON						
[continued from preceding page.]								
Stream USGS Name [locally used name.]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
				MAY	JUNE	JULY	AUG.	SEPT.
Silver C.	241-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Stonehocker C.	241-15-10345	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-15-10340	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-16-10245	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-16-10240	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-16-10130	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-16-10130-2010	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-16-10130-2031	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Tutka Lagoon C.	241-16-10090	No escapement observed in recent years	UNKNOWN			TIMING UNKNOWN		
Jakolof C.	241-16-10040	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-16-10040-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-16-10040-2013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-16-10040-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Barbara C. (Barabara C.)	241-11-10800	No escapement observed in recent years	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-11-10800-2017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-11-10800-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-11-10800-2030	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-11-10770	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-11-10770-2010	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-11-10740	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Unnamed Tributary	241-11-10740-2010	UNKNOWN	UNKNOWN			TIMING UNKNOWN		
Seidovia R.	241-11-10730	1,500 EE 2005	1,500 EE 2005					
Unnamed Tributary	241-11-10680	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-20-10650	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	241-20-10570	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

EXHIBIT 11-2E		[continued from preceding page]					KACHEMAK BAY UNIT CHUM SALMON				
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Unnamed Tributary	241-20-10560	UNKNOWN	UNKNOWN	TIMING UNKNOWN							
Unnamed Tributary	241-20-10560-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Port Graham R.	241-20-10550	11,400	700								
Unnamed Tributary	241-20-10550-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2018-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2023	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10550-2024-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-20-10530	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
English Bay R.	241-30-10500	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2039	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2051	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2061	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									
Unnamed Tributary	241-30-10500-2071	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT									



11.4 SIGNIFICANT STOCKS

Based on the available data, the following stocks are known to fit the size criterion for local significance as discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0 of this document. The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

EXHIBIT 11-3		SIGNIFICANT STOCKS				
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM
Clearwater Creek	241-14-10645-2060			significant		
English Bay River	241-30-10500		significant			
Humpy Creek	241-14-10510				significant	
<i>China Poot Creek</i>	241-15-10370				significant	
<i>Tutka Lagoon Creek</i>	241-16-10090				significant	
Jakolof Creek	241-16-10040				significant	
Barbara ( <i>Barabara</i> ) Creek	241-11-10800				significant	
Seldovia River	241-11-10730				significant	significant
<i>Port Graham River</i>	241-20-10550				significant	significant

Non-italics = stream name appearing on USGS maps      *Italics = Unnamed on USGS map but identified by its locally-used name*

AWC = Anadromous Waters Catalog

significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.
significant	Historic count meets minimum size criteria, but the most recent count does not.

Minimum significant stock size criteria:		Generalized period for two life cycles:	
King Salmon	400 fish		12 years
Sockeye Salmon	2,000 fish		10 years
Coho Salmon	800 fish		8 years
Pink Salmon	5,000 fish		4 years
Chum Salmon	800 fish		8 years

11.5 WILD STOCK SANCTUARIES / STOCK RESERVES

A review of the various stocks of salmon found in the Kachemak Bay Unit leads the CIRPT to make the following determinations with respect to the designation of "wild stock sanctuaries / stock reserves" in the Kachemak Bay systems. This concept is described and recommended for adoption in the ADF&G *Genetics Policy* where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0, section 3.3.3.5 of this document as it is applied in Cook Inlet.

11.5.1 King Salmon

Stock identified: None

Rationale: After reviewing the information about king salmon in the Kachemak Bay systems, the CIRPT determined there was

no king salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

11.5.2 Sockeye Salmon

Stock identified: None

Rationale: After reviewing the information about sockeye salmon in the Kachemak Bay systems, the CIRPT determined there was no sockeye salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

11.5.3 Coho Salmon

Stock identified: None

Rationale: After reviewing the information about coho salmon in the Kachemak Bay systems, the CIRPT determined there was no coho salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

11.5.4 Pink Salmon

Stock identified: None

Rationale: After reviewing the information about pink salmon in the Kachemak Bay systems, the CIRPT determined there was no pink salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

11.5.5 Chum Salmon

Stock identified: None

Rationale: After reviewing the information about chum salmon in the Kachemak Bay systems, the CIRPT determined there was no chum salmon "stock" which could qualify for the designation "wild stock sanctuary / stock reserve".

**11.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

11.6.1 Projects Identified in the Phase I Plan 1981 - 2000

11.6.1.1 Homer Area Salmon Smolt Stocking Program

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*"The major goal of this F.R.E.D. project is the enhancement of the sport and subsistence fisheries in the Kachemak Bay area in future years to accommodate the greatly increased fishing pressure. This includes cooperation with the Sport Fish Division in providing an additional harvest of 15,000 coho salmon to satisfy 30,000*

*man-days of effort. Coho smolt stocking programs were initiated several years ago in the Kachemak Bay area in an effort to promote the sport and subsistence fisheries. Sites utilized thus far include Fritz Creek, Homer Spit and Beluga Lake. Tasks involved with this project include: (1) smolt transport and release approval for Fritz Creek; (2) release site reconnaissance and preparation; (3) Fritz Creek release; (4) public information on release and potential returns; and (5) evaluation of adult returns.”*

Subsequent Developments:

Fritz Creek was stocked with coho salmon from 1978 through 1981 and then again for the last time in 1985. The broodstock was cited as Seward Lagoon coho.

Although the Homer Spit had been stocked with king salmon since 1984, stocking of coho salmon began in 1988. A lagoon was identified by ADF&G on the northeast side of the Homer Spit for the purpose of creating a fully accessible terminal recreational salmon fishery. The lagoon, which has since been named the Nick Dudiak Fishing Lagoon, has been stocked annually since 1988 with an average of 119,000 late-run coho salmon smolt originating from Bear Lake broodstock. ADF&G conducted this stocking program through the 2002 release. Starting in 2003 CIAA took over the late-run coho salmon portion of the overall Lagoon stocking program. A second element was added to this project in 2001 when ADF&G initiated stocking the same lagoon with an average of 144,000 early-run coho salmon of Ship Creek origin.

No information could be located on any program enacted in Beluga Lake. A Beluga Lake release was investigated but not implemented. An unplanned accidental release of 10,000 coho fingerlings occurred in 1976. The fish returned in 1978 and 1979 sparking requests for more stocking. Stocking Beluga Lake with coho salmon smolt was considered to provide subsistence and sport harvests; but land-use conflicts, the closure of the area to subsistence use and issues regarding management of a fishery in the Beluga drainage resulted in recommendations not to pursue developing any fishery until these issues could be resolved.

(also see Sections 11.6.2.3 and 11.6.2.8)

11.6.1.2 Tutka Hatchery Evaluation

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The ultimate goal of this funded and ongoing F.R.E.D. project's tasks in combination is the increased survival and quality of Tutka Hatchery produced pink and chum salmon fry with the subsequent increase in the hatchery contribution to the Tutka Bay system adult salmon returns. This project includes several component tasks which when conducted will combine to evaluate production at the Tutka Lagoon Hatchery. Individual tasks include:*

*(1) evaluation of short-term rearing of pink and chum salmon fry with special emphasis on monitoring plankton population levels to determine optimum timing of release;*

*(2) Tutka Creek wild pink and chum salmon fry evaluation performed to provide comparisons to hatchery fry quality; to provide for wild fry marking and release for comparisons of adult quality and ultimate ocean survival rates; to maintain an annual comparative index relating to levels of natural production within Tutka Creek;*

*(3) adult salmon return evaluation program is designed to determine the number of marked salmon present in the return to ultimately estimate ocean survival rates as well as hatchery contribution to the total Tutka Bay salmon run. This program also provides for ultimate comparison of various hatchery treatment release groups as well as natural stocks,*

*(4) Tutka Lagoon predator control study conducted to continue to collect baseline data on Dolly Varden and herring predation of wild and hatchery pink and chum salmon fry within the Tutka Creek and Lagoon system. It will help to determine the extent and feasibility of conducting future predator control programs and/or improving on hatchery release methods. Major emphasis should be placed upon determining the potential levels of herring predation; and*

*(5) pink and chum salmon fry food habit study involves the identification and reverification of primary food sources within the Tutka Bay and Lagoon system. This task will also attempt to reconfirm as well as determine additional nursery areas utilized by pink and chum fry in Tutka Bay and Lagoon.”*

#### Subsequent Developments:

Although it is clear aspects of all five of the tasks listed above have been investigated, some type of documentation could only be found for items (1), (2) and (3). No records could be located for either the predator control studies or the fry food habit studies.

Extensive studies were conducted at Tutka Hatchery evaluating the effectiveness of different types of feed on the short-term rearing of both pink and chum fry. Results of these studies for the years 1982 and 1983 were published by ADF&G's Lower Cook Inlet F.R.E.D. staff.

An adult pink salmon food habit study was done in 1983 to determine if adults will feed on fry of their own species.

The F.R.E.D. Division published a report in 1986 outlining mark-recovery sampling projects done on pink salmon within the Tutka system. The recommendations and observations that came from that report included:

“Evaluation of hatchery contributions that rely solely on mark-recovery data can underestimate hatchery returns. Mark-recovery data must incorporate an estimated differential mortality or mark loss (handicap factor) for marked fish as compared to the unmarked fish that they are supposed to represent.

“The timing of the run can vary between mark groups; therefore, sampling for marks in the fishery should be stratified over the entire run.

“When possible, wild fry should be captured and marked so that adult quality as well as survival rates of the returning fish can be compared to those fish resulting from hatchery production.

“Marked fish should be mixed with unmarked fish as soon as possible after marking so that the assumption that they represent the unmarked fish will be more tenable.”

## 11.6.1.3 Halibut Cove Lagoon Saltwater Rearing Evaluation

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This F.R.E.D. smolt release experimental project was designed to enhance the king salmon sport fishery in the Kachemak Bay area. It involves the ongoing king salmon smolt stocking program at Halibut Cove Lagoon which was originally started in 1974. Approximately 100,000-200,000 king salmon smolts at 20-30 per pound size were transported to the facility by barge and tanker truck where they were short-term reared and imprinted for a 2-3 week period and subsequently released on-site.*

*“The program attempts to evaluate the relative success of releasing king salmon smolts to provide a sport fishery in the Kachemak Bay area by providing an additional harvest of 2,000 king salmon to satisfy 10,000 man days of effort.*

*“This project, which was active in 1981 is not scheduled for 1982, involves the continued evaluation of king salmon smolt releases by adult capture and sampling for coded wire tags (CWT). Valuable data on comparative quality of adults as well as ultimate ocean survival rates will be obtained. In addition, contribution to the fishery will also be determined. The tasks involved with this project include: (1) screening adult king salmon returns in Kachemak Bay area; (2) sample adults for age, weight and length and CWT; (3) lab analysis of CWT; (4) data reduction and analysis.”*

Subsequent Developments:

Between 1977 and 1984 an estimated 11,280 adult king salmon were provided by this enhancement project. A report published in 1987 stated that the average survival rate of smolts was 3.4%. The recommendations of the report were:

“The Chinook salmon smolt direct-release stocking program in Halibut Cove Lagoon should be continued.

“A multi-year study should be performed to determine the appropriate time and size of release for optimal survival.”

The enhancement of king salmon is ongoing at Halibut Cove Lagoon. A portion of the king salmon that were released in Halibut Cove Lagoon between 1994 and 1998 were tagged to estimate straying. The king salmon escapements to Deep Creek and Ninilchik River were sampled for strays from Halibut Cove Lagoon and other Kachemak Bay king salmon enhancement projects. No strays have been found in these two systems.

## 11.6.1.4 Tutka Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This F.R.E.D. hatchery on Tutka Lagoon on the south side of Kachemak Bay has been in operation since 1975 and has been functioning primarily as a producer of pink salmon. The location is such that it lends itself to a terminal harvest. Overall production is expected to increase at this facility, and in the process there will be a change in emphasis so that by the year 2000 chum salmon will be approximately 36 percent of the annual production. The broodstock for this facility comes from Port Dick and Tutka*

*Creek, and in addition to releases at the hatchery some releases have occurred in the Paint River system. Assuming funding and staffing support annual production is expected to reach 360,000 adult pink salmon and 200,000 adult chum salmon.”*

Subsequent Developments:

As a facility owned and operated by ADF&G Tutka Hatchery saw annual returns of pink salmon averaging 520,000 fish between 1980 and 1990. In 1991 CIAA took over operation of the hatchery under a lease agreement with the State. The facility was substantially upgraded, and the permitted egg capacity was increased to 125,000,000. Pink returns averaged 1,359,501 from 1991 to 2001.

During the years 1986-1993, some of the pink salmon fry raised at Tutka Hatchery were transported to Halibut Cove Lagoon and released from that location after a brief rearing/imprinting period. The intent of this satellite release program, designed to benefit commercial seiners, was to disperse the fleet while concurrently attempting to disperse Tutka Hatchery fry releases over more underutilized rearing areas. Releases at Halibut Cove Lagoon during this period ranged from two million to six million pink fry, averaging 4.75 million. Adult pink salmon returns to Halibut Cove Lagoon were estimated at 107,600 fish from 1987 through 1994.

A second satellite release program involving Tutka Hatchery pink fry occurred at the Homer Spit fishing lagoon between 1987 and 1992. Annual releases ranged from 295,000 to 332,000 pink fry for this program, which was intended to increase sport fishing opportunities in the Kachemak Bay area.

Chum salmon production at the Tutka Hatchery occurred in the years 1980 through 1990. In this eleven-year period the smallest release (5,874) took place in 1980, and the largest release (3,211,000) occurred in 1988. The annual average release for the eleven years was 786,815.

CIAA initiated a very limited sockeye program at TBH, with only minimal documented returns between 1991 and 1997. (See Section 11.6.2.6)

The Board of Directors for CIAA elected to suspend year-round operations at Tutka Hatchery after the release of 55 million pink salmon fry in spring 2004, with the final resultant adult return occurring in 2005. The dramatic decline in the price of pink salmon made it impossible to generate the revenue through cost recovery that would make the facility essentially self-supporting on a consistent basis.

11.6.1.5 English Bay Lakes Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“Details of this project have not yet been developed nor has it been funded, however the site on the South side of Kachemak Bay did emerge as a good candidate for a hatchery as a result of the F.R.E.D. site selection process. Three species are contemplated as being feasible for this hatchery, sockeye, pink and chum salmon. It is a site that would lend itself to a terminal harvest technique. Annual production could account for 100,000 adult sockeye salmon, 750,000 adult pink salmon, and 92,000 adult chum salmon by 2000.”*

Subsequent Developments:

There was a site selection process for a hatchery at English Bay, but a hatchery was never approved or built. The decline of the English Bay sockeye run resulted in a very restrictive management strategy for this area. The commercial, sport, and subsistence fisheries in area waters were closed or severely restricted during the mid-1980's and much of the 1990's. Efforts to rehabilitate this depressed stock were initiated by ADF&G with an egg take in 1989 and the subsequent release of 350,000 sockeye salmon fry in 1990.

Chugach Regional Resources Commission (CRRRC), in cooperation with the village of Nanwalek (formerly English Bay) and the Bureau of Indian Affairs (BIA) has since taken over this enhancement project under the title of Nanwalek Salmon Enhancement Project (NSEP). Though the project is still ongoing, numerous setbacks in the form of disease outbreaks and significant changes to the program have rendered the project highly inconsistent in recent seasons. Additionally, the adult sockeye returns to English Bay Lakes have also diminished as the program attempts to become more stable and consistent.

(See also Sections 11.6.2.7. and 11.7.3.11)

## 11.6.1.6 Leisure Lake Fishpass

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible."*

Subsequent Developments:

Although a fishpass was never built, there has been an ongoing sockeye salmon stocking and lake fertilization project at Leisure Lake. (See Sections 11.6.2.1 and 11.7.3.8)

## 11.6.1.7 Bradley Lake Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*"One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here."*

Subsequent Developments:

It was thought that there might be the opportunity to build a hatchery in conjunction with the construction of a hydroelectric facility at Bradley Lake. The power plant was

constructed, but the concept of a related hatchery facility as a mitigation measure was not pursued.

#### 11.6.1.8 Humpy Creek Weir

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project would allow more accurate assessment of the escapement to a major spawning stream in Lower Cook Inlet. The manner in which returning salmon behave in the vicinity of Humpy Creek necessitates constant monitoring. Movement of fish upstream seems to begin slowly, builds to an extremely rapid migration and then tapers off. It is during the time that the large numbers of salmon are moving upstream that a more accurate evaluation of numbers would be beneficial. The critical aspect involves proper timing of fishery openings. A weir would allow the best possible management of this specific resource.”*

#### Subsequent Developments:

The weir was operated in 1961, 1963-65, 1980, and 1982. In 1980 the weir was used to re-evaluate the average stream life for pink salmon and to compare differences between aerial, ground and weir counts for future calibration of various escapement estimation methods. The final escapement that year was 64,400 pink salmon, well over the desired 45,000 fish escapement, with a harvest of 65,200 pinks, which was average for even years. In 1982 the counting weir was operated at Humpy Creek, and it confirmed the return was very poor. The harvest of 6,000 pink salmon was the second lowest on record. The poor return was a result of severe flooding in the fall of 1980 which produced an alevin density that was 81 percent below average and the second lowest on record. The Humpy Creek weir was not operated after the 1982 season.

#### 11.6.1.9 Kachemak Bay Salmon and Shellfish Subsistence Catch Monitoring

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project would monitor the salmon subsistence fishery and the increasing shellfish subsistence fishery in Kachemak Bay to provide data for future management decisions concerning various species of fish and shellfish. From the perspective of the salmon resource, the primary objective of the program will be to monitor the salmon subsistence harvest to determine the quantity and species of incidentally caught fish. Standard creel census techniques will be established to monitor the fishery primarily in the vicinity of the Homer Spit. Data gathered on harvest and number of participants will be used to assess the adequacy of present regulations governing the fisheries and the need for future regulatory adjustments.”*

#### Subsequent Developments:

When the planning document was originally drafted, regulations for “personal use” fisheries did not exist, thus salmon net fisheries at the time were generally considered “subsistence” and governed by subsistence regulations. The above-described project was likely aimed at what would presently be considered “personal use” fisheries. Although harvest information from the various personal use fisheries in Cook Inlet was collected, no formal inseason catch monitoring project ever materialized. In 1992, the



Alaska Board of Fisheries created two separate fishery categories by establishing “subsistence” and “non-subsistence” areas within Cook Inlet. Currently, Kachemak Bay (roughly Point Pogibshi to Anchor Point east) contains only a very small portion (southwest of Jakalof Bay and Herring Islands) of its waters categorized as “subsistence” areas under state regulations, while “personal use” fisheries exist within the “non-subsistence” areas.

#### 11.6.1.10 English Bay-Port Graham Monitoring

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“This project would monitor the early subsistence fishery in the villages of Port Graham and English Bay, and a weir operation on the English Bay Lakes system would insure that adequate sockeye and coho salmon escapements are achieved. The weir portion of this project would be a 5 to 10-year program. During this time period, run timing, run characteristics and relationship of actual weir escapements to aerial surveys will be determined for various run strengths. Subsequently, aerial surveys can be used for escapement counting and monitoring. The subsistence catch monitoring will be an annual program that will provide accurate and timely subsistence catch data for in-season management of the salmon resource.”*

#### Subsequent Developments:

Subsistence catch monitoring in the villages of Nanwalek and Port Graham annually consists of catch calendars distributed to residents by the ADF&G Division of Subsistence. Although this program provides reasonably good harvest assessment, timely inseason information is not gathered since calendars are collected at the end of each season and results compiled over the winter, long after most fishing activity has ended.

A salmon counting weir, deemed preferable to other methods of assessment due to the numerous shortcomings of aerial and/or ground surveying, as well as specific difficulties associated with aerial monitoring of the English Bay Lakes system, was begun in 1994 at English Bay River by the Nanwalek Salmon Enhancement Project. The weir collects both sockeye salmon smolt outmigration information and adult sockeye escapement data. Although high water events have historically plagued the English Bay River weir, the weir has nonetheless provided good information during its years of operation.

The annual smolt weir operation provides estimated system productivity, over-winter survival of stocked fish, and a means to project adult returns. A heavy duty welded aluminum floating resistance board weirs presently onsite and will be utilized in future years in an effort to overcome weir shutdown due to flood events.

#### 11.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 - 2000*

Several projects were identified and implemented after the publication of the *Phase I Plan 1981 - 2000*, and they focused primarily on stocking salmon in various parts of the Kachemak Bay Unit drainages.

#### 11.6.2.1 Leisure Lake Sockeye Salmon Stocking

Leisure Lake (China Poot Lake) is a barriered lake located on the southern side of Kachemak Bay, and it has been studied since 1976. The object of this work was to make use of the rearing capacity of the lake by stocking it annually and to determine the effectiveness of increasing the food supply for the juvenile salmon through lake fertilization. It has been stocked annually with sockeye salmon since 1976 with the exception of 1979, 1980, 1994 and 2001. The broodstock for this project was Tustumena Lake for the release years 1976 through 2004. Hidden Lake became the transitional broodstock source beginning with the release in 2005. Ultimately a broodstock now being developed at Tutka Bay Lagoon, using Hidden Lake broodstock, will become the regular broodstock source. Lake fertilization continues to be a regular part of this annual program.

#### 11.6.2.2 Hazel Lake Sockeye Salmon Stocking

Hazel Lake is another barriered lake located on the southern side of Kachemak Bay, and it has been studied since 1988. It presents generally the same type of opportunity for sockeye salmon enhancement through the use of unutilized rearing capacity as Leisure Lake. It has been stocked annually with sockeye salmon since 1988 with the exception of 1994 and 2001. The broodstock for this project was Tustumena Lake for the release years 1988 through 2004. Hidden Lake became the transitional broodstock source beginning with the release in 2005. Ultimately a broodstock now being developed at Tutka Bay Lagoon, also using Hidden Lake broodstock, will become the regular broodstock source. Lake fertilization has not been conducted as a part of the Hazel Lake program.

#### 11.6.2.3 Caribou Lake Coho Salmon Stocking

Caribou Lake is located on the north side of Kachemak Bay and empties into the head of the Bay through Fox Creek. The Lake was stocked annually with an average of about 148,000 coho salmon by ADF&G from 1985 through 1994. The project was then discontinued and has not been resumed.

#### 11.6.2.4 Nick Dudiak Fishing Lagoon Early-run King Salmon Stocking

The Nick Dudiak Fishing Lagoon, previously described in section 11.6.1.1, has been stocked annually by ADF&G since 1984 with an average of 168,000 early-run king salmon smolt originating from Crooked Creek broodstock.

#### 11.6.2.5 Nick Dudiak Fishing Lagoon Late-run King Salmon Stocking

The Nick Dudiak Fishing Lagoon, previously described in section 11.6.1.1, was stocked annually by ADF&G from 1992 through 1999 with an average of 114,000 late-run king salmon smolt originating from Crooked Creek broodstock. The project was suspended in 2000 and has not resumed.

#### 11.6.2.6 Tutka Bay Lagoon Sockeye Salmon Stocking

At least two sockeye salmon programs have been tried previously at the Tutka Bay Lagoon Hatchery. In 1991 sockeye salmon of Tustumena Lake origin were transferred from the Crooked Creek Hatchery to the Tutka Bay Lagoon Hatchery and immediately

placed in saltwater net pens for a one-time experimental project. In the four years 1994 through 1997 sockeye salmon of Packers Lake origin were present at the Tutka Bay Lagoon Hatchery. There was a release of 75,000 in 1994 and 245,000 in 1995. In 1996 fish were transferred from Trail Lakes Hatchery but were lost to an IHNV outbreak before release. An outbreak of Trichodina after emergence reduced the 1997 release to 100,000.

The current sockeye salmon project associated with Tutka Bay Lagoon and being developed by CIAA is one that uses the Trail Lakes Hatchery for incubation and short-term rearing. Broodstock collection and egg take occurs at Hidden Lake. After incubation and rearing for one year, the resulting pre-smolt are transferred to net pens in Tutka Bay Lagoon in the spring for final rearing, imprinting, and release. The intent of this project is to develop a sockeye salmon run to Tutka Bay Lagoon that will serve as the broodstock source for the Lower Cook Inlet sockeye salmon stocking projects at Leisure Lake, Hazel Lake and Kirschner Lake. The underlying reason for the project is to replace the use of Tustumena Lake sockeye salmon broodstock that is no longer available as a result of a 2003 judicial decision. The first release occurred in 2005, and Hidden Lake will be available as a source of broodstock until 2009.

#### 11.6.2.7 Port Graham Hatchery

Construction was completed on the Port Graham Hatchery in 1991, and the first release of pink salmon occurred in the same year. The pink salmon program continued until January 1998 when the hatchery and an adjacent salmon processing plant were destroyed by fire. The hatchery and processing plant were rebuilt and re-opened in June 1999. There were no pink salmon releases in 1993 and 1998, and the releases in the remaining years ranged from a low of 255,000 in 1991 to a high of 57,158,000 in 2003. The average of the thirteen annual releases during this period was 13,135,000.

The facility has also incubated sockeye salmon eggs collected from the English Bay Lakes enhancement project since 1993. Non-volitional outmigration is used for sockeye. The hatchery is permitted to take 1.35 million sockeye eggs from English Bay Lakes, and juveniles are eventually released back into that system. In 2003, the Hatchery was granted an amendment to their permit that increased the permitted sockeye egg capacity to 3.15 million for a duration of two years. The additional 1.8 million eggs were to be utilized in an effort to establish an accelerated saltwater acclimation program, with release of juveniles ultimately occurring from the hatchery facility. Renewal of the latter project's permit was denied by ADF&G in an effort to induce the hatchery to demonstrate its proficiency by increasing the success of its currently permitted English Bay Lakes sockeye salmon enhancement program.

#### 11.6.2.8 Seldovia Lake Coho Salmon Stocking

Seldovia Lake was stocked annually by ADF&G with coho salmon from 1985 through 1991. The average annual release during this period was 61,000 fish, and the project was suspended after the 1991 release.

## 11.6.2.9 Seldovia Bay Coho Salmon Stocking

A coho salmon stocking program in the Fish Creek drainage in Seldovia was initiated in 2006 under an agreement between the City of Seldovia and the Cook Inlet Aquaculture Association. The projected annual stocking level is 100,000 fish.

## 11.6.2.10 Seldovia Bay King Salmon Stocking

Seldovia Bay has been stocked annually by ADF&G with king salmon smolt since 1987, and the average annual release during this period has been 95,000 fish. The broodstock for this project is the Ninilchik River run of king salmon.

## 11.6.2.11 Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems

This investigation is being conducted by the Kachemak Bay Research Reserve in cooperation with the University of Alaska, Fairbanks; the University of Alaska, Anchorage and the U.S. Geological Survey and is funded by the Exxon Valdez Oil Spill Trustee Council. It is a three-year study (2004 – 2006) to develop monitoring tools for tracking marine derived nutrients in Alaskan watersheds. Humpy Creek was the only system in the Kachemak Bay Unit to be included in the study, but there were an additional ten rivers in four of the other units described in this Phase II Plan 2006 – 2025. As part of this project a video monitoring of escapement in Humpy Creek took place in 2006.

## 11.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

## 11.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

## 11.7.1.1 Impacts Of Past Logging In The Port Graham / English Bay Area

Extensive logging can have numerous negative impacts on salmon habitat. Loss of protective cover along the banks of streams is one. Rapid and dramatic fluctuations in flow regimes pose threats to spawning beds and juvenile salmon. Areas with a history of substantial logging should be examined to determine the extent of habitat damage, if any, and what types of remedial measures might be beneficial.

## 11.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of two anadromous salmon runs in this unit that are sufficiently outside their normal range to warrant recommendations for immediate investigation and/or remedial action.

11.7.2.1 English Bay Lakes Sockeye Salmon

Additional information is necessary to determine the reasons for the less than abundant returns of sockeye salmon to the English Bay lakes system in recent times.

11.7.2.2 Fox River Coho Salmon

Current escapement information about coho salmon in the Fox River is necessary to accurately assess the status of this stock.

11.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

11.7.3.1 **ADF&G** Aerial And Ground Surveys To Monitor Salmon Systems With Escapement Goals

ADF&G annually monitors the salmon systems in this unit for which escapement goals have been established and plans to continue to do so. Understanding the current stock status in the various salmon producing systems is critical to long-range planning for the wellbeing of the resource.

11.7.3.2 **ADF&G** Nick Dudiak Fishing Lagoon Early-run Coho Salmon Stocking

ADF&G started this project to support a recreational coho salmon fishery on the Homer Spit in 2001 and plans to continue it. (See Section 11.6.1.1)

11.7.3.3 **ADF&G** Halibut Cove Lagoon King Salmon Stocking

ADF&G started this project to support a recreational king salmon fishery in Halibut Cove in 1985 and plans to continue it. (See Section 11.6.1.3)

11.7.3.4 **ADF&G** Nick Dudiak Fishing Lagoon King Salmon Stocking

ADF&G started this project to support a recreational king salmon fishery on the Homer Spit in 1984 and plans to continue it. (See Sections 11.6.2.4 and 11.6.2.5)

11.7.3.5 **ADF&G** Seldovia Slough King Salmon Stocking

ADF&G started this project to support a recreational king salmon fishery in Seldovia in 1987 and plans to continue it. (See Section 11.6.2.10)

11.7.3.6 **CIAA** Nick Dudiak Fishing Lagoon Coho Salmon Stocking

ADF&G started this project to support a recreational late-run coho salmon fishery on the Homer Spit in 1988 using Bear Lake broodstock. In 2001 and 2002 they also stocked early-run coho from Ship Creek broodstock. In 2003 CIAA took over the

stocking of the late-run coho salmon and plans to continue it until ADF&G hatcheries are upgraded and can accommodate rearing this stock.. (See Section 11.6.1.1)

11.7.3.7 **CIAA** Tutka Lagoon Sockeye Salmon Remote Release

A sockeye salmon release of fish originating from Hidden Lake broodstock was made at Tutka Lagoon in 2005, initiating a new project by CIAA. The object is to develop a sockeye salmon broodstock at Tutka Lagoon to replace the Tustumena Lake sockeye salmon broodstock that had previously been used for the Lower Cook Inlet sockeye salmon lake stocking projects. CIAA plans to continue this project. (See Section 11.6.1.4)

11.7.3.8 **CIAA** Leisure Lake Sockeye Salmon Stocking and Lake Fertilization

ADF&G had conducted this project to utilize sockeye salmon rearing capacity provided by Leisure Lake since 1976. CIAA assumed responsibility for funding the project in 1990 and for operation of the project in 1993 and plans to continue it. (See Section 11.6.2.1)

11.7.3.9 **CIAA** Hazel Lake Sockeye Salmon Stocking

ADF&G had conducted this project to utilize sockeye salmon rearing capacity provided by Hazel Lake since 1988. CIAA assumed responsibility for funding the project in 1990 and for operation of the project in 1993 and plans to continue it. (See Section 11.6.2.2)

11.7.3.10 **CIAA** Seldovia Slough Coho Salmon Stocking

CIAA is beginning the project in 2006 in conjunction with the City of Seldovia to support a recreational coho salmon fishery in Seldovia and plans to continue it. (See Section 11.6.2.9)

11.7.3.11 **NSEP** Nanwalek Salmon Enhancement Project (NSEP) Sockeye Salmon Smolt /Adult Weir Operation In English Bay River And English Bay Lakes

This project was described earlier and is expected to continue. (See Sections 11.6.1.5 and 11.6.2.7)

11.7.3.12 **PGHC** Port Graham Hatchery Sockeye Salmon Stocking

This project was described earlier but has currently been suspended. (See Section 11.6.2.7)

11.7.3.13 **KWF** Kenai Watershed Forum Habitat Survey

The Kenai Watershed Forum is engaged in a project to evaluate the impact of existing culverts in various stream systems. This project will help to identify those culverts that have the most significant negative impact on successful fish migration. While the study will conclude, the work identified may be taken on subsequently by any of a number of organizations.

11.7.3.14  OTHER None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

11.7.4 Proposed New Anadromous Salmon Projects

11.7.4.1  OTHER None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

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## CHAPTER 12.0

### GULF COAST UNIT ANALYSIS AND RECOMMENDATIONS

#### 12.1 OVERVIEW

The Gulf Coast Unit is characterized by rough terrain and persistently poor weather from the Gulf of Alaska. It is not connected to the major road systems and can be reached only by boat or plane.

There is no developed population center within this Unit; however, resource extraction activity in the form of logging has taken place in the western portion of the Unit.

There are limited commercial and recreational fisheries on anadromous salmon runs in this unit. The anadromous salmon species that characterize most recreational fisheries, king salmon and coho salmon, are not abundant in this unit although some streams support harvests of coho salmon.

All but the western-most portion of the Unit falls within either the Kenai Fjords National Park, the Kachemak Bay State Park or the Kachemak Bay State Wilderness Park, while Port Graham Corporation maintains a significant private ownership of land in and around East Nuka Bay (also known as McCarty Fiord). Moving west to east the area from the western edge of Rocky Bay to Yalik Point (including Nuka Island) is in one of the two Kachemak Bay State Park units. From Yalik Point east to Alijo Point the land is within the Kenai Fjords National Park with the exception of a limited number of inholdings, including the aforementioned Port Graham Corporation land.

#### 12.2 RELEVANT LAND USE POLICIES

##### 12.2.1 National Park Service:

The Kenai Fjords National Park includes the majority of the Gulf Coast Unit from Petrof Point near Nuka Island eastward. This fact places significant limitations on the rehabilitation or enhancement work that can be carried out. (see Section 3.4.5)

##### 12.2.2 Alaska Department of Natural Resources

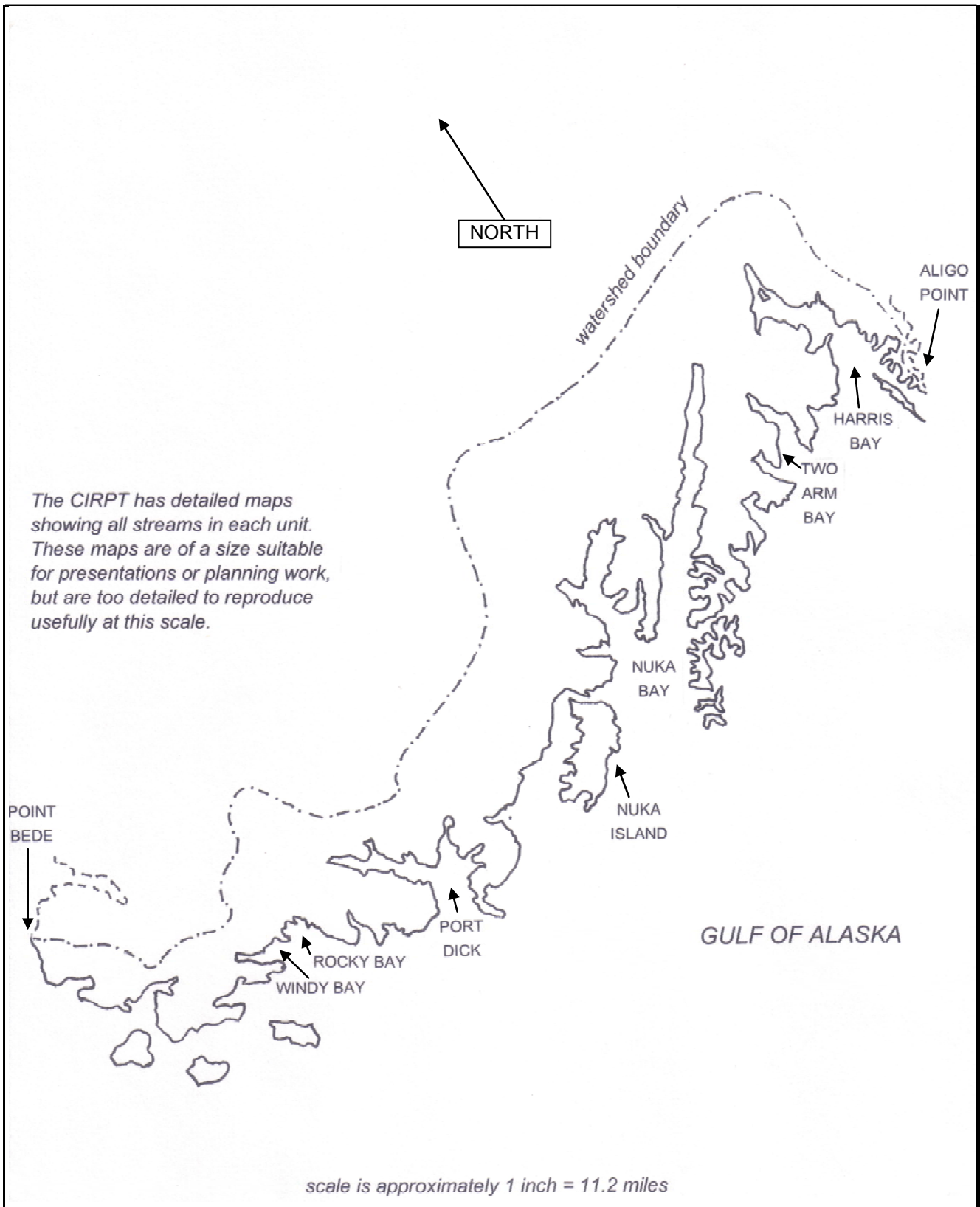
The Alaska Department of Natural Resources through its Division of Parks has responsibility for a large segment of land in the western portion of this unit.

The Kachemak Bay State Park and Kachemak Bay State Wilderness Park, established in 1970, encompass the majority of the freshwater drainage on the coast of the Gulf of Alaska from the western edge of Rocky Bay to Yalik Point (including Nuka Island). The Kachemak Bay State Park Management Plan recognizes the value of the salmon enhancement activities that occur in and near the Park and the role they play in public use of the Park.

In conjunction with its general responsibilities for State lands the Alaska Department of Natural Resources (ADNR) published the Kenai Area Plan (KAP) in 2000. The boundaries of the area covered by this plan are coincidental with the boundaries of the Kenai Peninsula Borough;

EXHIBIT 12-1

GULF COAST UNIT MAP



therefore, all of the Gulf Coast Unit is covered by the ADNR plan. The KAP is probably the best consolidated reference for land ownership patterns in the Unit.

The plan directs how ADNR will manage state uplands, tidelands, and submerged lands within the area it covers. In addition to its general management intent and management guidelines the KAP specifically addresses the Gulf Coast Unit in the sections designated Region 9 – South Side of Kachemak Bay and Chugach Islands and Region 10 – Outer Coast of the Kenai Peninsula.

12.2.3 Kenai Peninsula Borough:

Although all of the Gulf Coast Unit is within the Kenai Peninsula Borough, only a very small portion of the land is actually owned by the Borough. The Borough does, however, plan for the development and use of resources within the Borough boundaries on land held by others.

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue land use permits that can influence project implementation.

In addition the Borough conducts consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program.

12.2.4 Port Graham Corporation:

Port Graham Corporation maintains varied policies governing access and allowed uses on native owned lands. Individuals or organizations wishing to conduct activities on or access water bodies across these lands must first seek permission and obtain appropriate permits from Port Graham Corporation.

**12.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 12-2A through 12-2E reflect what is known about the stream systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 1996. Run sizes were obtained from ADF&G’s historical escapement counts

**KEY FOR EXHIBITS 12A THROUGH 12E**

In the following exhibits there are numbers of fish cited under two headings, *“Highest Number of Fish Reported for the System”* (column 3) and *“Most Recent Number of Fish Reported for the System”* (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey
EE	estimated escapement
EHO	estimate of historical observations

GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 12-2A							GULF COAST UNIT KING SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
<b>west-to-east geographic reference:</b>							<b>POINT BEDE SOUTHWEST OF ENGLISH BAY</b>						
Unnamed Tributary	241-30-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-30-10375	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-40-10325	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-40-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	241-40-10309	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Dogfish Lagoon C.	242-10-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2010-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10300-2020-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10299	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
<b>west-to-east geographic reference:</b>							<b>PORT CHATHAM</b>						
Unnamed Tributary	242-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10249	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Port Chatham C.	242-10-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10230-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										

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EXHIBIT 12-2A [continued from preceding page]							GULF COAST UNIT KING SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	242-10-10230-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10230-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10230-2014-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10230-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10230-2029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10221	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10221-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200-2003-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200-2003-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200-2003-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200-2026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10200-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-10-10196	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
		west-to-east geographic reference: CHUGACH BAY											
Unnamed Tributary	242-20-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-20-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-32-10186	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-32-10185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-32-10183	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-32-10182	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-32-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	242-32-10175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										

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EXHIBIT 12-2A		[continued from preceding page]		GULF COAST UNIT KING SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.		SEPT.	
Windy Left C.	242-32-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-32-10170-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-32-10170-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Windy Right C.	242-32-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-32-10160-2001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-32-10155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-32-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
		west-to-east geographic reference: <b>ROCKY BAY</b>								
Unnamed Tributary	242-32-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10122	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Rocky R.	242-31-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2149	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2155-3038	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2155-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2155-3048	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2159	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2251	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2272	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2272-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10120-2282	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10119	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							

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**EXHIBIT 12-2A** [continued from preceding page] **GULF COAST UNIT KING SALMON**

Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
				MAY	JUNE	JULY	AUG. SEPT.
Unnamed Tributary	242-31-10119-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10119-2010-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10117	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10116	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10114	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10110-2013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10100-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10100-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10100-2014-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-31-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-41-10390	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-41-10380	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Port Dick (Head) C.	242-42-10460	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-42-10460-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Slide C.	242-42-10450	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-42-10442	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Middle C.	242-42-10440	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Island C.	242-42-10430	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-43-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-43-10410	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	242-43-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
Unnamed Tributary	232-10-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				
		<i>west-to-east geographic reference:</i>					
		TONSINA BAY					
Unnamed Tributary	232-10-10342	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT				

[ continued on following page ]



EXHIBIT 12-2A		[continued from preceding page]					GULF COAST UNIT KING SALMON				
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Tonsina C.	232-10-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Petrof R.	232-10-10330	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-10-10330-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
west-to-east geographic reference: NUKA ISLAND											
South Nuka Island C.	232-15-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-21-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-21-10240-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-21-10240-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-21-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-21-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
west-to-east geographic reference: WEST ARM OF NUKA BAY											
Unnamed Tributary	232-22-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10210	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Nuka R.	232-22-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								

[ continued on following page ]

EXHIBIT 12-2A		[continued from preceding page]					GULF COAST UNIT KING SALMON				
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Unnamed Tributary	232-22-10092	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10090-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10077	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Babcock C.	232-22-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-22-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
		<i>west-to-east geographic reference:</i> McCARTY FJORD									
Unnamed Tributary	232-23-10245	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-23-10256	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
James Lagoon C.	232-23-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-23-10261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-23-10261-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-23-10261-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-23-10261-2009-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-23-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Delusion Lake C.	232-23-10390	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Desire Lake C.	232-23-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
		<i>west-to-east geographic reference:</i> DELIGHT LAKE									
Delight Lake C.	232-23-10100	UNKNOWN	UNKNOWN						TIMING UNKNOWN		
Unnamed Tributary	232-30-10435	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								
Unnamed Tributary	232-30-10425	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT								

[ continued on following page ]

EXHIBIT 12-2A		[continued from preceding page]					GULF COAST UNIT KING SALMON				
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing							
				MAY	JUNE	JULY	AUG.	SEPT.			
Unnamed Tributary	232-30-10420		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10375		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10355		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10350		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10340		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10275		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10272		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10270		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10251		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10251-2008		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10195		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10190		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
			<i>west-to-east geographic reference:</i>								
			HARRIS BAY								
Unnamed Tributary	232-30-10200		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10215		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10220		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10226		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10230		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10247		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10250		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10255		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10273		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10273-2007		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10273-2007-3012		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10273-2020		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-30-10273-2024		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
			<i>west-to-east geographic reference:</i>								
			ALIGO POINT WEST SIDE OF AIALIK BAY								

EXHIBIT 12-2B							GULF COAST UNIT SOCKEYE SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY		AUG.	SEPT.				
	<i>west-to-east geographic reference:</i>						<i>POINT BEDE SOUTHWEST OF ENGLISH BAY</i>						
Unnamed Tributary	241-30-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	241-30-10375	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	241-40-10325	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	241-40-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	241-40-10309	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Dogfish Lagoon C.	242-10-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2010-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10300-2020-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10299	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
	<i>west-to-east geographic reference:</i>						<i>PORT CHATHAM</i>						
Unnamed Tributary	242-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10249	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Port Chatham C.	242-10-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									
Unnamed Tributary	242-10-10230-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT									

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<b>EXHIBIT 12-2B</b> [continued from preceding page]									
<b>GULF COAST UNIT SOCKEYE SALMON</b>									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	242-10-10230-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10230-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10230-2014-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10230-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10230-2029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10221	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10221-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10200	UNKNOWN	UNKNOWN						
Unnamed Tributary	242-10-10200-2003	UNKNOWN	UNKNOWN						
Unnamed Tributary	242-10-10200-2003-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10200-2003-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10200-2003-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10200-2026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10200-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10196	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		<i>west-to-east geographic reference:</i> <b>CHUGACH BAY</b>							
Unnamed Tributary	242-20-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-20-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-32-10186	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-32-10185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-32-10183	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-32-10182	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-32-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-32-10175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 12-2B [continued from preceding page]										GULF COAST UNIT SOCKEYE SALMON									
Stream USGS Name [locally used name]		Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing														
					MAY	JUNE	JULY	AUG.	SEPT.										
Windy Left C.		242-32-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-32-10170-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-32-10170-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Windy Right C.		242-32-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-32-10160-2001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-32-10155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-32-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
			<a href="#">west-to-east geographic reference:</a>	ROCKY BAY															
Unnamed Tributary		242-32-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10122	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Rocky R.		242-31-10120	UNKNOWN	UNKNOWN															
Unnamed Tributary		242-31-10120-2149	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10120-2155	UNKNOWN	UNKNOWN															
Unnamed Tributary		242-31-10120-2155-3038	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10120-2155-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10120-2155-3048	UNKNOWN	UNKNOWN															
Unnamed Tributary		242-31-10120-2159	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10120-2160	UNKNOWN	UNKNOWN															
Unnamed Tributary		242-31-10120-2251	UNKNOWN	UNKNOWN															
Unnamed Tributary		242-31-10120-2272	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10120-2272-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10120-2282	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																
Unnamed Tributary		242-31-10119	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																

[ continued on following page ]

EXHIBIT 12-2B [continued from preceding page] <b>GULF COAST UNIT SOCKEYE SALMON</b>									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	242-31-10119-2010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10119-2010-3005			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10117			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10116			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10114			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10115			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10110			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10110-2013			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10100			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10100-2011			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10100-2014			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10100-2014-3012			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10080			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-41-10390			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-41-10380			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Port Dick (Head) C.	242-42-10460	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-42-10460-2010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Slide C.	242-42-10450			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-42-10442			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Middle C.	242-42-10440			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Island C.	242-42-10430			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-43-10420			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-43-10410			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-43-10400			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-10-10350			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		<a href="#">west-to-east geographic reference:</a>		TONSINA BAY					
Unnamed Tributary	232-10-10342			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

EXHIBIT 12-2B		GULF COAST UNIT SOCKEYE SALMON							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
[continued from preceding page]						MAY	JUNE	JULY	AUG.
Tonsina C.		232-10-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Petrof R.		232-10-10330	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-10-10330-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		<a href="#">west-to-east geographic reference:</a>							
		<a href="#">NUKA ISLAND</a>							
South Nuka Island C.		232-15-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-21-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-21-10240-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-21-10240-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-21-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-21-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		<a href="#">west-to-east geographic reference:</a>							
		<a href="#">WEST ARM OF NUKA BAY</a>							
Unnamed Tributary		232-22-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-22-10210	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-22-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-22-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-22-10145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-22-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary		232-22-10135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Nuka R.		232-22-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

[ continued on following page ]



EXHIBIT 12-2B [continued from preceding page]		GULF COAST UNIT SOCKEYE SALMON							
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	232-22-10092			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10090			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10090-2010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10082			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10080			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10077			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10070			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10064			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10060			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10050			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Babcock C.	232-22-10020			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-22-10010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
				west-to-east geographic reference: McCARTY FJORD					
Unnamed Tributary	232-23-10245			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-23-10256			UNKNOWNTIMING UNKNOWN					
James Lagoon C.	232-23-10260			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-23-10261			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-23-10261-2002			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-23-10261-2009			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-23-10261-2009-3010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-23-10290			UNKNOWNTIMING UNKNOWN					
Delusion Lake C.	232-23-10390	3,600	PC 2002						
Desire Lake C.	232-23-10120	18,000	EE 1985						
				west-to-east geographic reference: DELIGHT LAKE					
Delight Lake C.	232-23-10100	27,800	WC 1997						
Unnamed Tributary	232-30-10435			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-30-10425			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

[ continued on following page ]

EXHIBIT 12-2B [continued from preceding page]		GULF COAST UNIT SOCKEYE SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	232-30-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10375	UNKNOWN	UNKNOWN					
Unnamed Tributary	232-30-10355	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10340	UNKNOWN	UNKNOWN					
Unnamed Tributary	232-30-10275	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10272	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10251	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10251-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		west-to-east geographic reference: HARRIS BAY						
Unnamed Tributary	232-30-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10226	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10247	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273-2007-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		west-to-east geographic reference: ALIGO POINT WEST SIDE OF AIALIK BAY						

EXHIBIT 12-2C										GULF COAST UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
<b>west-to-east geographic reference:</b>										<b>POINT BEDE SOUTHWEST OF ENGLISH BAY</b>									
Unnamed Tributary	241-30-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	241-30-10375	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	241-40-10325	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	241-40-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	241-40-10309	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Dogfish Lagoon C.	242-10-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2010-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10300-2020-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10299	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10270	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	242-10-10261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
<b>west-to-east geographic reference:</b>										<b>PORT CHATHAM</b>									
Unnamed Tributary	242-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10249	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Unnamed Tributary	242-10-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															
Port Chatham C.	242-10-10230	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	242-10-10230-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT															

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EXHIBIT 12-2C [continued from preceding page]									
GULF COAST UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	242-10-10230-2011		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10230-2014		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10230-2014-3003		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10230-2021	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10230-2029		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10221		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10221-2009		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10220		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-10-10200	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10200-2003	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10200-2003-3008	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10200-2003-3010	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10200-2003-3011	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10200-2026	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10200-2034	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-10-10196		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
west-to-east geographic reference: CHUGACH BAY									
Unnamed Tributary	242-20-10190		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-20-10170		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-32-10186		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-32-10185		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-32-10183		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-32-10182		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	242-32-10180	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	242-32-10175		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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<b>EXHIBIT 12-2C</b>		<b>GULF COAST UNIT COHO SALMON</b>							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
		Windy Left C.	242-32-10170	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-32-10170-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-32-10170-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Windy Right C.	242-32-10160	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-32-10160-2001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-32-10155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-32-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
			west-to-east geographic reference: <b>ROCKY BAY</b>						
		Unnamed Tributary	242-32-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-31-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-31-10125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-31-10122	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Rocky R.	242-31-10120	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2149	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2155	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2155-3038	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2155-3040	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2155-3048	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2159	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-31-10120-2251	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2272	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2272-3007	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		Unnamed Tributary	242-31-10120-2282	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		Unnamed Tributary	242-31-10119	UNKNOWN	UNKNOWN	TIMING UNKNOWN			

[ continued on following page ]

EXHIBIT 12-2C [continued from preceding page]							GULF COAST UNIT COHO SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Unnamed Tributary	242-31-10119-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10119-2010-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10117	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10116	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10114	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10115	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10110-2013	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10100-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10100-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10100-2014-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-31-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-41-10390	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-41-10380	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Port Dick (Head) C.	242-42-10460	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	242-42-10460-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Slide C.	242-42-10450	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-42-10442	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Middle C.	242-42-10440	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Island C.	242-42-10430	UNKNOWN	UNKNOWN	TIMING UNKNOWN						
Unnamed Tributary	242-43-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-43-10410	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	242-43-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
Unnamed Tributary	232-10-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							
		<i>west-to-east geographic reference:</i>		TONSINA BAY						
Unnamed Tributary	232-10-10342	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT							

[ continued on following page ]

EXHIBIT 12-2C [continued from preceding page]							GULF COAST UNIT COHO SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing						
				MAY	JUNE	JULY	AUG.	SEPT.		
Tonsina C.	232-10-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Petrof R.	232-10-10330	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-10-10330-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
west-to-east geographic reference: NUKA ISLAND										
South Nuka Island C.	232-15-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-21-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-21-10240-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-21-10240-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-21-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-21-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
west-to-east geographic reference: WEST ARM OF NUKA BAY										
Unnamed Tributary	232-22-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-22-10210	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-22-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-22-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-22-10145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-22-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Unnamed Tributary	232-22-10135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								
Nuka R.	232-22-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT								

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EXHIBIT 12-2C [continued from preceding page]									
GULF COAST UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	232-22-10092	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10090-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10077	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Babcock C.	232-22-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-22-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
		<i>west-to-east geographic reference:</i> <b>McCARTY FJORD</b>							
Unnamed Tributary	232-23-10245	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-23-10256	UNKNOWN							TIMING UNKNOWN
James Lagoon C.	232-23-10260	UNKNOWN							TIMING UNKNOWN
Unnamed Tributary	232-23-10261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-23-10261-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-23-10261-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-23-10261-2009-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-23-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Delusion Lake C.	232-23-10390	UNKNOWN							TIMING UNKNOWN
Desire Lake C.	232-23-10120	UNKNOWN							TIMING UNKNOWN
		<i>west-to-east geographic reference:</i> <b>DELIGHT LAKE</b>							
Delight Lake C.	232-23-10100	UNKNOWN							TIMING UNKNOWN
Unnamed Tributary	232-30-10435	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						
Unnamed Tributary	232-30-10425	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT						

[ continued on following page ]



EXHIBIT 12-2C		GULF COAST UNIT COHO SALMON							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Unnamed Tributary	232-30-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10375	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10355	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10275	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10272	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10251	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10251-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
		<i>west-to-east geographic reference:</i> HARRIS BAY							
	Unnamed Tributary	232-30-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10226	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10247	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10273	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Unnamed Tributary	232-30-10273-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10273-2007-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT					
	Unnamed Tributary	232-30-10273-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
	Unnamed Tributary	232-30-10273-2024	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
		<i>west-to-east geographic reference:</i> ALIGO POINT WEST SIDE OF AIALIK BAY							

GULF COAST UNIT PINK SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
<b>west-to-east geographic reference:</b>									
Unnamed Tributary	241-30-10400	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-30-10375	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-40-10325	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-40-10320	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-40-10309	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Dogfish Lagoon C.	242-10-10300	22,300 EE 2005	22,300 EE 2005						
Unnamed Tributary	242-10-10300-2002	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2004	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2007	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2010-3001	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2020	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2020-3005	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10299	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10297	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10270	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	242-10-10261	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
<b>west-to-east geographic reference:</b>									
Unnamed Tributary	242-10-10250	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10249	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10240	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Port Chatham C.	242-10-10230	44,400 EE 2005	44,400 EE 2005						
Unnamed Tributary	242-10-10230-2003	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
[ continued on following page ]									

EXHIBIT 12-2D [continued from preceding page]										GULF COAST UNIT PINK SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	242-10-10230-2011	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10230-2014	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10230-2014-3003	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10230-2021	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10230-2029	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10221	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10221-2009	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10220	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10200	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10200-2003	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10200-2003-3008	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10200-2003-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10200-2003-3011	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10200-2026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-10-10200-2034	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-10-10196	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
west-to-east geographic reference:													
Unnamed Tributary	242-20-10190	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-20-10170	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-32-10186	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-32-10185	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-32-10183	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-32-10182	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-32-10180	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	242-32-10175	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
[ continued on following page ]													

EXHIBIT 12-2D [continued from preceding page]		GULF COAST UNIT PINK SALMON									
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
MAY	JUNE					JULY	AUG.	SEPT.			
Windy Left C.	242-32-10170	82,800	EE 2003	72,000	EE 2005						
Unnamed Tributary	242-32-10170-2015	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-32-10170-2045	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Windy Right C.	242-32-10160	23,300	EE 2003	22,200	EE 2005						
Unnamed Tributary	242-32-10160-2001	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-32-10155	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-32-10150	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
<b>west-to-east geographic reference:</b>											
Unnamed Tributary	242-32-10140	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10130	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10125	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10122	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Rocky R.	242-31-10120	287,400	EE 2003	198,700	EE 2005						
Unnamed Tributary	242-31-10120-2149	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	242-31-10120-2155	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10120-2155-3038	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	242-31-10120-2155-3040	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	242-31-10120-2155-3048	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10120-2159	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10120-2160	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	242-31-10120-2251	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10120-2272	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10120-2272-3007	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10120-2282	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					
Unnamed Tributary	242-31-10119	UNKNOW	UNKNOW	UNKNOW	UNKNOW	TIMING UNKNOWN					

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EXHIBIT 12-2D [continued from preceding page]									
GULF COAST UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	242-31-10119-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10119-2010-3005	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10117	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10116	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10114	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10115	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10110	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10110-2013	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100-2011	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100-2014	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100-2014-3012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10090	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10080	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-41-10390	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-41-10380	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Port Dick (Head) C.	242-42-10460	124,400 EE 2000	122,200 EE 2005	TIMING UNKNOWN					
Unnamed Tributary	242-42-10460-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Slide C.	242-42-10450	UNKNOWN	33,200 EE 2005	TIMING UNKNOWN					
Unnamed Tributary	242-42-10442	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Middle C.	242-42-10440	UNKNOWN	10,100 EE 2005	TIMING UNKNOWN					
Island C.	242-42-10430	118,600 EE 2003	26,400 EE 2005	TIMING UNKNOWN					
Unnamed Tributary	242-43-10420	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	242-43-10410	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-43-10400	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	232-10-10350	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
<i>west-to-east geographic reference:</i>									
Unnamed Tributary	232-10-10342	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

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EXHIBIT 12-2D		GULF COAST UNIT PINK SALMON								
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing				
[continued from preceding page]						MAY	JUNE	JULY	AUG.	SEPT.
	Tonsina C.	232-10-10340	700 EE 2005	700 EE 2005	700 EE 2005	TIMING UNKNOWN				
	Petrof R.	232-10-10330	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
	Unnamed Tributary	232-10-10330-2015	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
	Unnamed Tributary	232-10-10250	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN				
		<i>west-to-east geographic reference:</i>								
	South Nuka Island C.	232-15-10260	41,400 EE 2003	11,200 EE 2005						
	Unnamed Tributary	232-15-10270	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-15-10280	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-15-10290	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-15-10300	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-15-10310	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-15-10320	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-15-10350	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-21-10240	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-21-10240-2006	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-21-10240-2010	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-21-10230	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-21-10220	UNKNOWN	UNKNOWN						TIMING UNKNOWN
		<i>west-to-east geographic reference:</i>								
		<b>WEST ARM OF NUKA BAY</b>								
	Unnamed Tributary	232-22-10215	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-22-10210	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-22-10190	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-22-10160	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-22-10145	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-22-10140	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Unnamed Tributary	232-22-10135	UNKNOWN	UNKNOWN						TIMING UNKNOWN
	Nuka R.	232-22-10130	UNKNOWN	UNKNOWN						TIMING UNKNOWN

[ continued on following page ]

EXHIBIT 12-2D		GULF COAST UNIT PINK SALMON							
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
[continued from preceding page]						MAY	JUNE	JULY	AUG.
Unnamed Tributary	232-22-10092	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10090	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10090-2010	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10082	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10080	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10077	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10070	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10064	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10060	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10050	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Babcock C.	232-22-10020	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-22-10010	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
west-to-east geographic reference:		McCARTY FJORD							
Unnamed Tributary	232-23-10245	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-23-10256	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
James Lagoon C.	232-23-10260	14,000	EE 1981	3,100	EE 2002	TIMING UNKNOWN			
Unnamed Tributary	232-23-10261	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-23-10261-2002	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-23-10261-2009	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-23-10261-2009-3010	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-23-10290	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Delusion Lake C.	232-23-10390	3,700	EE 2005	3,700	EE 2005	TIMING UNKNOWN			
Desire Lake C.	232-23-10120	78,400	EE 2002	46,000	EE 2005				
west-to-east geographic reference:		DELIGHT LAKE							
Delight Lake C.	232-23-10100	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10435	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10425	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			

[ continued on following page ]

EXHIBIT 12-2D [continued from preceding page]		GULF COAST UNIT PINK SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	232-30-10420	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10375	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10355	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10350	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10340	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10275	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10272	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10270	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10251	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10251-2008	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10195	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10190	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		<b>west-to-east geographic reference:</b>						
Unnamed Tributary	232-30-10200	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10215	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10220	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10226	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10230	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10247	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10250	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10255	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10273	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10273-2007	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10273-2007-3012	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10273-2020	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
Unnamed Tributary	232-30-10273-2024	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN			
		<b>west-to-east geographic reference:</b>						
		<b>ALIGO POINT WEST SIDE OF AIALIK BAY</b>						



GULF COAST UNIT CHUM SALMON									
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
		<b>west-to-east geographic reference:</b> <b>POINT BEDE SOUTHWEST OF ENGLISH BAY</b>							
Unnamed Tributary	241-30-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-30-10375	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	241-40-10325	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-40-10320	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	241-40-10309	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Dogfish Lagoon C.	242-10-10300	19,600	EE 2000	2,700	EE 2005				
Unnamed Tributary	242-10-10300-2002	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2004	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2007	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2010-3001	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10300-2020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10300-2020-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10299	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10297	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	242-10-10261	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		<b>west-to-east geographic reference:</b> <b>PORT CHATHAM</b>							
Unnamed Tributary	242-10-10250	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10249	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-10-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Port Chatham C.	242-10-10230	500	EE 2005	500	EE 2005	TIMING UNKNOWN			
Unnamed Tributary	242-10-10230-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
[ continued on following page ]									

<b>EXHIBIT 12-2E</b>		<b>GULF COAST UNIT CHUM SALMON</b>							
[ continued from preceding page ]		Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			
						MAY	JUNE	JULY	AUG.
	Unnamed Tributary	242-10-10230-2011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10230-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10230-2014-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10230-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10230-2029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10221	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10221-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10220	UNKNOWN	UNKNOWN					TIMING UNKNOWN
	Unnamed Tributary	242-10-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10200-2003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10200-2003-3008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10200-2003-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10200-2003-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10200-2026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10200-2034	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-10-10196	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
			<i>west-to-east geographic reference:</i> <b>CHUGACH BAY</b>						
	Unnamed Tributary	242-20-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-20-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-32-10186	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-32-10185	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-32-10183	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-32-10182	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
	Unnamed Tributary	242-32-10180	UNKNOWN	UNKNOWN					TIMING UNKNOWN
	Unnamed Tributary	242-32-10175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						

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EXHIBIT 12-2E [continued from preceding page]										GULF COAST UNIT CHUM SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Windy Left C.	242-32-10170	600 EE 2005	600 EE 2005										
Unnamed Tributary	242-32-10170-2015	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-32-10170-2045	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Windy Right C.	242-32-10160	300 EE 2005	300 EE 2005										
Unnamed Tributary	242-32-10160-2001	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	242-32-10155	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	242-32-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
west-to-east geographic reference: <b>ROCKY BAY</b>													
Unnamed Tributary	242-32-10140	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	242-31-10130	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	242-31-10125	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10122	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Rocky R.	242-31-10120	17,200 EE 2004	6,100 EE 2005										
Unnamed Tributary	242-31-10120-2149	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2155	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	242-31-10120-2155-3038	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2155-3040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2155-3048	UNKNOWN	UNKNOWN						TIMING UNKNOWN				
Unnamed Tributary	242-31-10120-2159	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2251	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2272	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2272-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10120-2282	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
Unnamed Tributary	242-31-10119	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT											
[ continued on following page ]													

EXHIBIT 12-2E [continued from preceding page]									
GULF COAST UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	242-31-10119-2010			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10119-2010-3005			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10117			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10116			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10114			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10115			ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-31-10110	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10110-2013	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100-2011	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100-2014	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10100-2014-3012	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10090	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-31-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-41-10390	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-41-10380	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Port Dick (Head) C.	242-42-10460	12,300 EE 2002	4,800 EE 2005						
Unnamed Tributary	242-42-10460-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Slide C.	242-42-10450	4,800 EE 2005	4,800 EE 2005	TIMING UNKNOWN					
Unnamed Tributary	242-42-10442	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Middle C.	242-42-10440	1,100 EE 2005	1,100 EE 2005	TIMING UNKNOWN					
Island C.	242-42-10430	36,200 EE 1983	20,700 EE 2005						
Unnamed Tributary	242-43-10420	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	242-43-10410	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	242-43-10400	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary	232-10-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
		west-to-east geographic reference: TONSINA BAY							
Unnamed Tributary	232-10-10342	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 12-2E		GULF COAST UNIT CHUM SALMON						
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
[continued from preceding page]						MAY	JUNE	JULY
Tonsina C.		232-10-10340	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Petrof R.		232-10-10330	8,400 EE 2005	8,400 EE 2005				
Unnamed Tributary		232-10-10330-2015	UNKNOWN	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary		232-10-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
			west-to-east geographic reference: NUKA ISLAND					
South Nuka Island C.		232-15-10260	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10300	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10310	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10320	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-15-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-21-10240	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-21-10240-2006	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-21-10240-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-21-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-21-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
			west-to-east geographic reference: WEST ARM OF NUKA BAY					
Unnamed Tributary		232-22-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-22-10210	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-22-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-22-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-22-10145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-22-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Unnamed Tributary		232-22-10135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					
Nuka R.		232-22-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT					

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EXHIBIT 12-2E [continued from preceding page]										GULF COAST UNIT CHUM SALMON			
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Unnamed Tributary	232-22-10092	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10090-2010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10077	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10070	UNKNOWN	TIMING UNKNOWN										
Unnamed Tributary	232-22-10064	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10060	UNKNOWN	TIMING UNKNOWN										
Unnamed Tributary	232-22-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Babcock C.	232-22-10020	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-22-10010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
		<i>west-to-east geographic reference:</i> <b>McCARTY FJORD</b>											
Unnamed Tributary	232-23-10245	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-23-10256	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
James Lagoon C.	232-23-10260	UNKNOWN	TIMING UNKNOWN										
Unnamed Tributary	232-23-10261	UNKNOWN	TIMING UNKNOWN										
Unnamed Tributary	232-23-10261-2002	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-23-10261-2009	UNKNOWN	TIMING UNKNOWN										
Unnamed Tributary	232-23-10261-2009-3010	UNKNOWN	TIMING UNKNOWN										
Unnamed Tributary	232-23-10290	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Delusion Lake C.	232-23-10390	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Desire Lake C.	232-23-10120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
		<i>west-to-east geographic reference:</i> <b>DELIGHT LAKE</b>											
Delight Lake C.	232-23-10100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-30-10435	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-30-10425	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										

[ continued on following page ]

EXHIBIT 12-2E [continued from preceding page]		GULF COAST UNIT CHUM SALMON						
		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
MAY	JUNE					JULY	AUG.	SEPT.
Unnamed Tributary	232-30-10420	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10375	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10355	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10350	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10340	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10275	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10272	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10270	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10251	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10251-2008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10195	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
		<b>west-to-east geographic reference:</b>						
		HARRIS BAY						
Unnamed Tributary	232-30-10200	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10215	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10220	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10226	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10230	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10247	UNKNOWNTIMING UNKNOWN						
Unnamed Tributary	232-30-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10255	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273	UNKNOWNTIMING UNKNOWN						
Unnamed Tributary	232-30-10273-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273-2007-3012	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT						
Unnamed Tributary	232-30-10273-2020	UNKNOWNTIMING UNKNOWN						
Unnamed Tributary	232-30-10273-2024	UNKNOWNTIMING UNKNOWN						
		<b>west-to-east geographic reference:</b>						
		ALIGO POINT WEST SIDE OF AIALIK BAY						

12.4 SIGNIFICANT STOCKS

Based on the available data, the stocks shown in EXHIBIT 12-3 are known to fit the size criterion for significance as discussed in the ADF&G Genetics Policy and further amplified in Chapter 3.0 of this document.

EXHIBIT 12-3		SIGNIFICANT STOCKS				
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM
<i>Dogfish Lagoon Creek</i>	242-10-10300				significant	significant
<i>Port Chatham Creek</i>	242-10-10230				significant	
<i>Windy Left Creek</i>	242-32-10170				significant	
<i>Windy Right Creek</i>	242-32-10160				significant	
Rocky River	242-31-10120				significant	significant
Port Dick (Head) Creek	242-42-10460				significant	significant
Slide C.	242-42-10450				significant	significant
Middle C.	242-42-10440				significant	significant
Island Creek	242-42-10430				significant	significant
Petrof R.	232-10-10330					significant
<i>South Nuka Island Creek</i>	232-15-10260				significant	
<i>James Lagoon Creek</i>	232-23-10260				significant	
<i>Delusion Lake C.</i>	232-23-10390		significant			
<i>Desire Lake Creek</i>	232-23-10120		significant		significant	
<i>Delight Lake Creek</i>	232-23-10120		significant			

Non-italics = stream name appearing on USGS maps      *Italics = Unnamed on USGS map but identified by its locally-used name*

AWC = Anadromous Waters Catalog

significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.
significant	Historic count meets minimum size criteria, but the most recent count does not.

Minimum significant stock size criteria:		Generalized period for two life cycles:	
King Salmon	400 fish		12 years
Sockeye Salmon	2,000 fish		10 years
Coho Salmon	800 fish		8 years
Pink Salmon	5,000 fish		4 years
Chum Salmon	800 fish		8 years

12.5 WILD STOCK SANCTUARIES / STOCK RESERVES

A review of the various stocks of salmon found in the Gulf Coast Unit leads the CIRPT to make the following determinations with respect to the designation of "stock reserves" in the Gulf Coast Unit systems. This concept is described and recommended for adoption in the ADF&G *Genetics Policy* where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0 section 3.3.3.5 of this document as it is applied in Cook Inlet.



12.5.1 King Salmon

Stock identified: None

Rationale: After reviewing the information about king salmon in the Gulf Coast systems, the CIRPT determined there was no king salmon "stock" which could qualify for designation as a "wild stock sanctuary / stock reserve".

12.5.2 Sockeye Salmon

Stock identified: None

Rationale: After reviewing the information about sockeye salmon in the Gulf Coast systems, the CIRPT determined there was no sockeye salmon "stock" which could qualify for designation as a "wild stock sanctuary / stock reserve".

12.5.3 Coho Salmon

Stock identified: None

Rationale: After reviewing the information about coho salmon in the Gulf Coast systems, the CIRPT determined there was no coho salmon "stock" which could qualify for designation as a "wild stock sanctuary / stock reserve".

12.5.4 Pink Salmon

Stock identified: *Port Dick (Head) Creek [AWC 242-42-10460]*

Rationale: After reviewing the information about pink salmon in the Gulf Coast systems, the CIRPT determined the Port Dick (Head) Creek pink salmon "stock" was large enough, and representative enough to qualify as a "wild stock sanctuary / stock reserve". In addition it is afforded habitat protection by virtue of the fact much of the system is inside the Kachemak Bay State Wilderness Park.

12.5.5 Chum Salmon

Stock identified: None

Rationale: After reviewing the information about chum salmon in the Gulf Coast systems, the CIRPT determined there was no chum salmon "stock" which could qualify for designation as a "wild stock sanctuary / stock reserve".

## 12.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT

### 12.6.1 Projects Identified in the Phase I Plan 1981 - 2000

#### 12.6.1.1 Scurvy Creek

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*"This is a project in Rocky Bay in which CIAA has taken the lead in cooperative efforts with the F.R.E.D. and Commercial Fish Divisions. Work began with the stocking of pink and chum salmon in 1980. Port Dick and Rocky River served as sources of broodstock. Observation of the system indicated that the presence of a velocity chute creates a serious impediment to the upstream migration of adult pink salmon. It appears that some blasting of the ledge that forms the velocity chute will allow for the creation of a partial channel diversion with sufficient pools to allow adult salmon to pass upstream. When sufficient runs have been established the project would lend itself to a terminal harvest. Production is estimated at 240,000 adult pink salmon and 6,000 adult chum salmon annually."*

#### Subsequent Developments:

Between 1979 and 1985 several studies and projects were done at Scurvy Creek by CIAA. These included adult stocking, fish ladder construction and weir operation for adult counting. In 1985 the system was investigated for its potential to accommodate spawning channels or to serve as a hatchery site. In 1987 a spawning channel was built at Scurvy Creek. Flooding occurred in 1990 and isolated the spawning channel from the mainstem of Scurvy Creek, thus precluding its use by spawning adult salmon returning to Scurvy Creek.

#### 12.6.1.2 Delight and Desire Lakes Fertilization and Stocking

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*"Although they are physically separate, these two lakes on the east side of the East Arm of Nuka Bay are viewed as a single 1,086 acre unit for this project proposed by the F.R.E.D. Division. Both lakes are candidates for fertilization and would provide the opportunity for terminal harvests. Production from this project could reach 129,000 adult sockeye salmon annually. The Regional Planning Team has been advised by the National Park Service that this project would require actions which would "constitute an inappropriate and unacceptable change to National Park Service lands and waters and are directly contrary to both law and policy." The Team understands this present limitation but will continue to carry the project representing a potential resource which would be available for realization should law and policy change during the life of the Plan."*

#### Subsequent Developments:

A weir was in place sporadically, at both lakes in 1977. Both lakes had adult weirs in place in 1997, and a weir has operated at Delight from 1997 through 2003 except for 2000 when finances and effort went to Port Dick Creek. The weir allowed ADF&G to identify harvestable surpluses more effectively while accurately managing for the SEG into Delight Lake. The lakes project was proposed for ongoing Exxon Valdez Oil Spill

Restoration Project funding, but after the initial year's (1997) limnological and fishery investigation funding was not continued. Lands surrounding the lakes were transferred to Port Graham Corporation in 1995 and are therefore no longer under the National Park Service jurisdiction.

#### 12.6.1.3 Island Creek Clearance

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

#### Subsequent Developments:

The potential project at Island Creek has received no further attention since the publication of the original plan. The project site is within the Kachemak Bay State Wilderness Park.

#### 12.6.1.4 Koyuktolik (Dogfish) Bay Creek Clearance

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

#### Subsequent Developments:

The potential project at Dogfish Bay Creek at the eastern end of Koyuktolik Bay has received no further attention since the publication of the original plan

#### 12.6.1.5 Windy Right Creek Clearance

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The potential project at Windy Right Creek has received no further attention since the publication of the original plan

## 12.6.1.6 Anderson Beach Clearance

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The potential project at Anderson Beach has received no further attention since the publication of the original plan

## 12.6.1.7 Bull Dog Cove Clearance

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The project at Bull Dog Cove had an initial investigation (Schroeder) done in 1982, which led to the conclusion that the project did not appear to hold sufficient promise to warrant the required effort. In November 1982 the CIRPT accepted this conclusion.

## 12.6.1.8 Porcupine Cove Clearance

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The project at Porcupine Cove had an initial investigation (Schroeder) done in 1982, which led to the conclusion that the project did not appear to hold sufficient promise to warrant the required effort. In November 1982 the CIRPT accepted this conclusion.

## 12.6.1.9 Two Arm Bay Clearance

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The project at Two Arm Bay had an initial investigation (Schroeder) done in 1982, which led to the conclusion that the project did not appear to hold sufficient promise to warrant the required effort. In November 1982 the CIRPT accepted this conclusion. In addition the project site is within the boundaries of the Kenai Fjords National Park and, therefore, precluded by policy (see Section 12.2.1).

## 12.6.1.10 Nuka Island Clearance

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The potential project at Nuka Island has received no further attention since the publication of the original plan. In addition the project site is within the boundaries of the Kachemak Bay State Park.

## 12.6.1.11 Port Dick (Middle) Creek Clearance

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The potential project at Port Dick (Middle) Creek has received no further attention since the publication of the original plan. The project site is within the Kachemak Bay State Wilderness Park.

## 12.6.1.12 Gore Point Lake Clearance

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The project at Gore Point Lake involves trying to establish a clear and maintainable outlet creek from the lake to the ocean through continuously shifting beach and extreme accumulations of driftwood. CIAA did some sampling in the lake and surveying along a potential channel route. It was felt the project would be substantial and the chances of success uncertain. No further work was done. The project site is within the Kachemak Bay State Wilderness Park.

## 12.6.1.13 Rocky River Clearance

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

The potential project at Rocky River has received no further attention since the publication of the original plan.

## 12.6.1.14 Delight Lake Hatchery

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

Subsequent Developments:

The potential hatchery project at Delight Lake has received no further attention since the publication of the original plan. (See Section 12.6.1.2)

## 12.6.1.15 Nuka Bay Hatchery

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

Subsequent Developments:

The potential hatchery project at Nuka Bay has received no further attention since the publication of the original plan. (See Section 12.2.1)

## 12.6.1.16 Port Dick Lake Development

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

Subsequent Developments:

Port Dick Lake, a barriered system draining into the south side of Port Dick near the eastern end, was stocked with sockeye salmon from Tustumena Lake broodstock in 1987, 1988 and 1989. Adult sockeye returns between 1990 and 1993 ranged from 600 fish (1993) to 12,000 fish (1990) as a result of these releases. No additional stocking took place. The project site is within the Kachemak Bay State Wilderness Park.

## 12.6.1.17 Port Chatham Fish Pass

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

Subsequent Developments:

The potential project at Port Chatham Bay has received no further attention since the publication of the original plan.

## 12.6.2 Projects Identified and Implemented After Publication of the Phase I Plan 1981 - 2000

### 12.6.2.1 Windy Left Creek Rearing Ponds

In 1998, Port Graham Corporation (PGC) was granted a habitat permit to construct a series of small rearing ponds on PGC land in the upper reaches of Windy Left Creek. The intent of these water bodies was to increase coho salmon production through improved juvenile survival. PGC contracted with Taiga Resource Consultants to undertake actual construction of the ponds. Very little documentation on this project exists, and no known evaluation of the project was ever conducted. After construction, the ponds were essentially abandoned and their performance, as well as their current condition, remains questionable.

### 12.6.2.2 Investigation of the Role of Marine-derived Nutrients in Riverine Ecosystems

This investigation is being conducted by the Kachemak Bay Research Reserve in cooperation with the University of Alaska, Fairbanks; the University of Alaska, Anchorage and the U.S. Geological Survey and is funded by the Exxon Valdez Oil Spill Trustee Council. It is a three-year study (2004 – 2006) to develop monitoring tools for tracking marine derived nutrients in Alaskan watersheds. Windy Creek was the only system in the Gulf Coast Unit to be included in the study, but there were an additional ten rivers in four of the other units described in this Phase II Plan 2006 – 2025.

## 12.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

### 12.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will draw attention to situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

#### 12.7.1.1 Impacts of Past Logging on Numerous Streams Draining to the Gulf Coast

Extensive logging can have numerous negative impacts on salmon habitat. Loss of protective cover along the banks of streams is one. Rapid and dramatic fluctuations in flow regimes pose threats to spawning beds and juvenile salmon. Areas with a history of substantial logging should be examined to determine the extent of habitat damage, if any, and what types of remedial measures might be beneficial.

#### 12.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is made up of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT has been made aware of one anadromous salmon run in this unit for which there is insufficient data to make informed decisions.



12.7.2.1 Rocky River Coho Salmon

Additional information is necessary to assess the abundance of coho salmon in the Rocky River system.

12.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it is cognizant of the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

12.7.3.1 **ADF&G** Aerial And Ground Surveys, and a Weir Project, To Monitor Salmon Systems With Escapement Goals

ADF&G annually monitors the salmon systems in this unit for which escapement goals have been established and plans to continue to do so. Understanding the current stock status in the various salmon producing systems is critical to long-range planning for the wellbeing of the resource.

12.7.3.2 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

12.7.4 Proposed New Anadromous Salmon Projects

12.7.4.1 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

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## CHAPTER 13.0

### GREATER RESURRECTION BAY UNIT ANALYSIS

#### 13.1 OVERVIEW

Although this unit is composed of Aialik Bay, Resurrection Bay and Day Harbor and their respective drainages, the major salmon resources and resource enhancement activities have centered on the head end of Resurrection Bay north of Caines Head.

Most of the land in the Aialik Bay drainage falls within the Kenai Fjords National Park and is overseen by the National Park Service. Most of the land in the Day Harbor drainage falls within the Chugach National Forest and is overseen by the U.S. Forest Service. In both cases there are no developed centers of human activity nor are there roads to make the areas accessible to large numbers of people.

The shore areas from the north end of Resurrection Bay south to beyond the latitude of Caines Head are in state or private ownership. This area contains such prominent features as the City of Seward, Caines Head State Recreation Area and the Seward Marine Industrial Center. This has been the area where most of the salmon resource work in this unit has taken place at least as far back as 1924 when the Seward Territorial Hatchery released 1,387,000 king salmon fry of Washington state origin in Grouse Lake in the Salmon Creek system. This is also the most heavily developed area within the Greater Resurrection Bay Unit.

Marine waters of this unit support a limited commercial salmon seine fishery and a very prominent recreational fishery, both of which rely on one or more enhancement projects.

#### 13.2 RELEVANT LAND USE POLICIES

##### 13.2.1 National Park Service:

The Kenai Fjords National Park includes the majority of the western portion of this unit from Aligo Point eastward to Bulldog Cove. This fact places significant limitations on the rehabilitation or enhancement work that can be carried out. (see Section 3.4.5)

##### 13.2.2 United States Forest Service

The eastern portion of the Greater Resurrection Bay Unit is within Kenai Peninsula portion of the Chugach National Forest. These lands are managed for a variety of uses including recreational and commercial fisheries. The 2002 Revised Land and Resource Management Plan directs the U.S. Forest Service to provide for the sustainability of fish resources. Furthermore, the Plan emphasizes recovery of impacted fish populations and improvement of fish habitat values for commercial, subsistence or sport fish opportunities.

**EXHIBIT 13-1**

**GREATER RESURRECTION BAY UNIT MAP**

The CIRPT has detailed maps showing all streams in each unit. These maps are of a size suitable for presentations or planning work, but are too detailed to reproduce usefully at this scale.



13.2.3 Alaska Department of Natural Resources:

The Alaska Department of Natural Resources through its Division of Parks has responsibility for several parcels of land in Resurrection Bay and Day Harbor.

Notable among the various park units are Caines Head State Recreation Area, Thumb Cove State Marine Park, Sandspit Point State Marine Park, Sunny Cove State Marine Park, Driftwood Bay State Marine Park and Safety Cove State Marine Park.

In conjunction with its general responsibilities for State lands the Alaska Department of Natural Resources (ADNR) published the Kenai Area Plan (KAP) in 2000. The boundaries of the area covered by this plan are coincidental with the boundaries of the Kenai Peninsula Borough; therefore, all of the Gulf Coast Unit is covered by the ADNR plan. The KAP is probably the best consolidated reference for land ownership patterns in the Unit.

The plan directs how ADNR will manage state uplands, tidelands, and submerged lands within the area it covers. In addition to its general management intent and management guidelines the KAP specifically addresses the Gulf Coast Unit in the sections designated Region 3 – Seward and Resurrection Bay and Region 10 – Outer Coast of the Kenai Peninsula.

13.2.4 Kenai Peninsula Borough:

Although all of the Gulf Coast Unit is within the Kenai Peninsula Borough, only a very small portion of the land is actually owned by the Borough. The Borough does, however, plan for the development and use of resources within the Borough boundaries on land held by others.

The Borough does not have specific policies on fisheries enhancement or rehabilitation, but it does issue land use permits that can influence project implementation.

In addition the Borough conducts consistency reviews to evaluate the degree to which a proposed project is compatible with the Coastal Management Program.

**13.3 THE ANADROMOUS SALMON RESOURCE BASE OF THIS UNIT**

The tables that constitute EXHIBITS 13-2A through 13-2E reflect current knowledge of the freshwater systems that have anadromous salmon runs, the species associated with each, the historic high count for that system as well as the most recent count and the run timing for the species in these systems. Information about species presence is derived from the Anadromous Waters Catalog updated as of 2006. Run sizes were obtained from ADF&G’s historical escapement counts.

**KEY FOR EXHIBITS 13A THROUGH 13E**

In the following exhibits there are numbers of fish cited under two headings, *“Highest Number of Fish Reported for the System”* (column 3) and *“Most Recent Number of Fish Reported for the System”* (column 4). In each case there are letters that represent an abbreviation of the source of the numeric information. The abbreviations and the sources they represent are listed below.

AS	aerial survey
BS	boat survey

EE	estimated escapement
EHO	estimate of historical observations
GS	ground survey
MC	maximum count
PC	peak count
RC	recreational catch
RH	recreation harvest
SC	sonar count
TC	tower count
TCU	type of count unknown
TLR	total local return
TN	test net
VC	video count
WC	weir count

In the larger units and/or in units with which people may be less familiar periodic lines of blue type provide geographical reference points.

EXHIBIT 13-2A GREATER RESURRECTION BAY UNIT KING SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
		<b>west-to-east geographic reference:</b> ALIGO POINT WEST SIDE OF AIALIK BAY				
Unnamed Tributary	232-40-10280		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10280-2007		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10254		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10250		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary (Aialik Lake/Lagoon)	232-40-10230		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10190		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10182		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10180		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10177		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10170		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10160		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10150		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10145		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10140		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	232-40-10130		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-20-10330		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-20-10337		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-20-13500		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-20-13500-2024		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-20-13525		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
		<b>west-to-east geographic reference:</b> CAINES HEAD WEST SIDE OF RESURRECTION BAY				
Tonsina C.	231-30-10040		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-30-10070		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			
Unnamed Tributary	231-30-10070-2009		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT			

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EXHIBIT 13-2A [continued from preceding page] GREATER RESURRECTION BAY UNIT KING SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10070-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10070-2014-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10078	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Resurrection R.	231-30-10080	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Salmon C.	231-30-10080-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3018-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3031-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3046-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 13-2A [continued from preceding page] GREATER RESURRECTION BAY UNIT KING SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10080-2010-3054	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3065	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Bear C.	231-30-10080-2010-3065-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2021	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2021-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2028	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2040	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2040-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2040-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2055-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Martin C.	231-30-10080-2090	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2100	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2103	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Placer C.	231-30-10080-2119	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Boulder C.	231-30-10080-2120	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Cottonwood C.	231-30-10080-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2138	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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<b>EXHIBIT 13-2A</b> [continued from preceding page]							<b>GREATER RESURRECTION BAY UNIT KING SALMON</b>						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
Moose C.	231-30-10080-2155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10080-2158	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10080-2164	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10080-2169	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10080-2169-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Summit C.	231-30-10080-2175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10094	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10098	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10104	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
4th of July C.	231-30-10108	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10110	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary (Thumb Cove)	231-30-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary (Humpy Cove)	231-40-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
		<b>west-to-east geographic reference: CAPE RESURRECTION EAST SIDE OF RESURRECTION BAY</b>											
Unnamed Tributary	233-30-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-30-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-30-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-20-10082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-20-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	233-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
		<b>west-to-east geographic reference: CAPE FAIRFIELD EAST SIDE WHIDBEY BAY</b>											

EXHIBIT 13-2B										GREATER RESURRECTION BAY UNIT SOCKEYE SALMON									
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
		<b>west-to-east geographic reference: ALIGO POINT WEST SIDE OF AIALIK BAY</b>																	
Unnamed Tributary	232-40-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10280-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10254	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary (Aialik Lake/Lagoon)	232-40-10230	22,400 EE 1982	5,300 EE 2005																
Unnamed Tributary	232-40-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10182	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10177	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	232-40-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-20-10330	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-20-10337	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-20-13500	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	231-20-13500-2024	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	231-20-13525	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
		<b>west-to-east geographic reference: CAINES HEAD WEST SIDE OF RESURRECTION BAY</b>																	
Tonsina C.	231-30-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	231-30-10070-2009	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
[ continued on following page ]																			

EXHIBIT 13-2B [continued from preceding page] GREATER RESURRECTION BAY UNIT SOCKEYE SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10070-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10070-2014-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10078	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Resurrection R.	231-30-10080	UNKNOWN	UNKNOWN						
Salmon C.	231-30-10080-2010	UNKNOWN	UNKNOWN						
Unnamed Tributary	231-30-10080-2010-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3018-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3031-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3046-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 13-2B		GREATER RESURRECTION BAY UNIT SOCKEYE SALMON									
[continued from preceding page]		Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
						MAY	JUNE	JULY	AUG.	SEPT.	
		Unnamed Tributary	231-30-10080-2010-3054	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2010-3058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2010-3065	UNKNOWWN	UNKNOWWN						
		Bear C.	231-30-10080-2010-3065-4010	59,000 WC 1968	13,400 WC 2005						
		Unnamed Tributary	231-30-10080-2017	UNKNOWWN	UNKNOWWN						
		Unnamed Tributary	231-30-10080-2021	UNKNOWWN	UNKNOWWN						
		Unnamed Tributary	231-30-10080-2021-3010	UNKNOWWN	UNKNOWWN						
		Unnamed Tributary	231-30-10080-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2028	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2040	UNKNOWWN	UNKNOWWN						
		Unnamed Tributary	231-30-10080-2040-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2040-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2055-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Martin C.	231-30-10080-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2103	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Placer C.	231-30-10080-2119	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Boulder C.	231-30-10080-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Cottonwood C.	231-30-10080-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2138	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
		Unnamed Tributary	231-30-10080-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 13-2B <i>[continued from preceding page]</i> GREATER RESURRECTION BAY UNIT SOCKEYE SALMON						
Stream USGS Name <i>[locally used name]</i>	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
Moose C.	231-30-10080-2155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10080-2158	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10080-2164	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10080-2169	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10080-2169-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Summit C.	231-30-10080-2175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10094	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10098	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10104	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
4th of July C.	231-30-10108	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10110	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary (Thumb Cove)	231-30-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary (Humpy Cove)	231-40-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>west-to-east geographic reference: CAPE RESURRECTION EAST SIDE OF RESURRECTION BAY</b>						
Unnamed Tributary	233-30-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-30-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-30-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>west-to-east geographic reference: CAPE FAIRFIELD EAST SIDE WHIDBEY BAY</b>						

EXHIBIT 13-2C							GREATER RESURRECTION BAY UNIT COHO SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing									
				MAY	JUNE	JULY	AUG.	SEPT.					
		<b>west-to-east geographic reference: ALIGO POINT WEST SIDE OF AIALIK BAY</b>											
Unnamed Tributary	232-40-10280	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10280-2007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10254	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10250	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary (Aialik Lake/Lagoon)	232-40-10230	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	232-40-10190	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10182	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10180	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10177	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10170	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10150	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10145	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	232-40-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-20-10330	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-20-10337	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-20-13500	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-20-13500-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-20-13525	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
		<b>west-to-east geographic reference: CAINES HEAD WEST SIDE OF RESURRECTION BAY</b>											
Tonsina C.	231-30-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES	PRESENT										
Unnamed Tributary	231-30-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN									
Unnamed Tributary	231-30-10070-2009	UNKNOWN	UNKNOWN	TIMING UNKNOWN									

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<b>EXHIBIT 13-2C</b> [continued from preceding page] <b>GREATER RESURRECTION BAY UNIT COHO SALMON</b>									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10070-2014	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10070-2014-3001	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10075	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	231-30-10078	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Resurrection R.	231-30-10080	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Salmon C.	231-30-10080-2010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3003	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3007	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3011	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3014	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3018	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3018-4003	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3019	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3019-4003	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3019-4004	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3019-4008	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3022	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3026	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>							
Unnamed Tributary	231-30-10080-2010-3029	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3031	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3031-4017	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3041	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3046	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3046-4008	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3050	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

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EXHIBIT 13-2C [continued from preceding page] GREATER RESURRECTION BAY UNIT COHO SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10080-2010-3054	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3058	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2010-3065	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Bear C.	231-30-10080-2010-3065-4010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2017	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2021	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2021-3010	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2024	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2028	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2040	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2040-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2040-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2055-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Martin C.	231-30-10080-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2100	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2103	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Placer C.	231-30-10080-2119	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Boulder C.	231-30-10080-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Cottonwood C.	231-30-10080-2130	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2135	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2138	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10080-2141	UNKNOWN	UNKNOWN	TIMING UNKNOWN					

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EXHIBIT 13-2C [continued from preceding page] GREATER RESURRECTION BAY UNIT COHO SALMON						
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing		
				MAY	JUNE	JULY
Moose C.	231-30-10080-2155	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10080-2158	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10080-2164	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10080-2169	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10080-2169-3005	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Summit C.	231-30-10080-2175	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10090	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10094	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10096	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10098	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10104	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
4th of July C.	231-30-10108	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	231-30-10110	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary	231-30-10130	UNKNOWN	UNKNOWN	TIMING UNKNOWN		
Unnamed Tributary (Thumb Cove)	231-30-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary (Humpy Cove)	231-40-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>west-to-east geographic reference: CAPE RESURRECTION EAST SIDE OF RESURRECTION BAY</b>						
Unnamed Tributary	233-30-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-30-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-30-10060	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-30-10070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10082	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
Unnamed Tributary	233-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT				
<b>west-to-east geographic reference: CAPE FAIRFIELD EAST SIDE WHIDBEY BAY</b>						

EXHIBIT 13-2D											
GREATER RESURRECTION BAY UNIT PINK SALMON											
Stream USGS Name [ locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing			MAY	JUNE	JULY	AUG.	SEPT.
	<i>west-to-east geographic reference:</i> <b>ALIGO POINT WEST SIDE OF AIALIK BAY</b>										
Unnamed Tributary	232-40-10280	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10280-2007	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10254	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10250	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary (Alalik Lake/Lagoon)	232-40-10230	25,000 EE 1962	800 EE 2005								
Unnamed Tributary	232-40-10190	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10182	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10180	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10177	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10170	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10160	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10150	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10145	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10140	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	232-40-10130	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	231-20-10330	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	231-20-10337	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	231-20-13500	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	231-20-13500-2024	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
Unnamed Tributary	231-20-13525	UNKNOWN	UNKNOWN	UNKNOWN							
	<i>west-to-east geographic reference:</i> <b>CAINES HEAD WEST SIDE OF RESURRECTION BAY</b>										
Tonsina C.	231-30-10040	48,200 EE 1985	9,900 EE 2005								
Unnamed Tributary	231-30-10070	UNKNOWN	UNKNOWN	UNKNOWN							
Unnamed Tributary	231-30-10070-2009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>									
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EXHIBIT 13-2D [continued from preceding page] GREATER RESURRECTION BAY UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10070-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10070-2014-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10075	UNKNOWN	UNKNOWN						
Unnamed Tributary	231-30-10078	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Resurrection R.	231-30-10080	UNKNOWN	UNKNOWN						
Salmon C.	231-30-10080-2010	38,600 EE 1995	34,500 EE 2005						
Unnamed Tributary	231-30-10080-2010-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3018-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3019-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3026	UNKNOWN	UNKNOWN						
Unnamed Tributary	231-30-10080-2010-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3031	UNKNOWN	UNKNOWN						
Unnamed Tributary	231-30-10080-2010-3031-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3041	UNKNOWN	UNKNOWN						
Unnamed Tributary	231-30-10080-2010-3046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3046-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 13-2D [continued from preceding page] GREATER RESURRECTION BAY UNIT PINK SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Unnamed Tributary	231-30-10080-2010-3054	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3058	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2010-3065	UNKNOW	UNKNOW						
Bear C.	231-30-10080-2010-3065-4010	38,600 EE 1995	34,500 EE 2005						
Unnamed Tributary	231-30-10080-2017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2021	UNKNOW	UNKNOW						
Unnamed Tributary	231-30-10080-2021-3010	UNKNOW	UNKNOW						
Unnamed Tributary	231-30-10080-2024	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2028	UNKNOW	UNKNOW						
Unnamed Tributary	231-30-10080-2040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2040-3010	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2040-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2055	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2055-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2070	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2080	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Martin C.	231-30-10080-2090	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2100	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2103	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Placer C.	231-30-10080-2119	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Boulder C.	231-30-10080-2120	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Cottonwood C.	231-30-10080-2130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2135	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2138	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2141	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							

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EXHIBIT 13-2D <i>[continued from preceding page]</i> <b>GREATER RESURRECTION BAY UNIT PINK SALMON</b>									
Stream USGS Name <i>[locally used name]</i>	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Moose C.	231-30-10080-2155		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10080-2158		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10080-2164		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10080-2169		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10080-2169-3005		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Summit C.	231-30-10080-2175		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10090		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10094	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	231-30-10096	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	231-30-10098		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary	231-30-10104	UNKNOWN	UNKNOWN						TIMING UNKNOWN
4th of July C.	231-30-10108	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	231-30-10110	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	231-30-10130		<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>						
Unnamed Tributary ( <i>Thumb Cove</i> )	231-30-10160	21,000 EE 1998	8,700 EE 2005						
Unnamed Tributary ( <i>Humpy Cove</i> )	231-40-10140	14,600 EE 2005	14,600 EE 2005						
<b>west-to-east geographic reference: CAPE RESURRECTION EAST SIDE OF RESURRECTION BAY</b>									
Unnamed Tributary	233-30-10040	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-30-10050	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-30-10060	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-30-10070	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-20-10082	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-20-10080	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-20-10050	UNKNOWN	UNKNOWN						TIMING UNKNOWN
Unnamed Tributary	233-20-10040	UNKNOWN	UNKNOWN						TIMING UNKNOWN
<b>west-to-east geographic reference: CAPE FAIRFIELD EAST SIDE WHIDBEY BAY</b>									

EXHIBIT 13-2E										GREATER RESURRECTION BAY UNIT CHUM SALMON									
Stream USGS Name [locally used name ]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
		<b>west-to-east geographic reference: ALIGO POINT WEST SIDE OF AIALIK BAY</b>																	
Unnamed Tributary	232-40-10280	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10280-2007	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10254	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	232-40-10250	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary (Aialik Lake/Lagoon)	232-40-10230	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10190	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10182	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	232-40-10180	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10177	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	232-40-10170	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10160	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10150	UNKNOWN	UNKNOWN	TIMING UNKNOWN															
Unnamed Tributary	232-40-10145	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	232-40-10140	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	232-40-10130	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	231-20-10330	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	231-20-10337	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	231-20-13500	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	231-20-13500-2024	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	231-20-13525	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
		<b>west-to-east geographic reference: GAINES HEAD WEST SIDE OF RESURRECTION BAY</b>																	
Tonsina C.	231-30-10040	1,500 EE 2005	1,500 EE 2005																
Unnamed Tributary	231-30-10070	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
Unnamed Tributary	231-30-10070-2009	<b>ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT</b>																	
[ continued on following page ]																			

EXHIBIT 13-2E [continued from preceding page]										GREATER RESURRECTION BAY UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing															
				MAY	JUNE	JULY	AUG.	SEPT.											
Unnamed Tributary	231-30-10070-2014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10070-2014-3001	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10075	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10078	UNKNOWN	UNKNOWN																
Resurrection R.	231-30-10080	UNKNOWN	UNKNOWN																
Salmon C.	231-30-10080-2010	UNKNOWN	UNKNOWN																
Unnamed Tributary	231-30-10080-2010-3003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3007	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3011	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3014	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3018	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3018-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3019	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3019-4003	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3019-4004	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3019-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3022	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3026	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3029	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3031	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3031-4017	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3041	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3046	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3046-4008	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	
Unnamed Tributary	231-30-10080-2010-3050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT																	

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EXHIBIT 13-2E [continued from preceding page]										GREATER RESURRECTION BAY UNIT CHUM SALMON									
Stream USGS Name [locally used name]		Anadromous Waters Catalog Number		Highest Number of Fish Reported for the System		Most Recent Number of Fish Reported for the System		Run Timing											
								MAY	JUNE	JULY	AUG.	SEPT.							
Unnamed Tributary		231-30-10080-2010-3054		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2010-3058		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2010-3065		UNKNOW		UNKNOW						TIMING UNKNOWN							
Bear C.		231-30-10080-2010-3065-4010		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2017		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2021		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2021-3010		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2024		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2028		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2040		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2040-3010		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2040-3018		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2055		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2055-3018		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2070		UNKNOW		UNKNOW						TIMING UNKNOWN							
Unnamed Tributary		231-30-10080-2080		UNKNOW		UNKNOW						TIMING UNKNOWN							
Martin C.		231-30-10080-2090		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2100		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2103		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Placer C.		231-30-10080-2119		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Boulder C.		231-30-10080-2120		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Cottonwood C.		231-30-10080-2130		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2135		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2138		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															
Unnamed Tributary		231-30-10080-2141		ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT															

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EXHIBIT 13-2E [continued from preceding page] GREATER RESURRECTION BAY UNIT CHUM SALMON									
Stream USGS Name [locally used name]	Anadromous Waters Catalog Number	Highest Number of Fish Reported for the System	Most Recent Number of Fish Reported for the System	Run Timing					
				MAY	JUNE	JULY	AUG.	SEPT.	
Moose C.	231-30-10080-2155	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2158	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2164	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2169	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10080-2169-3005	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Summit C.	231-30-10080-2175	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10090	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10094	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10096	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10098	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10104	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
4th of July C.	231-30-10108	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	231-30-10110	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	231-30-10130	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary (Thumb Cove)	231-30-10160	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary (Humpy Cove)	231-40-10140	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
west-to-east geographic reference: CAPE RESURRECTION EAST SIDE OF RESURRECTION BAY									
Unnamed Tributary	233-30-10040	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	233-30-10050	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	233-30-10060	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	233-30-10070	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	233-20-10082	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	233-20-10080	UNKNOWN	UNKNOWN	TIMING UNKNOWN					
Unnamed Tributary	233-20-10050	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
Unnamed Tributary	233-20-10040	ANADROMOUS WATERS CATALOG DOES NOT SHOW SPECIES PRESENT							
west-to-east geographic reference: CAPE FAIRFIELD EAST SIDE WHIDBEY BAY									

**13.4 SIGNIFICANT STOCKS**

Based on the available data, the stocks shown in EXHIBIT 13-3 are known to fit the size criterion for significance as discussed in the ADF&G Genetics Policy and further amplified in Chapter 3.0 of this document.

EXHIBIT 13-3		SIGNIFICANT STOCKS																												
STOCK	AWC NUMBER	KING	SOCKEYE	COHO	PINK	CHUM																								
<i>Aialik Lake / Lagoon</i>	232-40-10230		significant		significant																									
<i>Tonsina C.</i>	231-30-10040				significant	significant																								
Salmon Creek	231-30-10080-2010		significant		significant																									
Bear Creek	231-30-10080-2010-3065-4010		significant	significant	significant																									
<i>Thumb Cove</i>	231-30-10160				significant																									
<i>Humpy Cove</i>	231-40-10140				significant																									
Non-italics = stream name appearing on USGS maps <i>Italics = Unnamed on USGS map but identified by its locally-used name</i> AWC = Anadromous Waters Catalog <table border="1"> <tr> <td>significant</td> <td>Most recent count meets minimum size criteria, and it is less than two life cycles old.</td> </tr> <tr> <td>significant</td> <td>Most recent count meets minimum size criteria, but it is more than two life cycles old.</td> </tr> <tr> <td>significant</td> <td>Historic count meets minimum size criteria, but the most recent count does not.</td> </tr> </table> <table border="1"> <thead> <tr> <th></th> <th>Minimum significant stock size criteria:</th> <th>Generalized period for two life cycles:</th> </tr> </thead> <tbody> <tr> <td>King Salmon</td> <td>400 fish</td> <td>12 years</td> </tr> <tr> <td>Sockeye Salmon</td> <td>2,000 fish</td> <td>10 years</td> </tr> <tr> <td>Coho Salmon</td> <td>800 fish</td> <td>8 years</td> </tr> <tr> <td>Pink Salmon</td> <td>5,000 fish</td> <td>4 years</td> </tr> <tr> <td>Chum Salmon</td> <td>800 fish</td> <td>8 years</td> </tr> </tbody> </table>							significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.	significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.	significant	Historic count meets minimum size criteria, but the most recent count does not.		Minimum significant stock size criteria:	Generalized period for two life cycles:	King Salmon	400 fish	12 years	Sockeye Salmon	2,000 fish	10 years	Coho Salmon	800 fish	8 years	Pink Salmon	5,000 fish	4 years	Chum Salmon	800 fish	8 years
significant	Most recent count meets minimum size criteria, and it is less than two life cycles old.																													
significant	Most recent count meets minimum size criteria, but it is more than two life cycles old.																													
significant	Historic count meets minimum size criteria, but the most recent count does not.																													
	Minimum significant stock size criteria:	Generalized period for two life cycles:																												
King Salmon	400 fish	12 years																												
Sockeye Salmon	2,000 fish	10 years																												
Coho Salmon	800 fish	8 years																												
Pink Salmon	5,000 fish	4 years																												
Chum Salmon	800 fish	8 years																												

**13.5 STOCK RESERVES**

A review of the various stocks of salmon found in the Greater Resurrection Bay Unit leads the CIRPT to make the following determinations with respect to the designation of "stock reserves" in the Greater Resurrection Bay Unit systems. This concept is described and recommended for adoption in the ADF&G *Genetics Policy* where it is called "wild stock sanctuaries" and is discussed in Chapter 3.0 section 3.3.3.5 of this document as it is applied in Cook Inlet.

13.5.1 King Salmon

Stock identified: None

Rationale: After reviewing the information about king salmon in the Greater Resurrection Bay systems, the CIRPT determined there was no king salmon "stock" which could qualify for designation as a "wild stock sanctuary / stock reserve".

13.5.2 Sockeye Salmon

Stock identified: None

Rationale: After reviewing the information about sockeye salmon in the Greater Resurrection Bay systems, the CIRPT determined there was no sockeye salmon “stock” which could qualify for designation as a "wild stock sanctuary / stock reserve".

13.5.3 Coho Salmon

Stock identified: None

Rationale: After reviewing the information about coho salmon in the Greater Resurrection Bay systems, the CIRPT determined there was no coho salmon “stock” which could qualify for designation as a "wild stock sanctuary / stock reserve".

13.5.4 Pink Salmon

Stock identified: None

Rationale: After reviewing the information about pink salmon in the Greater Resurrection Bay systems, the CIRPT determined there was no pink salmon “stock” which could qualify for designation as a "wild stock sanctuary / stock reserve".

13.5.5 Chum Salmon

Stock identified: None

Rationale: After reviewing the information about chum salmon in the Greater Resurrection Bay systems, the CIRPT determined there was no chum salmon "stock" which could qualify for designation as a "wild stock sanctuary / stock reserve".

**13.6 HISTORY OF SALMON RESOURCE REHABILITATION AND/OR ENHANCEMENT**

13.6.1 Projects Identified in the Phase I Plan 1981 - 2000

13.6.1.1 Resurrection Bay Rearing Ponds

This project was described in the Phase I Plan 1981 - 2000 in the following way.

*“The level of information about some projects is such that no project-by-project estimate of potential salmon production can be made. However, there was general consensus that some increased production was possible. Thus, a total of 50,000 each for four species of salmon were included in the projected 2000 status ... attributed to these projects. It is entirely possible that as some of these projects become more fully developed refinement of those numbers will be possible.”*

Subsequent Developments:

Preliminary investigations of circumstances that would be suitable for some form of rearing ponds were undertaken, focusing primarily on the area around the Seward Marine Industrial Center and Spring Creek and Fourth of July Creek. Spawning / rearing channels that were excavated near Fourth of July Creek were soon destroyed by flooding and were never rehabilitated. Such a rearing facility is still under active consideration although a specific site and configuration remain undetermined.

## 13.6.1.2 Resurrection Bay Odd-Year Pink/Chum Development

This project was described in the *Phase I Plan 1981 - 2000* in the following way.

*“One step further removed are those projects which have not yet received any study and are based on the most general knowledge of their locale. They would, however, rank high on the list of investigative priorities as the Cook Inlet salmon enhancement planning process moves into Phase II, the specific addressing of the goals and objectives set out here.”*

Subsequent Developments:

The spawning channels mentioned above in Section 13.6.1.1 were part of an attempt to develop pink and/or chum salmon runs, but they were not successful. Additional work on this concept has been suspended.

13.6.2 Projects Identified and Implemented After Publication of the *Phase I Plan 1981 - 2000*

Several projects were implemented prior to the completion of the *Phase I Plan 1981 - 2000*, but for unspecified reasons were not included in that plan. In addition, several projects implemented after publication of the original plan were never envisioned during construction of that.

## 13.6.2.1 Bear Lake Coho Salmon Stocking

ADF&G started stocking Bear Lake with coho salmon in 1962 and continued that project until CIAA assumed operation of the project in 1989. There was no stocking in 1989, but it resumed in 1990 and continues to the present. In the period 1980 through 2005 the lowest annual stocking was 150,011 in 1980, and the largest was 893,000 in 2005.

## 13.6.2.2 Bear Lake Sockeye Salmon Stocking

The Bear Lake sockeye salmon run had become reduced to very low numbers, and in 1990 CIAA started stocking Bear Lake with sockeye salmon and continues the project to the present. In the period 1990 through 2005 the lowest annual stocking was 145,000 in 2001, and the largest was 3,422,000 in 2005.

## 13.6.2.3 Seward Lagoon Coho Salmon Stocking

Seward Lagoon has been stocked with coho salmon by ADF&G since at least 1980, and the project continues today. In the period 1980 through 2005 the lowest annual

stocking was 41,000 in 1984, and the largest was 315,700 in 1995. The average annual release over this twenty-five year stocking period is 126,129 fish.

#### 13.6.2.4 Seward Lagoon King Salmon Stocking

Seward Lagoon has been stocked with king salmon by ADF&G since 1985, and the project continues today. In the period 1985 through 2005 the lowest annual stocking was 53,200 in 1985, and the largest was 373,165 in 1991. The average annual release over this nineteen-year stocking period is 157,924 fish.

#### 13.6.2.5 Box Canyon Creek King Salmon Stocking

Box Canyon Creek was stocked with king salmon for a single year in 1983 when 54,500 fish were released.

#### 13.6.2.6 Box Canyon Creek Coho Salmon Stocking

Box Canyon Creek was stocked with coho salmon for two years in 1986 and 1987 when 53,607 and 257,461 fish were released, respectively.

#### 13.6.2.7 Institute of Marine Science Coho Salmon Stocking

The Institute of Marine Science made two minor releases of coho salmon, 1,200 in 1986 and 1,011 in 1987.

#### 13.6.2.8 Lowell Creek King Salmon Stocking

Lowell Creek has been stocked with king salmon by ADF&G since 1984, and the project continues today. In the period 1984 through 2005 the lowest annual stocking was 39,000 in 1984, and the largest was 216,220 in 1990. The average annual release over this twenty-one-year stocking period is 107,215 fish.

#### 13.6.2.9 Lowell Creek Coho Salmon Stocking

Lowell Creek has been stocked with coho salmon by ADF&G since 1987, and the project continues today. In the period 1987 through 2005 the lowest annual stocking was 30,400 in 1991, and the largest was 132,276 in 2005. The average annual release over this eighteen-year stocking period is 77,244 fish.

#### 13.6.2.10 Grouse Lake Coho Salmon Stocking

For five years in the early 1980's (1980, 1983 – 1986) ADF&G stocked Grouse Lake with coho salmon. The smallest stocking was 34,000 in 1984, and the largest was 56,100 in both 1985 and 1986. The project was suspended following the 1986 release.

#### 13.6.2.11 Grouse Lake Sockeye Salmon Stocking

Beginning in 1994 and running through 1998 CIAA stocked sockeye salmon into Grouse Lake along the Seward Highway north of Seward. The intent of this project was to create a return of adult sockeye salmon that the Association could harvest and sell to offset the costs associated with some of its projects. The smallest release was

570,000 in 1994, and the largest was 1,170,000 in 1997. The project was suspended after the 1998 release.

13.6.2.12 Thumb Cove King Salmon Stocking

In 1984 there was a one-time project by ADF&G that involved stocking 71,000 king salmon fry into Thumb Cove on the eastern side of Resurrection Bay. These fish were of mainstem Kenai River broodstock.

13.6.2.13 Jap Creek Chum Salmon Stocking

In 1985 there was a one-time project by ADF&G that involved stocking 281,000 chum salmon fry into Jap Creek near Seward at the head of Resurrection Bay.

13.6.2.14 Spring Creek Chum Salmon Stocking

In 1985 there was a one-time project that involved stocking 173,000 chum salmon fry into Spring Creek on the eastern side of Resurrection Bay.

13.6.2.15 Spring Creek King Salmon Stocking

In 1989 there was a one-time project that involved stocking 75,063 king salmon fry into Spring Creek on the eastern side of Resurrection Bay. These fish were of Crooked Creek broodstock.

### 13.7 ISSUES / PROJECTS FOR INCORPORATION INTO LONG-RANGE PLANNING

The statements in the following sections reflect conditions as seen by the CIRPT in 2006, but it is anticipated that annual review will modify and update these items.

#### 13.7.1 Anadromous Salmon Habitat Issues

The CIRPT is cognizant of the importance of suitable habitat in maintaining a strong salmon resource base and will identify situations where – through natural or man-made causes - there are substantial damages or the threat of such damages to salmon habitat.

##### 13.7.1.1 Impacts of Unpermitted Development Activities on Salmon Habitat

Widespread individual private development activities not sanctioned with the appropriate permits have damaged or threatened to damage valuable salmon habitat. Such activities can and do cause reductions in the salmon resource base that, partially or totally, offset the benefits of the various enhancement projects being done. Efforts should be made to determine the extent of habitat damage and what types of remedial measures might be beneficial.

##### 13.7.1.2 Resurrection River Delta Flooding

Quite regular flooding in the Resurrection River is substantially disruptive of salmon habitat. Efforts should be made to determine the extent of habitat damage and what types of remedial measures might be beneficial.

### 13.7.1.3 Loss of Seward-area Coho Salmon Habitat

Seward has made the annual runs of coho salmon a centerpiece of their tourist season. Loss of coho salmon habitat for the reasons cited in Sections 13.8.1.1 and 13.8.1.2 and others is of considerable significance. The City of Seward has focused on this problem as noted in Section 13.8.4.5.

### 13.7.2 Apparent Anadromous Salmon Run Anomalies Requiring Investigation

The overall salmon resource base is comprised of many individual salmon runs, and the earliest possible recognition of problems in any one of these runs is critical to preserving the strength of the base. The CIRPT is unaware of any anadromous salmon run anomalies in this unit for which there is insufficient data to make informed decisions.

### 13.7.3 Continuation of Existing Anadromous Salmon Projects

Although the CIRPT regularly sees projects involving supplemental production in its annual reviews of hatchery management plans, it recognizes the importance of a broader range of projects that are an integral part of maintaining a strong salmon resource base. Tracking all types of projects related to the salmon resource is important to the CIRPT's role of long-range planning.

#### 13.7.3.1 **ADF&G** Aerial And Ground Surveys To Monitor Salmon Systems With Escapement Goals

ADF&G annually monitors the salmon systems in this unit for which escapement goals have been established and plans to continue to do so. Understanding the current stock status in the various salmon producing systems is critical to long-range planning for the wellbeing of the resource.

#### 13.7.3.2 **ADF&G** Lowell Creek King Salmon Stocking

Lowell Creek has been stocked with king salmon by ADF&G since 1984, and they are planning to continue the project.

#### 13.7.3.3 **ADF&G** Lowell Creek Coho Salmon Stocking

Lowell Creek has been stocked with king salmon by ADF&G since 1987, and they are planning to continue the project.

#### 13.7.3.4 **ADF&G** Seward Lagoon King Salmon Stocking

Seward Lagoon has been stocked with king salmon by ADF&G since 1985, and they are planning to continue the project.

#### 13.7.3.5 **ADF&G** Seward Lagoon Coho Salmon Stocking

Seward Lagoon has been stocked with coho salmon by ADF&G since 1980, and they are planning to continue the project.



13.7.3.6 **CIAA** Bear Lake Coho Salmon Stocking

Bear Lake has been stocked with coho salmon since at least 1980 (ADF&G 1980 through 1988 and CIAA 1990 through 2005), and CIAA is planning to continue the project.

13.7.3.7 **CIAA** Bear Lake Sockeye Salmon Stocking

Bear Lake has been stocked with sockeye salmon by CIAA since 1990, and CIAA is planning to continue the project.

13.7.3.8 **USFS** Public Education – Invasive Fish Species

In cooperation with ADF&G and the U.S. Fish and Wildlife Service the U.S. Forest Service will post signs in FY 07 and 08 at popular fishing areas to educate the public on the effects of spreading invasive species. The goal is to make the public aware of the possible disastrous effects to commercial, sport and subsistence fisheries caused by illegal introductions of pike and perch.

13.7.3.9 **USFS** Public Outreach and Education

The U.S. Forest Service provides for annual in-school programs. The programs address the importance of healthy ecosystems for fish, the fish life cycle, the role of carcasses and the nutrient cycle, basic hydrology and many other related issues. The program reaches over a thousand youth per year in the schools of the affected areas.

13.7.3.10 **ASLC** Bear Lake Sediment Analysis

The Alaska SeaLife Center is conducting sediment coring in Bear Lake to assess marine-derived nutrients and, thereby, begin the estimate historic salmon production levels. This project began in 2006 and will continue.

13.7.3.11 **OTHER** None

The CIRPT is not aware of any ongoing anadromous salmon projects in this unit being conducted by any agency or group not previously mentioned.

13.7.4 Proposed New Anadromous Salmon Projects

13.7.4.1 **ADF&G** Resurrection River Coho Salmon Enumeration

ADF&G is considering a project to enumerate coho salmon in the Resurrection River using either sonar or a mark and recapture procedure.

13.7.4.2 **ADF&G** Aialik Lake Sockeye Salmon Video Enumeration

ADF&G is considering a project to enumerate sockeye salmon in the Aialik Lake using remote video camera.

13.7.4.3 **CIAA** Sockeye and/or Coho Salmon Rearing Ponds and/or Net Pens in Resurrection Bay

CIAA is considering a project to establish a remote rearing facility and/or net pens at or near the Seward Marine Industrial Center. This would allow Trail Lakes Hatchery to increase its productive capacity, which is now limited by the water supply available for rearing.

13.7.4.4 **USFS** Public Education – Invasive Species

In cooperation with ADF&G and other agencies the U.S. Forest Service is in the process of publishing an invasive species plan to address the risks of invasive plants and animals to the aquatic and terrestrial environments.

13.7.4.5 **COS** Habitat Work by Enhancement Committee

The City of Seward has formed an Enhancement Committee; and it is charged with recommending funding mechanisms to the City that, if enacted, would allow the Seward community to fund continued releases of salmon designated for recreational harvest in Resurrection Bay. The Committee is also interested in addressing various habitat issues in the Resurrection Bay drainage around Seward.

13.7.4.6 **ASLC** King Salmon Project

The Alaska SeaLife Center has entered into a cooperative agreement with ADF&G to begin developing a king salmon stocking program in Resurrection Bay. The current agreement goal is to produce and release 250,000 king salmon smolt. The Alaska SeaLife Center intends to pursue a PNP permit for 500,000 smolt.

The Alaska SeaLife Center also intends to investigate and take action on salmon habitat restoration and enhancement in Resurrection Bay to improve conditions for wild stock production. No specific projects are currently identified.

13.7.4.7 **ASLC** Bear Lake Acoustical Monitoring

The Alaska SeaLife Center is planning a project to begin in 2007 to identify sockeye salmon spawning locations in Bear Lake. Acoustical monitors will be secured in the Lake, and transmitters will be placed on returning sockeye salmon before they arrive at the Lake. It should then be possible to locate spawning sites in the lake.

13.7.4.8 **OTHER** None

The CIRPT is not aware of any new anadromous salmon projects being planned or conducted in this unit by any agency or organization other than those mentioned in previous sections.

## CHAPTER 14.0

### PHASE II PLAN 2006 – 2025 SUMMARY

#### 14.1 OVERVIEW

It is the intent of the Cook Inlet Regional Planning Team that this Phase II Plan 2006 - 2025 become the base for its work addressing the strengths and weaknesses of the Cook Inlet salmon resource base. The information contained in the preceding pages has been drawn from a number of sources and may yet be further refined by both existing information that has not been identified or by new information arising from ongoing project work.

Additionally the document can be a means of creating a common understanding of the way the resource functions and the variety of options available to play an appropriate role in those functions.

#### 14.2 SIGNIFICANT SALMON STOCKS

In the preceding ten chapters the CIRPT has constructed its initial lists of the significant stocks in each planning unit. The concept of local significance is discussed in the ADF&G Genetics Policy and further amplified in Chapter 3.0, Section 3.3.2.3 of this document.

Stocks that were designated "significant" were of a sufficient size to maintain themselves even though it might be at a level well below what users would judge to be the optimum level or what the habitat could probably support. This identifies the major discrete components of the total salmon resource of the region. This definition should not be construed to devalue the collective importance of the many smaller or "non-significant" stocks.

The absence of a significance designation may mean a run smaller than the established size criteria, the absence of that species in that system or the absence of information about that species in that system.

This approach was developed and adopted by the CIRPT in the absence any other suggested approach that appeared to be broadly applicable

The following five exhibits (EXHIBIT 14-1 through 14-5) consolidate the significant stocks from the ten planning units by species.

The underlying size criteria are further qualified by the currency of the information as cited in the five parts of the second exhibit in each of the planning unit chapters. In the legends of the following five exhibits the size criteria for the species is identified as is reference to the age of the data. Three situations are identified: (1) the most recent qualifying data meets the size criteria and is less than two life-cycles old; (2) the most recent qualifying data meets the size criteria but is more than two life-cycles old; and (3) the most recent qualifying data do not meet the size criteria but an historic count does. At the least either of the latter two designations should trigger questions about the need for more current information or the causes of lower levels of production.

**EXHIBIT 14-1 SIGNIFICANT KING SALMON STOCKS**

Stream name appearing on USGS maps  
*Unnamed on USGS map but identified by its locally-used name*  
 AWC = Anadromous Waters Catalog

most recent count meets minimum size criteria (400 fish) and is less than 12 years old	significant
most recent count meets minimum size criteria (400 fish) but is more than 12 years old	significant
historic count meets minimum size criteria (400 fish), but recent count does not	significant

STOCK	AWC NUMBER	PLANNING UNIT	STATUS
NONE	NONE	Kamishak Bay	NONE
McArthur River	247-10-10080	Westside Unit	significant
Nikolai Creek	247-10-10200	Westside Unit	significant
Chuitna River	247-20-10010	Westside Unit	significant
Beluga River	247-30-10090	Westside Unit	significant
Theodore River	247-30-10080	Westside Unit	significant
Lewis River	247-30-10070	Westside Unit	significant
Susitna River	247-41-10200	Susitna River Unit	significant
Alexander Creek	247-41-10200-2015	Susitna River Unit	significant
Lower Sucker Creek	247-41-10200-2015-3035	Susitna River Unit	significant
Wolverine Creek	247-41-10200-2015-3035-4019	Susitna River Unit	significant
Yentna River	247-41-10200-2053	Susitna River Unit	significant
Peters Creek	247-41-10200-2053-3150-4060	Susitna River Unit	significant
Cache Creek	247-41-10200-2053-3150-4120	Susitna River Unit	significant
Lake Creek	247-41-10200-2053-3170	Susitna River Unit	significant
Camp Creek	247-41-10200-2053-3170-4057	Susitna River Unit	significant
Sunflower Creek	247-41-10200-2053-3170-4067	Susitna River Unit	significant
Fish Lake Creek	247-41-10200-2053-3180	Susitna River Unit	significant
Skwentna River	247-41-10200-2053-3205	Susitna River Unit	significant
Talachulitna River	247-41-10200-2053-3205-4053	Susitna River Unit	significant
Canyon Creek	247-41-10200-2053-3205-4067	Susitna River Unit	significant
Red Creek	247-41-10200-2053-3225-4015	Susitna River Unit	significant
Kitchatna River	247-41-10200-2053-3229	Susitna River Unit	significant
Deshka River / Kroto Creek	247-41-10200-2081	Susitna River Unit	significant
Unnamed Tributary	247-41-10200-2081-3065	Susitna River Unit	significant
Moose Creek	247-41-10200-2081-3100	Susitna River Unit	significant
Twentymile Creek	247-41-10200-2081-3181	Susitna River Unit	significant
Willow Creek	247-41-10200-2120	Susitna River Unit	significant
Deception Creek	247-41-10200-2120-3020	Susitna River Unit	significant
Little Willow Creek	247-41-10200-2130	Susitna River Unit	significant
North Fork Kashwitna River	247-41-10200-2180-3061	Susitna River Unit	significant
Sheep Creek	247-41-10200-2200	Susitna River Unit	significant
Goose Creek	247-41-10200-2230	Susitna River Unit	significant
Montana Creek	247-41-10200-2250	Susitna River Unit	significant
Talkeetna River	247-41-10200-2370	Susitna River Unit	significant
Chunilna River	247-41-10200-2370-3041	Susitna River Unit	significant
Praitire Creek	247-41-10200-2370-3301	Susitna River Unit	significant
Chulitna River	247-41-10200-2381	Susitna River Unit	significant

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<b>EXHIBIT 14-1</b> (continued)		<b>SIGNIFICANT KING SALMON STOCKS</b>	
Bunco Creek	247-41-10200-2381-3161-4085	Susitna River Unit	significant
Indian River	247-41-10200-2551	Susitna River Unit	significant
Portage Creek	247-41-10200-2585	Susitna River Unit	significant
Little Susitna River	247-41-10100	Knik Arm Unit	significant
Ship Creek	247-50-10060	Knik Arm Unit	significant
Chickaloon River	247-60-10110	Turnagain Arm Unit	significant
Kenai River	244-30-10010	Upper Peninsula / Kenai River Unit	significant
Killey River	244-30-10010-2076	Upper Peninsula / Kenai River Unit	significant
Benjamin Creek	244-30-10010-2076-3095	Upper Peninsula / Kenai River Unit	significant
Olson Creek	no AWC number	Upper Peninsula / Kenai River Unit	significant
Russian River	244-30-10010-2158	Upper Peninsula / Kenai River Unit	significant
Quartz Creek	244-30-10010-2177	Upper Peninsula / Kenai River Unit	significant
Crescent Creek	244-30-10010-2177-3012	Upper Peninsula / Kenai River Unit	significant
Kasilof River	244-30-10050	Mid-Peninsula / Kasilof River Unit	significant
Crooked Creek	244-30-10050-2024	Mid-Peninsula / Kasilof River Unit	significant
Ninlchik River	244-20-10090	Mid-Peninsula / Kasilof River Unit	significant
Deep Creek	244-20-10100	Mid-Peninsula / Kasilof River Unit	significant
Anchor River	244-10-10010	Mid-Peninsula / Kasilof River Unit	significant
NONE	NONE	Kachemak Bay Unit	NONE
NONE	NONE	Gulf Coast Unit	NONE
NONE	NONE	Greater Resurrection Bay Unit	NONE

**EXHIBIT 14-2 SIGNIFICANT SOCKEYE SALMON STOCKS**

Stream name appearing on USGS maps  
*Unnamed on USGS map but identified by its locally-used name*  
 AWC = Anadromous Waters Catalog

most recent count meets minimum size criteria (2,000 fish) and is less than 10 years old	significant
most recent count meets minimum size criteria (2,000 fish) but is more than 10 years old	significant
historic count meets minimum size criteria (2,000 fish), but recent count does not	significant

STOCK	AWC NUMBER	PLANNING UNIT	STATUS
Douglas River	248-40-10100	Kamishak Bay Unit	significant
Kamishak River	243-10-10040	Kamishak Bay Unit	significant
Mikfik Creek	243-20-10050	Kamishak Bay Unit	significant
Chenik Creek	243-30-10200	Kamishak Bay Unit	significant
Amakdedori Creek	243-40-10010	Kamishak Bay Unit	significant
Crescent River	245-30-10010	Westside Unit	significant
Harriet Creek	245-40-10010	Westside Unit	significant
Little Jack Slough	245-50-10110	Westside Unit	significant
Big River	248-20-10070	Westside Unit	significant
McArthur River	247-10-10080	Westside Unit	significant
Chuitna River	247-20-10010	Westside Unit	significant
Threemile Creek	247-20-10002	Westside Unit	significant
Beluga River	247-30-10090	Westside Unit	significant
Packers Creek	246-20-10020	Westside Unit	significant
Susitna River	247-41-10200	Susitna River Unit	significant
Fish Creek	247-41-10200-2020	Susitna River Unit	significant
Alexander Creek	247-41-10200-2015	Susitna River Unit	significant
Yentna River	247-41-10200-2053	Susitna River Unit	significant
Hungryman Creek	247-41-10200-2053-3150-4090	Susitna River Unit	significant
Lake Creek	247-41-10200-2053-3170	Susitna River Unit	significant
Fish Lake Creek	247-41-10200-2053-3180	Susitna River Unit	significant
Skwentna River	247-41-10200-2053-3205	Susitna River Unit	significant
Eightmile Creek	247-41-10200-2053-3205-4027	Susitna River Unit	significant
Shell Creek	247-41-10200-2053-3205-4050	Susitna River Unit	significant
Talachulitna River	247-41-10200-2053-3205-4053	Susitna River Unit	significant
Happy River	247-41-10200-2053-3205-4112	Susitna River Unit	significant
Hewitt Creek	247-41-10200-2053-3213	Susitna River Unit	significant
Unnamed Tributary	247-41-10200-2053-3213-4050	Susitna River Unit	significant
West Fork Yentna River	247-41-10200-2053-3229-4110	Susitna River Unit	significant
Trapper Creek	247-41-10200-2081-3050	Susitna River Unit	significant
Caswell Creek	247-41-10200-2190	Susitna River Unit	significant
Question Creek	247-41-10200-2300-3011	Susitna River Unit	significant
Birch Creek	247-41-10200-2320-3010	Susitna River Unit	significant
Trapper Creek	247-41-10200-2341	Susitna River Unit	significant
Talkeetna River	247-41-10200-2370	Susitna River Unit	significant
Chunilna River	247-41-10200-2370-3041	Susitna River Unit	significant
Unnamed Tributary	247-41-10200-2370-3080	Susitna River Unit	significant

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<b>EXHIBIT 14-2</b> (continued)		<b>SIGNIFICANT SOCKEYE SALMON STOCKS</b>	
Praitire Creek	247-41-10200-2370-3301	Susitna River Unit	significant
Little Susitna River	247-41-10100	Knik Arm Unit	significant
Fish Creek	247-50-10330	Knik Arm Unit	significant
Cottonwood Creek	247-50-10300	Knik Arm Unit	significant
Chickaloon River	247-60-10110	Turnagain Arm Unit	significant
Bishop Creek	247-90-10030	Upper Peninsula / Kenai River Unit	significant
Kenai River	244-30-10010	Upper Peninsula / Kenai River Unit	significant
Moose River	244-30-10010-2063	Upper Peninsula / Kenai River Unit	significant
Hidden Creek	244-30-10010-2137	Upper Peninsula / Kenai River Unit	significant
Jean Creek	244-30-10010-2135	Upper Peninsula / Kenai River Unit	significant
Russian River	244-30-10010-2158	Upper Peninsula / Kenai River Unit	significant
Quartz Creek	244-30-10010-2177	Upper Peninsula / Kenai River Unit	significant
Moose Creek	244-30-10010-2225-3013	Upper Peninsula / Kenai River Unit	significant
<i>Railroad Creek</i>	244-30-10010-2225-3021	Upper Peninsula / Kenai River Unit	significant
Johnson Creek	244-30-10010-2225-3031	Upper Peninsula / Kenai River Unit	significant
Ptarmigan Creek	247-60-10110-2231	Upper Peninsula / Kenai River Unit	significant
Snow River	247-60-10110-2231	Upper Peninsula / Kenai River Unit	significant
Kasilof River	244-30-10050	Mid-Peninsula / Kasilof River Unit	significant
Shantatalik Creek	244-30-10050-2059	Mid-Peninsula / Kasilof River Unit	significant
Nikolai Creek	244-30-10050-2060	Mid-Peninsula / Kasilof River Unit	significant
Bear Creek	244-30-10050-2075	Mid-Peninsula / Kasilof River Unit	significant
Moose Creek	244-30-10050-2099	Mid-Peninsula / Kasilof River Unit	significant
Seepage Creek	244-30-10050-2127	Mid-Peninsula / Kasilof River Unit	significant
Clear Creek	244-30-10050-2135	Mid-Peninsula / Kasilof River Unit	significant
Deep Creek	244-20-10100	Mid-Peninsula / Kasilof River Unit	significant
English Bay River	241-30-10500	Kachemak Bay Unit	significant
<i>Delusion Lake C.</i>	232-23-10390	Gulf Coast Unit	significant
<i>Desire Lake Creek</i>	232-23-10120	Gulf Coast Unit	significant
<i>Delight Lake Creek</i>	232-23-10120	Gulf Coast Unit	significant
<i>Aialik Lake / Lagoon</i>	232-40-10230	Greater Resurrection Bay Unit	significant
Salmon Creek	231-30-10080-2010	Greater Resurrection Bay Unit	significant
Bear Creek	231-30-10080-2010-3065-4010	Greater Resurrection Bay Unit	significant

**EXHIBIT 14-3 SIGNIFICANT COHO SALMON STOCKS**

Stream name appearing on USGS maps  
*Unnamed on USGS map but identified by its locally-used name*  
 AWC = Anadromous Waters Catalog

most recent count meets minimum size criteria (800 fish) and is less than 8 years old	significant
most recent count meets minimum size criteria (800 fish) but is more than 8 years old	significant
historic count meets minimum size criteria (800 fish), but recent count does not	significant

STOCK	AWC NUMBER	PLANNING UNIT	STATUS
NONE	NONE	Kamishak Bay	NONE
Chinitna River	243-10-10030	Westside Unit	significant
Silver Salmon Creek	245-10-10050	Westside Unit	significant
West Glacier Creek	245-10-10060	Westside Unit	significant
Polly Creek	245-40-10050	Westside Unit	significant
Little Jack Slough	245-50-10110	Westside Unit	significant
Cannery Creek	245-50-10010	Westside Unit	significant
Drift River	245-50-10085	Westside Unit	significant
Big River	248-20-10070	Westside Unit	significant
Kustatan River	245-50-10010	Westside Unit	significant
McArthur River	247-10-10080	Westside Unit	significant
Chuitna River	247-20-10010	Westside Unit	significant
Beluga River	247-30-10090	Westside Unit	significant
Theodore River	247-30-10080	Westside Unit	significant
Lewis River	247-30-10070	Westside Unit	significant
Packers Creek	246-20-10020	Westside Unit	significant
Susitna River	247-41-10200	Susitna River Unit	significant
Alexander Creek	247-41-10200-2015	Susitna River Unit	significant
Yentna River	247-41-10200-2053	Susitna River Unit	significant
Peters Creek	247-41-10200-2053-3150-4060	Susitna River Unit	significant
Lake Creek	247-41-10200-2053-3170	Susitna River Unit	significant
Fish Lake Creek	247-41-10200-2053-3180	Susitna River Unit	significant
Skwentna River	247-41-10200-2053-3205	Susitna River Unit	significant
Talachulitna River	247-41-10200-2053-3205-4053	Susitna River Unit	significant
Kitchatna River	247-41-10200-2053-3229	Susitna River Unit	significant
Deshka River / Kroto Creek	247-41-10200-2081	Susitna River Unit	significant
Willow Creek	247-41-10200-2120	Susitna River Unit	significant
Caswell Creek	247-41-10200-2190	Susitna River Unit	significant
Sheep Creek	247-41-10200-2200	Susitna River Unit	significant
Montana Creek	247-41-10200-2250	Susitna River Unit	significant
Sunshine Creek	247-41-10200-2300	Susitna River Unit	significant
Talkeetna River	247-41-10200-2370	Susitna River Unit	significant
Chunilna River	247-41-10200-2370-3041	Susitna River Unit	significant
Little Susitna River	247-41-10100	Knik Arm Unit	significant
Fish Creek	247-50-10330	Knik Arm Unit	significant
Cottonwood Creek	247-50-10300	Knik Arm Unit	significant
Wasilla Creek	247-50-10270	Knik Arm Unit	significant

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<b>EXHIBIT 14-3</b> (continued)		<b>SIGNIFICANT COHO SALMON STOCKS</b>	
Matanuska River	247-50-10220	Knik Arm Unit	significant
Kink River	247-50-10200	Knik Arm Unit	significant
Ship Creek	247-50-10060	Knik Arm Unit	significant
Campbell Creek	247-60-10340	Turnagain Arm Unit	significant
Bird Creek	247-60-10280	Turnagain Arm Unit	significant
Twentymile River	247-60-10230	Turnagain Arm Unit	significant
Sixmile Creek	247-60-10170	Turnagain Arm Unit	significant
Chickaloon River	247-60-10110	Turnagain Arm Unit	significant
Swanson River	247-90-10020	Upper Peninsula / Kenai River Unit	significant
Kenai River	244-30-10010	Upper Peninsula / Kenai River Unit	significant
Moose River	244-30-10010-2063	Upper Peninsula / Kenai River Unit	significant
Jean Creek	244-30-10010-2135	Upper Peninsula / Kenai River Unit	significant
Russian River	244-30-10010-2158	Upper Peninsula / Kenai River Unit	significant
Quartz Creek	244-30-10010-2177	Upper Peninsula / Kenai River Unit	significant
Kasilof River	244-30-10050	Mid-Peninsula / Kasilof River Unit	significant
Crooked Creek	244-30-10050-2024	Mid-Peninsula / Kasilof River Unit	significant
Deep Creek	244-20-10100	Mid-Peninsula / Kasilof River Unit	significant
Anchor River	244-10-10010	Mid-Peninsula / Kasilof River Unit	significant
Clearwater Creek	241-14-10645-2060	Kachemak Bay Unit	significant
NONE	NONE	Gulf Coast Unit	NONE
Bear Creek	231-30-10080-2010-3065-4010	Greater Resurrection Bay Unit	significant



<b>EXHIBIT 14-4</b> (continued)		<b>SIGNIFICANT PINK SALMON STOCKS</b>	
Unnamed Tributary	247-41-10200-2370-3041-4010	Susitna River Unit	significant
Unnamed Tributary	247-41-10200-2370-3080	Susitna River Unit	significant
Indian River	247-41-10200-2551	Susitna River Unit	significant
Little Susitna River	247-41-10100	Knik Arm Unit	significant
Campbell Creek	247-60-10340	Turnagain Arm Unit	significant
Bird Creek	247-60-10280	Turnagain Arm Unit	significant
Portage Creek	247-60-10220	Turnagain Arm Unit	significant
Resurrection Creek	247-60-10150	Turnagain Arm Unit	significant
Chickaloon River	247-60-10110	Turnagain Arm Unit	significant
Kenai River	244-30-10010	Upper Peninsula / Kenai River Unit	significant
Kasilof River	244-30-10050	Mid-Peninsula / Kasilof River Unit	significant
Humpy Creek	241-14-10510	Kachemak Bay Unit	significant
<i>China Poot Creek</i>	241-15-10370	Kachemak Bay Unit	significant
<i>Tutka Lagoon Creek</i>	241-16-10090	Kachemak Bay Unit	significant
Jakolof Creek	241-16-10040	Kachemak Bay Unit	significant
Barbara ( <i>Barabara</i> ) Creek	241-11-10800	Kachemak Bay Unit	significant
Seldovia River	241-11-10730	Kachemak Bay Unit	significant
<i>Port Graham River</i>	241-20-10550	Kachemak Bay Unit	significant
<i>Dogfish Lagoon Creek</i>	242-10-10300	Gulf Coast Unit	significant
<i>Port Chatham Creek</i>	242-10-10230	Gulf Coast Unit	significant
<i>Windy Left Creek</i>	242-32-10170	Gulf Coast Unit	significant
<i>Windy Right Creek</i>	242-32-10160	Gulf Coast Unit	significant
Rocky River	242-31-10120	Gulf Coast Unit	significant
Port Dick ( <i>Head</i> ) Creek	242-42-10460	Gulf Coast Unit	significant
<i>Slide C.</i>	242-42-10450	Gulf Coast Unit	significant
<i>Middle C.</i>	242-42-10440	Gulf Coast Unit	significant
<i>Island Creek</i>	242-42-10430	Gulf Coast Unit	significant
<i>South Nuka Island Creek</i>	232-15-10260	Gulf Coast Unit	significant
<i>James Lagoon Creek</i>	232-23-10260	Gulf Coast Unit	significant
<i>Desire Lake Creek</i>	232-23-10120	Gulf Coast Unit	significant
<i>Aialik Lake / Lagoon</i>	232-40-10230	Greater Resurrection Bay Unit	significant
<i>Tonsina C.</i>	231-30-10040	Greater Resurrection Bay Unit	significant
Salmon Creek	231-30-10080-2010	Greater Resurrection Bay Unit	significant
Bear Creek	231-30-10080-2010-3065-4010	Greater Resurrection Bay Unit	significant
<i>Thumb Cove</i>	231-30-10160	Greater Resurrection Bay Unit	significant
<i>Humpy Cove</i>	231-40-10140	Greater Resurrection Bay Unit	significant

**EXHIBIT 14-5 SIGNIFICANT CHUM SALMON STOCKS**

Stream name appearing on USGS maps  
*Unnamed on USGS map but identified by its locally-used name*  
 AWC = Anadromous Waters Catalog

most recent count meets minimum size criteria (800 fish) and is less than 8 years old	significant
most recent count meets minimum size criteria (800 fish) but is more than 8 years old	significant
historic count meets minimum size criteria (800 fish), but recent count does not	significant

STOCK	AWC NUMBER	PLANNING UNIT	STATUS
Kamishak River	243-10-10040	Kamishak Bay Unit	significant
Little Kamishak River	243-10-10030	Kamishak Bay Unit	significant
McNeil River	243-20-10035	Kamishak Bay Unit	significant
<i>Bruin Bay River</i>	243-50-10050	Kamishak Bay Unit	significant
<i>Ursus Cove River</i>	248-10-10020	Kamishak Bay Unit	significant
<i>Cottonwood Creek</i>	248-20-10040	Kamishak Bay Unit	significant
<i>North Head Creek</i>	248-20-10060	Kamishak Bay Unit	significant
<i>Sugarloaf Creek</i>	248-20-10070	Kamishak Bay Unit	significant
Iniskin River	248-20-10080	Kamishak Bay Unit	significant
Fitz Creek	245-10-10010	Westside Unit	significant
Chinitna River	243-10-10030	Westside Unit	significant
Marsh Creek	245-10-10040	Westside Unit	significant
Middle Glacier Creek	NO AWC	Westside Unit	significant
Crescent River	245-30-10010	Westside Unit	significant
McArthur River	247-10-10080	Westside Unit	significant
Susitna River	247-41-10200	Susitna River Unit	significant
Fish Creek	247-41-10200-2020	Susitna River Unit	significant
Yentna River	247-41-10200-2053	Susitna River Unit	significant
Lake Creek	247-41-10200-2053-3170	Susitna River Unit	significant
Skwentna River	247-41-10200-2053-3205	Susitna River Unit	significant
Talachulitna River	247-41-10200-2053-3205-4053	Susitna River Unit	significant
Unnamed Tributary	247-41-10200-2053-3205-4099	Susitna River Unit	significant
Willow Creek	247-41-10200-2120	Susitna River Unit	significant
Montana Creek	247-41-10200-2250	Susitna River Unit	significant
Talkeetna River	247-41-10200-2370	Susitna River Unit	significant
Chunilna River	247-41-10200-2370-3041	Susitna River Unit	significant
Byers Creek	247-41-10200-2381-3180	Susitna River Unit	significant
Indian River	247-41-10200-2551	Susitna River Unit	significant
Portage Creek	247-41-10200-2585	Susitna River Unit	significant
Little Susitna River	247-41-10100	Knik Arm Unit	significant
Portage Creek	247-60-10220	Turnagain Arm Unit	significant
NONE	NONE	Upper Peninsula / Kenai River Unit	NONE
NONE	NONE	Mid-Peninsula / Kasilof River Unit	NONE
Seldovia River	241-11-10730	Kachemak Bay Unit	significant
<i>Port Graham River</i>	241-20-10550	Kachemak Bay Unit	significant
<i>Dogfish Lagoon Creek</i>	242-10-10300	Gulf Coast Unit	significant

( continued on the next page )

EXHIBIT 14-5 (continued)		SIGNIFICANT CHUM SALMON STOCKS	
Rocky River	242-31-10120	Gulf Coast Unit	significant
Port Dick (Head) Creek	242-42-10460	Gulf Coast Unit	significant
Slide C.	242-42-10450	Gulf Coast Unit	significant
Middle C.	242-42-10440	Gulf Coast Unit	significant
Island Creek	242-42-10430	Gulf Coast Unit	significant
Petrof R.	232-10-10330	Gulf Coast Unit	significant
Tonsina C.	231-30-10040	Greater Resurrection Bay Unit	significant

**14.3 WILD STOCK SANCTUARIES / STOCK RESERVES**

In the preceding ten chapters the CIRPT has identified the stocks it has designated as “wild stock sanctuaries / stock reserves” in each planning unit. The concept of “wild stock sanctuaries / stock reserves” is discussed in the ADF&G *Genetics Policy* and further amplified in Chapter 3.0, Section 3.3.3.5 of this document. That information is consolidated in EXHIBIT 14-6.

As was stated in that earlier section a “wild stock sanctuary / stock reserve/” is defined by four conditions: (1) it must have no previous history of enhancement and is precluded from future enhancement; (2) it must be of a size sufficient to allow for substantial egg takes without posing serious threat to the viability of the stock; (3) it must be believed to be representative of the stocks of the area; and (4) it must be so designated by the CIRPT. This definition was developed and adopted by the CIRPT based on the concept suggested in the ADF&G “Genetics Policy”.

As EXHIBIT 14-6 shows the results of this designation process was the establishment of twenty-seven anadromous salmon “wild stock sanctuaries / stock reserves” in the Cook Inlet region. Of that total number seven are for king salmon, six for sockeye salmon, five for coho salmon, five for pink salmon and four for chum salmon.

Such sanctuaries / reserves are reservoirs of naturally adapting fish available to serve as broodstock should they be needed. Overall planning and prudence dictates the identification of safeguards such as this to buffer the effects of unanticipated adverse conditions.

This application of the concept recognized that in a given enhancement project proposal the first broodstock choice will probably always be the stock identified as needing enhancement. Should the target stock not be a suitable source of eggs for any reason, other local stocks including the nearest “wild stock sanctuary / stock reserve” will be examined for their suitability.

<b>EXHIBIT 14-6 WILD STOCK SANCTUARY / STOCK RESERVE DESIGNATION SUMMARY</b>								
CHAPTER	PLANNING UNIT	KING	SOCKEYE	COHO	PINK	CHUM		
4.0	KAMISHAK BAY UNIT	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	Bruin Bay River (mid-July / mid-September)	Cottonwood Creek (late July / August)		
5.0	WESTSIDE UNIT	Theodore Creek (June / July)	Crescent River (July)	Big River (August)	NONE DESIGNATED	Crescent River (July)		
6.0	SUSITNA RIVER UNIT	Talachulitna River (June)	Judd Lake (July)	Talachulitna River (July / August)	Talkeetna River (July / August)	Talachulitna River (July)		
		Alexander Creek (June)	West Fork of the Yentna River (July)	Chulitna River (July / August)				
		Prairie Creek (June)	Larson Lake (July)					
7.0	KNIK ARM UNIT	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	Little Susitna River (July / August)	NONE DESIGNATED		
8.0	TURNAGAIN ARM UNIT	Chickaloon River (June)	Chickaloon River (June)	Chickaloon River (July / August)	NONE DESIGNATED	Chickaloon River (July / August)		
9.0	UPPER PENINSULA / KENAI RIVER UNIT	Benjamin Creek (May / June)	Russian River below the falls (July)	Killey River (July / August)	Kenai River (August)	NONE DESIGNATED		
		Kenai River watershed above Skilak Lake (July)						
10.0	KASILOF RIVER / MID-PENINSULA UNIT	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED		
11.0	KACHEMAK BAY UNIT	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED		
12.0	GULF COAST UNIT	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	Port Dick (Head) Creek (mid-July / September)	NONE DESIGNATED		
13.0	GREATER RESURRECTION BAY UNIT	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED	NONE DESIGNATED		
<b>REGIONAL WILD STOCK SANCTUARIES / STOCK RESERVES BY SPECIES</b>								
		7	6	5	5	4		

**14.4 RUNS TO BE EVALUATED**

In the preceding ten chapters the CIRPT has identified, where warranted, the stocks that seem to be performing in an unanticipated manner and/or below previously demonstrated production levels. That information is consolidated in EXHIBIT 14-7.

The intent is to focus attention first on evaluation work that needs to be done and then on what, if any, remedial work might be needed. This is consistent with the CIRPT’s desire to anticipate problems when they can still be prevented and, failing that, to recognize them in an early enough stage to eliminate them with the minimum rehabilitation or enhancement effort.

It is anticipated that the runs identified on this list may change from year-to-year during the CIRPT’s annually review.

**EXHIBIT 14-7 SALMON RUNS TO BE EVALUATED**

	RUN	PLANNING UNIT	ISSUE IDENTIFIED
1	Chenik Lake Sockeye Salmon	Kamishak Bay	erratic run size
2	McNeil River Chum Salmon	Kamishak Bay	underutilized habitat
3	Douglas River Coho Salmon	Kamishak Bay	unknown escapement levels
4	Unnamed Tributary (old Douglas River channel) Coho Salmon	Kamishak Bay	unknown escapement levels
5	Kamishak River Coho Salmon	Kamishak Bay	unknown escapement levels
6	Amakdedori Creek Coho Salmon	Kamishak Bay	unknown escapement levels
7	Theodore River King Salmon	Westside	lower returns
8	Trinity Lake Sockeye Salmon	Susitna River	lower returns
9	Susitna River Sockeye Salmon	Susitna River	lower returns
10	Big Lake Sockeye Salmon	Knik Arm	lower returns
11	Cottonwood Creek Sockeye Salmon	Knik Arm	lower returns
12	Twentymile River Coho Salmon	Turnagain Arm	lower returns
13	Skilak Lake Sockeye Salmon	Upper Peninsula / Kenai River	rearing conditions
14	Bishop Creek Sockeye Salmon	Upper Peninsula / Kenai River	lower returns
15	NONE	Kasilof River / Mid-Peninsula	NONE
16	English Bay Lakes Sockeye Salmon	Kachemak Bay	erratic run size
17	Fox River Coho Salmon	Kachemak Bay	lower returns
18	Rocky River Coho Salmon	Gulf Coast	unknown escapement levels
19	NONE	Greater Resurrection Bay	NONE

**14.5 HABITAT ISSUES**

In the preceding ten chapters the CIRPT has identified activities or conditions that are damaging or have the potential to damage, where warranted, the stocks that seem to be performing in an unanticipated manner and/or below previously demonstrated production levels. That information is consolidated in EXHIBIT 14-8.

The intent is to focus attention first on evaluation work that needs to be done and then on what, if any, remedial work might be needed. This is consistent with the CIRPT’s desire to anticipate problems when they can still be prevented and, failing that, to recognize them in an early enough stage to eliminate them with the minimum rehabilitation or enhancement effort.

It is anticipated that the runs identified on this list may change from year-to-year during the CIRPT's annual review.

<b>EXHIBIT 14-8</b>		<b>HABITAT ISSUES</b>	
	ISSUE	PLANNING UNIT	ISSUE IDENTIFIED
1	Potential Secondary Impacts of Pebble Mine Development	Kamishak Bay	2006
2	Potential Impacts of Increased Recreational Use of Big River Lakes	Westside	2006
3	Potential Impacts of Increased Air Boat Use in Chinitna Bay	Westside	2006
4	Potential Impacts of Chuitna Coal Mine Development	Westside	2006
5	Potential Impacts of BLM Determination of Non-navigability in the Chuitna River	Westside	2006
6	Impacts of Beaver Dams on Annual Salmon Migrations	Susitna River	2006
7	Apparent Low Dissolved Oxygen Levels in Hewitt Lake	Susitna River	2006
8	Impact of Northern Pike Predation on Juvenile Salmon	Susitna River	2006
9	Impact of Increased Water Temperatures in Susitna River System Lakes	Susitna River	2006
10	Impacts of Increased Development Along Stream Banks	Susitna River	2006
11	Impacts to Aquatic Environment of Big Lake	Knik Arm	2006
12	Impacts of Bank Degradation and Migration Barriers in the Eklutna River	Knik Arm	2006
13	Impact of Highway Culverts	Knik Arm	2006
14	Impacts of Increased Development in River and Lake Riparian Zones	Knik Arm	2006
15	Impacts of Increased Boat Traffic on Smaller River Systems	Knik Arm	2006
16	Impacts of Dams on Ship Creek	Knik Arm	2006
17	Impacts of Anchorage Port Expansion	Knik Arm	2006
18	Potential Seward Highway Causeway Construction (Kern Creek to Ingram Creek)	Turnagain Arm	2006
19	Kenai River Bank Degradation	Upper Pen. / Kenai R.	2006
20	Hydrocarbon Levels in the Kenai River and Uplands	Upper Pen. / Kenai R.	2006
21	Development within the Riparian / Upland Corridors	Upper Pen. / Kenai R.	2006
22	ATV Habitat Degradation in All Zones Not Designated for Such Use	Upper Pen. / Kenai R.	2006
23	Barriers to Fish Passage, e.g. culverts	Upper Pen. / Kenai R.	2006
24	Invasive Aquatic and Terrestrial Plants	Upper Pen. / Kenai R.	2006
25	Increasing Water Temperatures Particularly in Small, Headwater Streams	Upper Pen. / Kenai R.	2006
26	Storm Damage to Tustumena Lake Tributaries	Kasilof R. / Mid-Pen.	2006
27	Potential Flood Impacts to Deep Creek King and Coho Salmon Stocks	Kasilof R. / Mid-Pen.	2006
28	Residential Development on the Kasilof River Banks	Kasilof R. / Mid-Pen.	2006
29	Habitat Degradation on the Kasilof River Banks	Kasilof R. / Mid-Pen.	2006
30	Increased Human Use of the Estuaries (camping, motorized vehicles, etc.)	Kasilof R. / Mid-Pen.	2006
31	Invasive Aquatic and Terrestrial Plants	Kasilof R. / Mid-Pen.	2006
32	Increasing Water Temperatures Particularly in Small, Headwater Streams	Kasilof R. / Mid-Pen.	2006
33	Impacts of Past Logging in the Port Graham / English Bay Area	Kachemak Bay	2006
34	Impacts of Past Logging	Gulf Coast	2006
35	Seward Area Coho Salmon Habitat	Greater Res. Bay	2006
36	Resurrection River Delta Flooding	Greater Res. Bay	2006
37	Impacts of Unpermitted Activities	Greater Res. Bay	2006



**14.6 INACTIVE SALMON PROJECTS**

In the preceding ten chapters the CIRPT has identified projects that are not currently being conducted. That information is consolidated in EXHIBIT 14-9.

With the changing composition of public participants in planning and project work related to anadromous salmon in the Cook Inlet region and the turnover in professional personnel engaged in the same activities, it is instructive to chronicle both the ideas that have been put forward and the actual project work undertaken. Contemporary decisions are informed by an understanding of past successes and failures.

The cited exhibit divides these inactive projects into three categories.

First, there are projects such as studies that have been completed and from which results have been published and hatcheries that have been closed and dismantled. These may accurately be described as “completed”.

Second, there are projects such as some stocking projects and lake fertilization projects that have been stopped for a variety of reasons, not all of which are directly related to the “success” of the project. It is conceivable that changes in support, financing or technology could reawaken interest in them. It seems appropriate to designate these projects as “suspended”.

Finally, there are projects that were identified in the *Phase I Plan 1981 – 2000* that were never initiated. Some of these projects were only vaguely outlined earlier, and the reasons others were not undertaken are not clear. These projects have been identified as “proposed but never implemented”.

**KEY FOR EXHIBIT 14-9**

In the following exhibit there are abbreviations indicating the agency or group that is the primary sponsor of the project listed. The abbreviations and the organizations represented by the abbreviations are listed below.

ADF&G	Alaska Department of Fish and Game
ASLC	Alaska SeaLife Center
CIAA	Cook Inlet Aquaculture Association
COS	City of Seward
CVTC	Chickaloon Village Traditional Council
IMS	Institute of Marine Science
KBRR	Kachemak Bay Research Reserve
KWF	Kenai Watershed Forum
NPS	National Park Service
NSEP	Nanwalek Salmon Enhancement Project
NVE	Native Village of Eklutna
PGC	Port Graham Corporation
USFWS	United States Fish and Wildlife Service
USFS	United States Forest Service

EXHIBIT 14-9		INACTIVE SALMON PROJECTS				
PROJECT COMPLETED						
PROJECT SUSPENDED						
PROJECT PROPOSED BUT NEVER IMPLEMENTED						
PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT DURATION		
Bruin Lake Stocking	C/AA	Kamishak Bay	sockeye	1990 - 1996		
Ursus Lake Stocking	C/AA	Kamishak Bay	sockeye	1992 - 1996		
Susitna River Radio Tagging Study - SuHydro	ADF&G	Susitna River	king, coho, chum	1981		
Judd Lake Pathology / Enumeration Study	C/AA	Susitna River	sockeye	1988 - 1989		
Hewitt Lake Pathology / Enumeration Study	C/AA	Susitna River	sockeye	1988 - 1989		
Upper Susitna River Salmon Enhancement Study	ADF&G	Susitna River	sockeye, king, coho, chum	1983 and 1990		
Susitna River Salmon Production Estimate	ADF&G	Susitna River	sockeye	1989		
Deshka River Radio Telemetry Study	ADF&G	Susitna River	coho	1980 - 1981		
Larson Lake Fertilization	C/AA	Susitna River	sockeye	1986 - 1987		
Caswell Creek Stocking	ADF&G	Susitna River	coho	1987 - 1990		
Chelatna Lake Production Capacity Study	ADF&G / C/AA	Susitna River	sockeye	1983 - 1996		
Byers Lake Fertilization	ADF&G	Susitna River	sockeye	never started		
Shell Lake Fertilization	ADF&G	Susitna River	sockeye	never started		
Willow Creek Stocking	ADF&G	Susitna River	coho	never started		
Big Lake Hatchery	ADF&G	Knik Arm	sockeye, coho	1974 - 1992		
Eklutna Hatchery	C/AA	Knik Arm	sockeye, chum, coho	1982 - 1998		
Wasilla Creek Stocking	ADF&G	Knik Arm	coho	1992 and 1996		
Fish Creek Stocking	ADF&G	Knik Arm	coho	1992 and 1993		
Cottonwood Creek Stocking	ADF&G	Knik Arm	coho	1992 and 1993		
Eagle River Stocking	ADF&G	Knik Arm	king	1994		
Nancy Lake Stocking	ADF&G	Knik Arm	coho	1992 - 1995		
Finger Lake Fertilization	ADF&G	Knik Arm	sockeye	never started		
Delyndia Lake Fertilization	ADF&G	Knik Arm	sockeye	never started		
Butterfly Lake Fertilization	ADF&G	Knik Arm	sockeye	never started		
Little Susitna River Stocking	ADF&G	Knik Arm	king	never started		

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EXHIBIT 14-9		( continued from the previous page )				INACTIVE SALMON PROJECTS	
PROJECT COMPLETED							
PROJECT SUSPENDED							
PROJECT PROPOSED BUT NEVER IMPLEMENTED							
PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT DURATION			
26	Sixmile Creek Run Development	Tumagain Arm	king	1984 - 1988			
27	Portage Ponds Development	Tumagain Arm	coho	1981 - 1989			
28	Sixmile Creek Stocking	Tumagain Arm	coho	1984 - 1988			
29	Ingram Creek Stocking	Tumagain Arm	coho, pink	1984 - 1988			
30	Kenai River Spawning and Rearing Study	Upper Peninsula / Kenai River	sockeye, king, coho	1979 - 1981			
31	Genetics of Russian River Sockeye Salmon	Upper Peninsula / Kenai River	sockeye	1978 - 1985			
32	Quartz Creek Broodstock Evaluation	Upper Peninsula / Kenai River	sockeye, king, coho	1981 - 1985			
33	Platnigan Lake Fishpass, Stocking, Fertilization	Upper Peninsula / Kenai River	sockeye	1980 - 1983, 2002			
34	Early Kenai River King Salmon Enhancement	Upper Peninsula / Kenai River	king	1983 - 1984			
35	Grant Lake Stocking	Upper Peninsula / Kenai River	coho	1983 - 1986			
36	Quartz Creek Stocking	Upper Peninsula / Kenai River	coho	1983 - 1985			
37	Tern Lake Stocking	Upper Peninsula / Kenai River	coho	1983 - 1985			
38	Quartz Creek Stocking	Upper Peninsula / Kenai River	sockeye	1983			
39	Birch Hill Hatchery	Upper Peninsula / Kenai River	sockeye, king, coho	never started			
40	Early Russian River Sockeye Salmon Enhancement	Upper Peninsula / Kenai River	sockeye	never started			
41	Evaluation of Hatchery Stocked Fry Survival in Kenai Lake	Upper Peninsula / Kenai River	sockeye, king, coho	never started			
42	Evaluation of Fry Stocking in Tustumena Lake	Kasilof River / Mid-Peninsula	sockeye				
43	Kasilof Hatchery	Kasilof River / Mid-Peninsula	sockeye, king, coho	1974 - 1996			
44	Kasilof Hatchery Evaluation	Kasilof River / Mid-Peninsula	sockeye, king, coho	1996			
45	Anchor River Salmon Study	Kasilof River / Mid-Peninsula	king	never started			
46	Ninlichik Native Association Hatchery	Kasilof River / Mid-Peninsula		never started			
47	Tutka Hatchery Evaluation	Kachemak Bay	pink, chum	1982 - 2001			
48	Tutka Hatchery	Kachemak Bay	pink, chum	1975 - 2001			
49	English Bay Lakes Hatchery	Kachemak Bay	sockeye				
50	Humpy Creek Weir	Kachemak Bay	pink	1961 - 1982			
51	Caribou Lake Stocking	Kachemak Bay	coho	1985 - 1994			

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EXHIBIT 14-9		( continued from the previous page )				INACTIVE SALMON PROJECTS	
PROJECT COMPLETED							
PROJECT SUSPENDED							
PROJECT PROPOSED BUT NEVER IMPLEMENTED							
PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT DURATION			
52	Nickj Dudiak Fishing Lagoon Stocking	ADF&G	Kachemak Bay	king (late run)	1992 - 1999		
53	Seldovia Lake Stocking	ADF&G	Kachemak Bay	coho	1985 - 1991		
54	Leisure Lake Fishpass		Kachemak Bay	sockeye	never started		
55	Bradley Lake Hatchery		Kachemak Bay		never started		
56	Bull Dog Cove Clearance	ADF&G	Gulf Coast		1982		
57	Porcupine Cove Clearance	ADF&G	Gulf Coast		1982		
58	Two Arm Bay Clearance	ADF&G	Gulf Coast		1982		
59	Scurvy Creek	CIAA	Gulf Coast	pink, chum	1979 - 1987		
60	Gore Point Lake Clearance	CIAA	Gulf Coast				
61	Port Dick (Middle) Creek Development	ADF&G	Gulf Coast	sockeye	1987 - 1989		
62	Delight and Desire Lakes Fertilization and Stocking	ADF&G	Gulf Coast	sockeye			
63	Windy Left Creek Rearing Ponds	PGC	Gulf Coast	coho	1998		
64	Nuka Bay Hatchery		Gulf Coast		never started		
65	Delight Lake Hatchery		Gulf Coast		never started		
66	Rocky River Clearance		Gulf Coast		never started		
67	Port Dick (Middle) Creek Clearance		Gulf Coast		never started		
68	Nuka Island Creek Clearance		Gulf Coast		never started		
69	Island Creek Clearance		Gulf Coast		never started		
70	Koyuktolik (Dogfish) Bay Creek Clearance		Gulf Coast		never started		
71	Windy Right Creek Clearance		Gulf Coast		never started		
72	Anderson Beach Clearance		Gulf Coast		never started		
73	Port Chatham Fish Pass		Gulf Coast		never started		
74	Institute of Marine Science Stocking	IMS	Greater Resurrection Bay	coho	1986 - 1987		
75	Thumb Cove Stocking	ADF&G	Greater Resurrection Bay	king	1984		
76	Jap Creek Stocking	ADF&G	Greater Resurrection Bay	chum	1985		

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EXHIBIT 14-9		( continued from the previous page )				INACTIVE SALMON PROJECTS	
PROJECT COMPLETED							
PROJECT SUSPENDED							
PROJECT PROPOSED BUT NEVER IMPLEMENTED							
PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT DURATION			
77	Spring Creek Stocking	ADF&G	Greater Resurrection Bay	chum	1985		
78	Spring Creek Stocking	ADF&G	Greater Resurrection Bay	king	1989		
79	Resurrection Bay Rearing Ponds	ADF&G/CIAA	Greater Resurrection Bay	pink, chum			
80	Resurrection Bay Odd-Year Pink / Chum Development	ADF&G/CIAA	Greater Resurrection Bay	pink, chum			
81	Box Canyon Stocking	ADF&G	Greater Resurrection Bay	king	1983		
82	Box Canyon Stocking	ADF&G	Greater Resurrection Bay	coho	1986 - 1987		
83	Institute of Marine Science Stocking	IMS	Greater Resurrection Bay	coho	1986 - 1987		
84	Grouse Lake Stocking	ADF&G	Greater Resurrection Bay	coho	1980 - 1986		
85	Grouse Lake Stocking	CIAA	Greater Resurrection Bay	sockeye	1994 - 1998		

**14.7 ACTIVE SALMON PROJECTS**

In the preceding ten chapters the CIRPT has identified projects that are currently being conducted. That information is consolidated in EXHIBIT 14-10.

This is the only location in which all of the projects being done in the Cook Inlet region, regardless of the nature of the project, are identified in one list. This type of comprehensive listing is necessary to grasp the magnitude of the resource work being done.

The cited exhibit identifies these active projects by project implementer, area, species involved and date of project initiation.

**KEY FOR EXHIBIT 14-10**

In the following exhibit there are abbreviations indicating the agency or group that is the primary sponsor of the project listed. The abbreviations and the organizations represented by the abbreviations are listed below.

ADF&G	Alaska Department of Fish and Game
ASLC	Alaska SeaLife Center
CIAA	Cook Inlet Aquaculture Association
COS	City of Seward
CVTC	Chickaloon Village Traditional Council
IMS	Institute of Marine Science
KBRR	Kachemak Bay Research Reserve
KWF	Kenai Watershed Forum
NPS	National Park Service
NSEP	Nanwalek Salmon Enhancement Project
NVE	Native Village of Eklutna
PGC	Port Graham Corporation
USFWS	United States Fish and Wildlife Service
USFS	United States Forest Service

EXHIBIT 14-10		ACTIVE SALMON PROJECTS			
PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT INITIATED	
1 Aerial escapement monitoring	ADF&G	Kamishak Bay	sockeye, pink, chum		
2 Mikfik Lake video escapement monitoring	ADF&G	Kamishak Bay	sockeye		
3 Chenik Lake video / weir escapement monitoring	ADF&G / CIAA	Kamishak Bay	sockeye		
4 Kirschner Lake stocking	CIAA	Kamishak Bay	sockeye		
5 Paint River stocking and evaluations	CIAA	Kamishak Bay	sockeye		
6 Operation of Crescent River sonar	ADF&G	Westside	sockeye	1979	
7 Packers Lake video escapement monitoring	ADF&G	Westside	sockeye		
8 Big River Lakes video escapement monitoring	ADF&G	Westside	sockeye		
9 Cannery Creek seasonal fishladder	CIAA	Westside	coho		
10 Annual operation of Marten Lake flow control structure	CIAA	Westside	sockeye		
11 Annual operation of Packers Lake flow control structure	CIAA	Westside	sockeye		
12 Operation of Yentna River sonar	ADF&G	Susitna River	sockeye	1981	
13 Deception Creek stocking	ADF&G	Susitna River	king	1985	
14 Susitna River mark/recapture for population estimate	ADF&G	Susitna River	sockeye	2006	
15 Susitna River radio telemetry for spawner distribution	ADF&G	Susitna River	sockeye	2006	
16 Seasonal modification of beaver dams	CIAA	Susitna River	sockeye		
17 Byers Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
18 Chelatna Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
19 Shell Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
20 Stephan Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
21 Larson Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
22 Hewitt Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
23 Judd Lake adult and smolt enumeration and limnology	CIAA	Susitna River	sockeye	2006	
24 Eklutna Tailrace stocking	ADF&G	Knik Arm	king	2002	
25 Ship Creek stocking	ADF&G	Knik Arm	king	1994	
26 Eklutna Tailrace stocking	ADF&G	Knik Arm	coho	1985	
27 Ship Creek stocking	ADF&G	Knik Arm	coho	1987	
28 Big Lake stocking	CIAA	Knik Arm	sockeye		
29 Eklutna Salmon Hatchery as backup / satellite facility	CIAA	Knik Arm	sockeye, coho	1998	
30 Moose Creek fish habitat and population restoration project	CVTC	Knik Arm	king, coho	2005	

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<b>EXHIBIT 14-10</b> (continued from preceding page)		<b>ACTIVE SALMON PROJECTS</b>			
PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT INITIATED	
Aerial stream surveys	ADF&G	Turnagain Arm			
Campbell Creek stocking	ADF&G	Turnagain Arm	coho	1992	
Bird Creek stocking	ADF&G	Turnagain Arm	coho	1992	
Resurrection Creek habitat restoration	USFS	Turnagain Arm		2003	
Resurrection Creek nutrient enrichment	USFS	Turnagain Arm			
Granite Creek habitat restoration	USFS	Turnagain Arm			
Public education - invasive fish species	USFS	Turnagain Arm			
Public outreach and education	USFS	Turnagain Arm			
Moose River salmon weir	ADF&G	Upper Peninsula / Kenai River	coho		
Kenai River fishwheel index	ADF&G	Upper Peninsula / Kenai River	coho		
Predator control	ADF&G	Upper Peninsula / Kenai River	northern pike		
Russian River salmon weir	ADF&G	Upper Peninsula / Kenai River	sockeye		
Kenai River genetic stock identification	ADF&G	Upper Peninsula / Kenai River	king		
Kenai River population estimate	ADF&G	Upper Peninsula / Kenai River	sockeye		
Russian River genetic stock identification	ADF&G	Upper Peninsula / Kenai River	sockeye (late run)		
Operation of Kenai River sonar	ADF&G	Upper Peninsula / Kenai River	king	1987	
Operation of Kenai River sonar	ADF&G	Upper Peninsula / Kenai River	sockeye	1970	
Kenai River Creel survey	ADF&G	Upper Peninsula / Kenai River	king		
Kenai River sampling	ADF&G	Upper Peninsula / Kenai River	king		
Stocked lakes evaluation	ADF&G	Upper Peninsula / Kenai River			
Daniels Lake flow control structure	CIAA	Upper Peninsula / Kenai River	sockeye	1987	
Hidden Lake stocking	ADF&G / CIAA	Upper Peninsula / Kenai River	sockeye	1970	
Russian River bank stabilization	USFS	Upper Peninsula / Kenai River			
Public education - invasive fish species	USFS	Upper Peninsula / Kenai River			
Public outreach and education	USFS	Upper Peninsula / Kenai River			
Crooked Creek stocking	ADF&G	Kasilof River / Mid-Peninsula	king		
Operation of Kasilof River sonar	ADF&G	Kasilof River / Mid-Peninsula	sockeye	1978	
Evaluation of highway culvert impacts	KWF	Kasilof River / Mid-Peninsula			
Enumeration of smolt from Tustumena Lake	ADF&G / CIAA	Kasilof River / Mid-Peninsula	sockeye	1978	

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<b>EXHIBIT 14-10</b>		<b>ACTIVE SALMON PROJECTS</b>				
(continued from preceding page)		PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT INITIATED
60	Aerial escapement monitoring	ADF&G	Kachemak Bay	sockeye, pink, chum		
61	Nick Dudiak Fishing Lagoon stocking	ADF&G	Kachemak Bay	coho (early run)	2001	
62	Nick Dudiak Fishing Lagoon stocking	ADF&G	Kachemak Bay	king	1985	
63	Nick Dudiak Fishing Lagoon stocking	ADF&G/CIAA	Kachemak Bay	coho (late run)	1988	
64	Halibut Cove Lagoon stocking	ADF&G	Kachemak Bay	king	1985	
65	Seldovia Slough stocking	ADF&G	Kachemak Bay	king	1987	
66	Seldovia Slough stocking	CIAA	Kachemak Bay	coho	2006	
67	Tutka Lagoon remote release	CIAA	Kachemak Bay	sockeye	2005	
68	Leisure Lake stocking and fertilization	ADF&G/CIAA	Kachemak Bay	sockeye	1976	
69	Hazel Lake stocking	ADF&G/CIAA	Kachemak Bay	sockeye	1988	
70	Humpty Creek marine-derived nutrient study	KBRR	Kachemak Bay			
71	English Bay River/Lakes adult weir	NSEP	Kachemak Bay	sockeye		
72	Evaluation of highway culvert impacts	KWF	Kachemak Bay			
73	Port Graham Hatchery stocking	PGC	Kachemak Bay	sockeye		
74	Aerial escapement monitoring	ADF&G	Gulf Coast	sockeye, pink, chum		
75	Aerial escapement monitoring	ADF&G	Greater Resurrection Bay	sockeye, pink, chum		
76	Lowell Creek stocking	ADF&G	Greater Resurrection Bay	king	1984	
77	Lowell Creek stocking	ADF&G	Greater Resurrection Bay	coho	1987	
78	Seward Lagoon stocking	ADF&G	Greater Resurrection Bay	king	1985	
79	Seward Lagoon stocking	ADF&G	Greater Resurrection Bay	coho	1980	
80	Bear Lake stocking	CIAA	Greater Resurrection Bay	sockeye	1990	
81	Bear Lake stocking	ADF&G/CIAA	Greater Resurrection Bay	coho	1980	
82	Public education - invasive fish species	USFS	Greater Resurrection Bay			
83	Public outreach and education	USFS	Greater Resurrection Bay			
84	Bear Lake sediment analysis	ASC	Greater Resurrection Bay		2006	

**14.8 PROPOSED SALMON PROJECTS**

In the preceding ten chapters the CIRPT has identified projects that are currently being conducted. That information is consolidated in EXHIBIT 14-11.

This is the only location in which all of the projects being proposed in the Cook Inlet region, regardless of the nature of the project, are identified in one list. This type of comprehensive listing of planned activities is consistent with the very nature of the work the CIRPT was set up to do.

The cited exhibit identifies these active projects by project implementer, area, species involved and date of project initiation.

**KEY FOR EXHIBIT 14-11**

In the following exhibit there are abbreviations indicating the agency or group that is the primary sponsor of the project listed. The abbreviations and the organizations represented by the abbreviations are listed below.

ADF&G	Alaska Department of Fish and Game
ASLC	Alaska SeaLife Center
CIAA	Cook Inlet Aquaculture Association
COS	City of Seward
CVTC	Chickaloon Village Traditional Council
IMS	Institute of Marine Science
KBRR	Kachemak Bay Research Reserve
KWF	Kenai Watershed Forum
NPS	National Park Service
NSEP	Nanwalek Salmon Enhancement Project
NVE	Native Village of Eklutna
PGC	Port Graham Corporation
USFWS	United States Fish and Wildlife Service
USFS	United States Forest Service

EXHIBIT 14-11		PROPOSED SALMON PROJECTS				
	PROJECT NAME	PRIMARY PROJECT SPONSOR	PLANNING UNIT	PRIMARY SALMON SPECIES	PROJECT IDENTIFIED	
1	NONE	NONE	Kamishak Bay	NONE	NONE	
2	Tuxedni Bay smolt release cost recovery project	CIAA	Westside	sockeye	2006	
3	Silver Salmon Creek escapement and harvest monitoring	NPS / ADF&G	Westside	coho	2006	
4	Introduction of salmon to Fisher Lake	CIAA	Westside	sockeye	2006	
5	Tyonek rearing facilities		Westside		2006	
6	Renewal of Packers Lake stocking	CIAA	Westside	sockeye	2006	
7	Conceptual plan for Lakle Louise stocking	CIAA	Susitna River	sockeye	2006	
8	Shell and Trinity Lake systems Beaver dam modification	ADF&G	Susitna River	sockeye	2006	
9	Construction or improvement of roads		Knik Arm		2006	
10	Eklutna River habitat restoration	NVE	Knik Arm		2006	
11	Big Lake habitat assessment		Knik Arm	sockeye	2006	
12	Twentymile River creel survey	ADF&G	Turnagain Arm		2006	
13	Placer River gravel extraction and habitat restoration	USFS	Turnagain Arm		2006	
14	Portage Creek enhancement	USFS	Turnagain Arm		2006	
15	Ingram Creek enhancement	USFS	Turnagain Arm	coho	2006	
16	Public education - invasive species	USFS	Turnagain Arm		2006	
17	Kenai River population estimate	ADF&G	Upper Peninsula / Kenai River	king	2006	
18	Stormy Lake fish barrier	ADF&G	Upper Peninsula / Kenai River	northern pike	2006	
19	West Fork Moose River Lakes survey	ADF&G	Upper Peninsula / Kenai River	northern pike	2006	
20	Juvenile fish passage through culverts	ADF&G	Upper Peninsula / Kenai River		2006	
21	Slikok Creek culvert assessment	ADF&G	Upper Peninsula / Kenai River		2006	
22	Funny River salmon weir	USFWS	Upper Peninsula / Kenai River		2006	
23	Cooper Creek habitat restoration	USFS	Upper Peninsula / Kenai River		2006	
24	Tem Lake culvert replacement	USFS	Upper Peninsula / Kenai River		2006	
25	Dave's Creek habitat restoration	USFS	Upper Peninsula / Kenai River		2006	
26	Quartz Creek bank stabilization	USFS	Upper Peninsula / Kenai River		2006	
27	Public education - invasive species	USFS	Upper Peninsula / Kenai River		2006	
28	NONE	NONE	Kasilof River / Mid-Peninsula	NONE	NONE	
29	NONE	NONE	Kachemak Bay	NONE	NONE	
30	NONE	NONE	Gulf Coast	NONE	NONE	
31	Trail Lakes Hatchery remote rearing and release facility	CIAA	Greater Resurrection Bay	coho	2006	
32	Resurrection River Adult Enumeration	ADF&G	Greater Resurrection Bay	coho	2006	
33	Video Escapement Monitoring at Aialik Lake	ADF&G	Greater Resurrection Bay	sockeye	2005	
34	Public education - invasive species	USFS	Greater Resurrection Bay		2006	
35	Seward area habitat work	COS	Greater Resurrection Bay		2006	
36	Alaska Sealife Center salmon release	ACS	Greater Resurrection Bay	king	2006	
37	Bear Lake acoustical monitoring	ACS	Greater Resurrection Bay	sockeye	2006	

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