



Region

USGS Quad

Anadromous Water Catalog Number

Name of Waterway USGS Name Local Name

Addition Deletion Correction Backup Information

Nomination # <u>98-031 TRW 035</u>		For Office Use	
Revision Year: <u>98</u>		<i>[Signature]</i> <u>3/19/98</u>	
Revision to: Atlas _____ Catalog _____		Regional Supervisor <u>Edward W. Weis</u> Date <u>12/17/97</u>	
Both <input checked="" type="checkbox"/>		AWC Project Biologist <u>2 - [Signature]</u> Date <u>2/17/98</u>	
Revision Code: <u>A-2 E-1</u>		Drafted _____ Date _____	

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
COHO SALMON	See attached numerous rearing streams				<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: Add area as polygon for rearing coho based on a dense number of coho rearing streams. TRW 5 streams crossing a 800 foot section of the road P-line contained rearing coho salmon at time of sampling (7/26/97). In addition to the high incidence of use it is not possible to the 5 streams individually at available map scales. Nor is it possible to define the location of the individual stream channels from available aerial photography. Streams were sampled as part of the Chugach Alaska's Carbon Mountain Timber Harvest proposal. Individual streams containing rearing coho within the polygon include streams 39 through 43. Location information and sampling data are contained within the attached nominations and Chugach GIS data printout.



EDWARD W. WEISS
HABITAT BIOLOGIST



STATE OF ALASKA
DEPARTMENT OF FISH AND GAME

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518
PHONE: (907) 267-2284
DESK PHONE: (907) 267-2305

Signature: Edward W. Weis

Date: 12/17/97

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: _____



State of Alaska
Department of Fish and Game
Habitat and Restoration Division

Nomination for Waters
Important to Anadromous Fish

#39

Region II Southcentral

USGS Quad Cordova G-3, B-12

Anadromous Water Catalog Number of Waterway 212-20

Name of Waterway USGS Name Local Name

Addition Deletion Correction Backup Information

For Office Use

Nomination #	<u>98 031</u>	Regional Supervisor	Date
Revision Year		AWC Project Biologist	Date
Revision to: Atlas	Catalog	Drafted	Date
Both			
Revision Code			

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
<u>coho</u>	<u>7/26/97</u>		<u>X 4</u>		<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments:

 Stream Sampled
 Section Sampled (P-line for road)

Name of Observer (please print):

Signature:

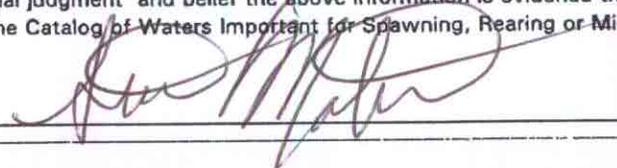
Address:

Samantha Greenwood
Samantha Greenwood
P.O. Box 2551
Cordova, AK 99574

Date: 8/8/97

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

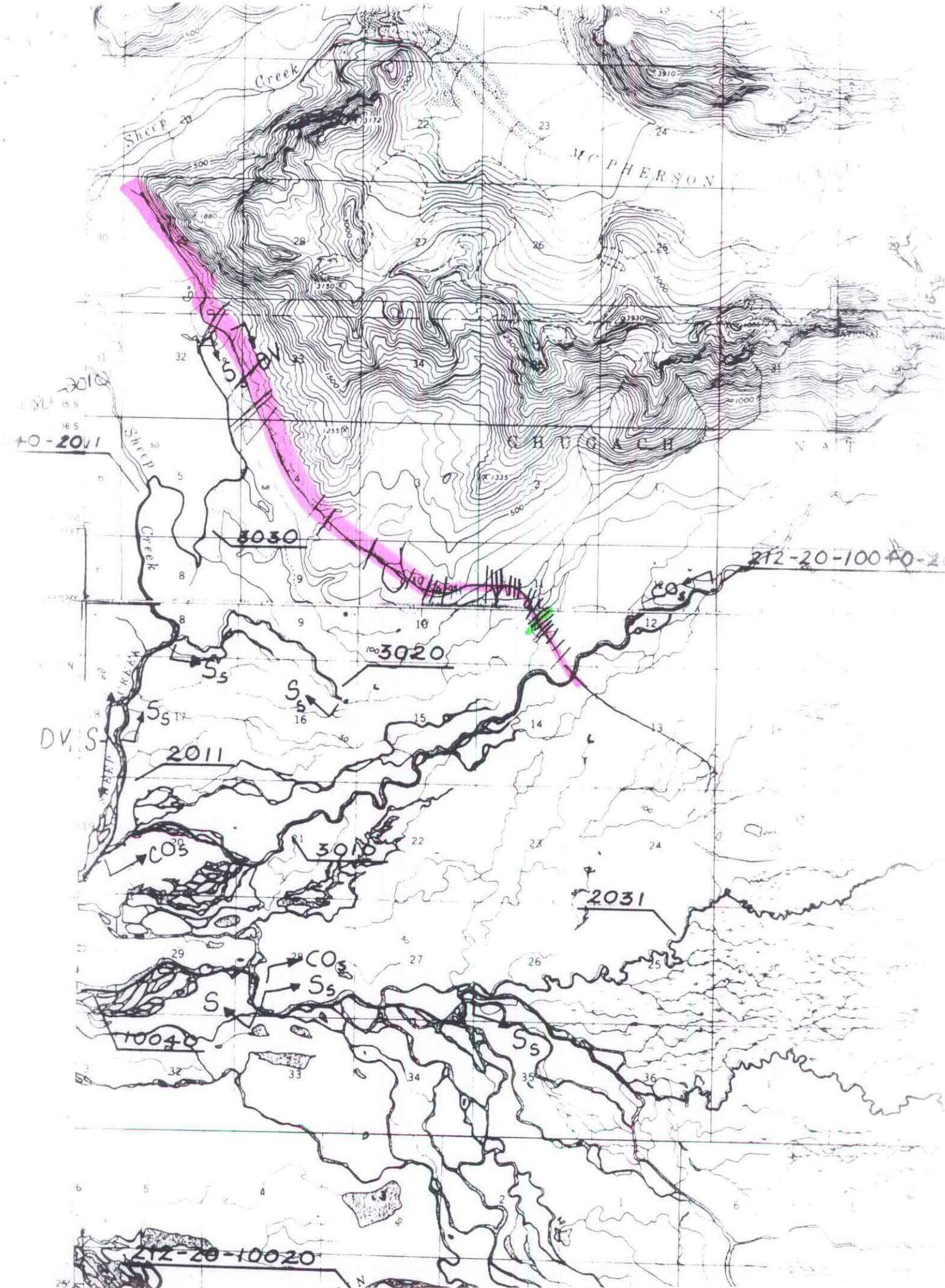
Signature of Area Biologist:



ALASKA DEPT. OF
FISH & GAME
Revision 3/97

SEP 02 1997

REGION II
HABITAT AND RESTORATION
DIVISION



Anadromous Stream Mapping Project

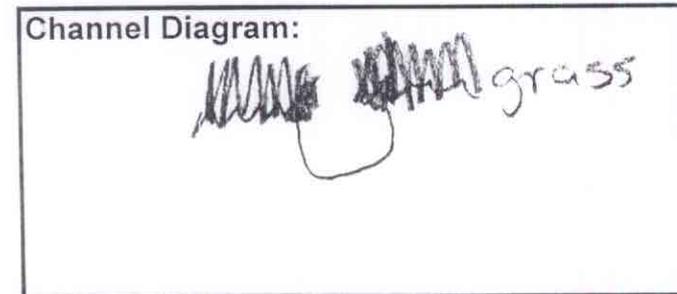
Date: <u>7/26/97</u>	Time: <u>1407</u>	Crew: <u>MB SG GS</u>
Weather: <u>SUN</u>	Last Precipitation: <u>7/25/97</u>	
Stream ID: <u>39</u>	Stream Location: <u>383+50 Not on list</u>	

Habitat:	Water Clarity:	Muddy	Murky	Stained	<u>Clear</u>
Substrate (%):	Silt: <u>100%</u>	Sand: <u>0%</u>	Gravel:	Cobble:	Boulders:
PRR ratio (%):	Pool:	Riffle:	Run: <u>Slow moving</u>		

Riparian Habitat:	
Dominant Vegetation:	<u>Grass Alder willow</u>
Wildlife Observations:	

Physical:	Temperature (C): <u>14.9</u>	Dissolved Oxygen (mg/L): <u>7.5</u>
	Conductivity (µS): <u>EF</u>	

Morphology:	Width:	Present: <u>75cm</u>	Bank Full: <u>7.5</u>	Grade:
	Depth:	1/4	1/2 <u>23cm</u>	3/4
	Flow:	1/4	1/2 <u>.8 m/s</u>	3/4



Comments:

veg in channel
 overgrown possible
 connected to previous
 stream upstream Roll 4
 photo 36, 37 roll 3 land 2

Fish Sampling:	Electro-Shocking Time:	Netting/Trapping Time:	Visual
Coho Salmon juv. adult		<u>1 minute</u> <u>4 lots age classes</u>	
Sockeye Salmon juv. adult			
Pink Salmon juv. adult			
Chum Salmon juv. adult			
King Salmon juv. adult			
Cutthroat Trout juv. adult			
Dolly Varden juv. adult			
Other			

5/26/97

Region II SouthCentral

USGS Quad Cordova C-3, B-2

Anadromous Water Catalog Number of Waterway 212-20

Name of Waterway _____ USGS Name Local Name

Addition Deletion Correction Backup Information

For Office Use

Nomination # <u>98 032</u>	_____	_____
Revision Year: _____	Regional Supervisor	Date
Revision to: Atlas _____ Catalog _____	_____	_____
Both _____	AWC Project Biologist	Date
Revision Code: _____	_____	_____
	Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
<u>coho</u>	<u>7/26/97</u>		<u>X 60</u>		<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments:

Section Sampled (P-line for road)
Stream Sampled

Name of Observer (please print)

Date: 11/25/96

Signature:

Address:

Samantha Greenwood
Samantha Greenwood
PO Box 2551
Cordova, AK 99574

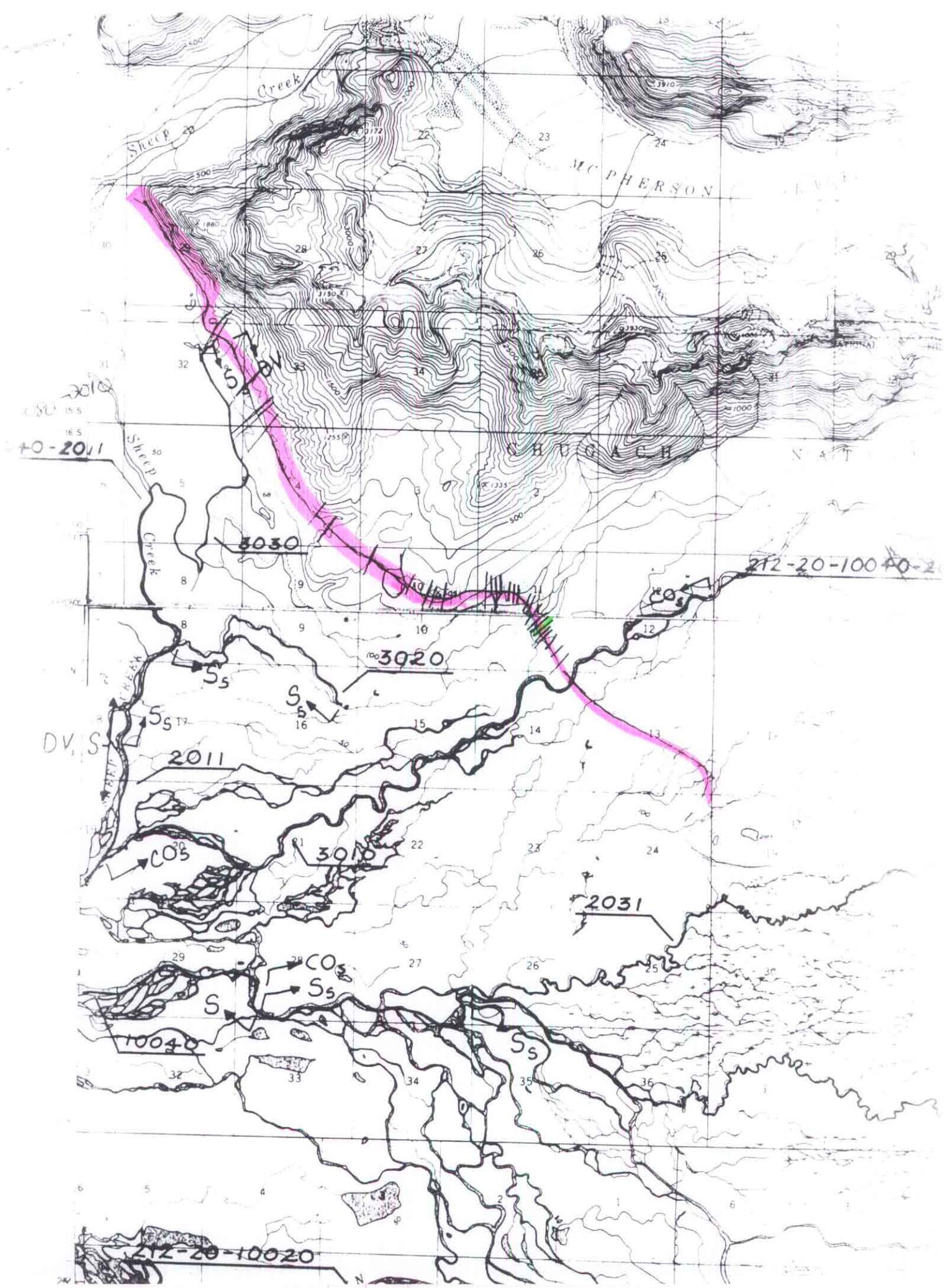
ALASKA DEPT. OF FISH & GAME

SEP 02 1997

REGION II HABITAT AND RESTORATION DIVISION

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: _____



Anadromous Stream Mapping Project

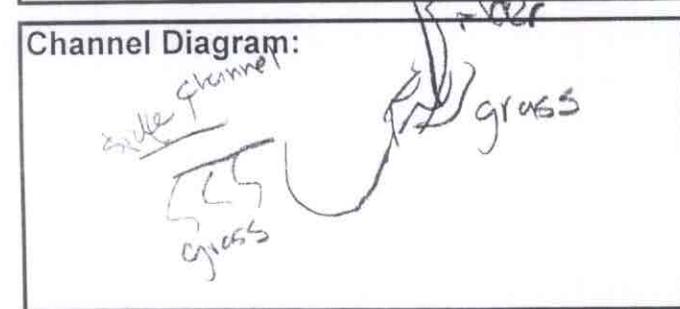
Date: 7/26/97	Time: 1424	Crew: SG MB GS
Weather: Sun		Last Precipitation: 7/25/97
Stream ID: 40	Stream Location: 385 + 03	

Habitat:	Water Clarity:	Muddy	Murky	Stained	<u>Clear</u>
Substrate (%):	Silt: 100%	Sand:	Gravel:	Cobble:	Boulders:
PRR ratio (%):	Pool:	Riffle:	Run: Slow moving		

Riparian Habitat:	Dominant Vegetation: <u>Grasses willow Alder</u>
Wildlife Observations:	

Physical:	Temperature (C): 13.4	Dissolved Oxygen (mg/L): 6.3
	Conductivity (µS): EF	

Morphology:	Width: Present: 1 m	Bank Full: 1 m	Grade: less
	Depth: 1/4	1/2 20 cm	3/4
	Flow: 1/4	1/2 less than 1 m	3/4



Comments: possibly con to previous event

Photo 3e4 Roll 4

Fish Sampling:		Electro-Shocking Time: 74	Netting/Trapping Time:	Visual
Coho Salmon	juv.	10		50
	adult			
Sockeye Salmon	juv.			
	adult			
Pink Salmon	juv.			
	adult			
Chum Salmon	juv.			
	adult			
King Salmon	juv.			
	adult			
Cutthroat Trout	juv.			
	adult			
Dolly Varden	juv.			
	adult			
Other		550		

5/20/00

Region II SouthCentral USGS Quad Cordova C-3, B2
 Anadromous Water Catalog Number of Waterway 212-20
 Name of Waterway _____ USGS Name Local Name
 Addition Deletion Correction Backup Information

For Office Use

Nomination # <u>98 033</u>	_____	_____
Revision Year: _____	Regional Supervisor	Date _____
Revision to: Atlas _____ Catalog _____	_____	_____
Both _____	AWC Project Biologist	Date _____
Revision Code: _____	_____	_____
	Drafted	Date _____

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
<u>coho</u>	<u>7/26/97</u>		<u>X 5</u>		<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

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Comments:

Section Sampled (P. line for road)
Stream Sampled

ALASKA DEPT. OF
 FISH & GAME

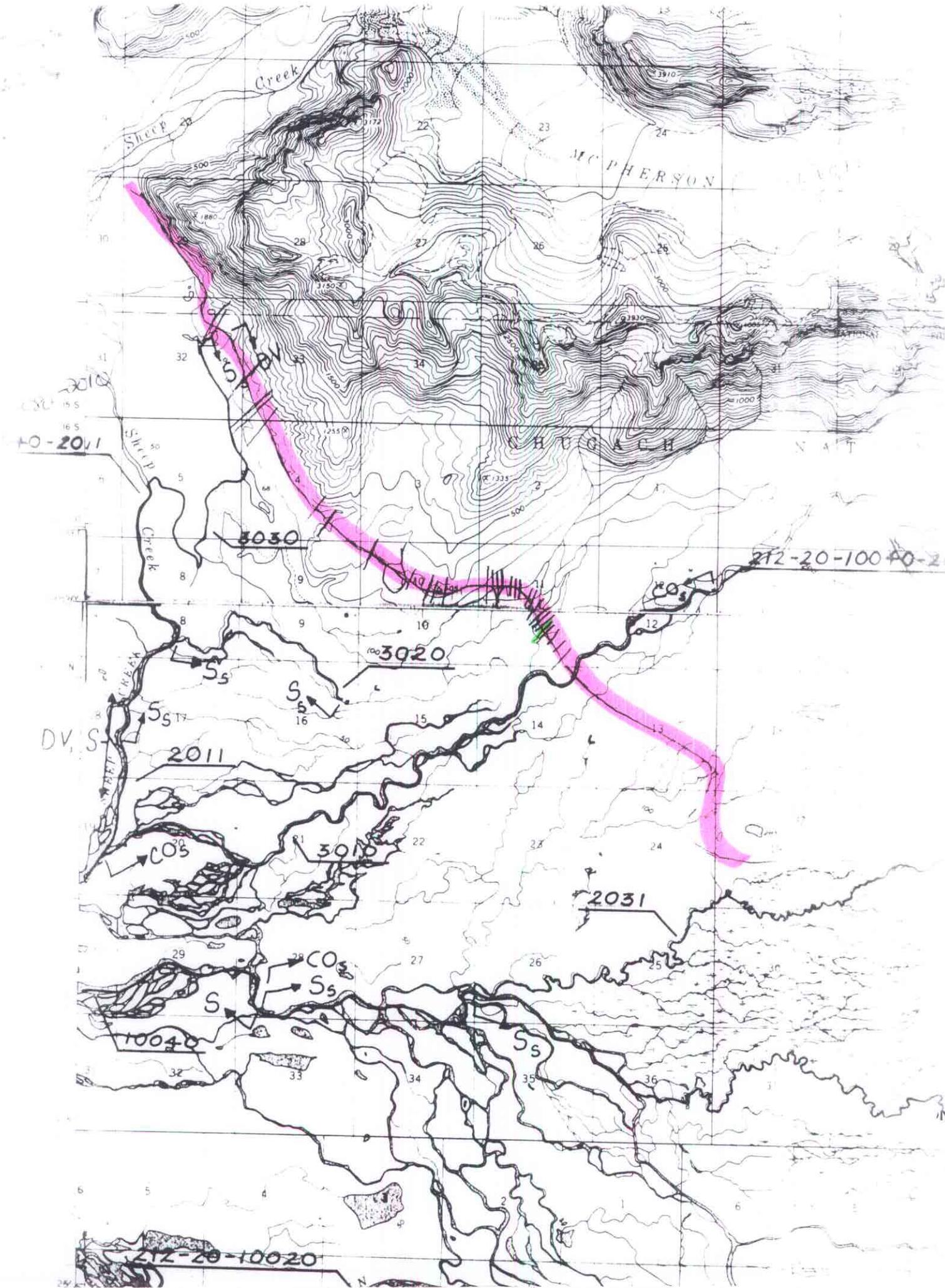
Name of Observer (please print) Samantha Greenwood
 Date: 11/25/96 Signature: Samantha Greenwood
 Address: PO Box 2551
Cordova, AK 99574

SEP 0 2 1997

REGION II
 HABITAT AND RESTORATION
 DIVISION

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Signature of Area Biologist: _____



Anatomous Stream Mapping Project

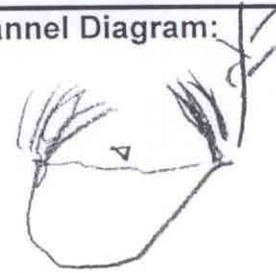
Date: 07/26/07	Time: 14:39	Crew: SG, MR, GRS
Weather: lt. clouds, lots of sun	Last Precipitation: yesterday	
Stream ID: 41	Stream Location: 386+33	

Habitat:	Water Clarity:	Muddy	Murky	Stained	Clear
Substrate (%):	Silt: 100 ^{muck} 100	Sand:	Gravel:	Cobble:	Boulders:
PRR ratio (%):	Pool:	Riffle:	Run: 100 glide		

Riparian Habitat:	Dominant Vegetation: lots of overhanging grass
Wildlife Observations:	

Physical:	Temperature (C): 13.3	Dissolved Oxygen (mg/L): 6.8
	Conductivity (µS): EF	

Morphology:	Width: Present: 2m	Bank Full: //	Grade: low
	Depth: 1/4	1/2 50	3/4
	Flow: 1/4	1/2 1 m/s	3/4

Channel Diagram:  <p style="margin-left: 20px;">veg. in channel very mucky bottom</p>	Comments: <ul style="list-style-type: none"> - may be interconnected w/ previous streams - pond downstream - nice debris dam pool + plunge pool <p>Photo photo 5+6 Roll 4</p>
---	---

Fish Sampling:	Electro-Shocking Time:	Netting/Trapping Time:	Visual
Coho Salmon juv.	61		
adult	III		
	Multi age class		
Sockeye Salmon juv.			
adult			
Pink Salmon juv.			
adult			
Chum Salmon juv.			
adult			
King Salmon juv.			
adult			
Cutthroat Trout juv.			
adult			
Dolly Varden juv.			
adult			
Other SB	III		
SC	I		

Region II SouthCentral USGS Quad Cordova C-3, B-2
 Anadromous Water Catalog Number of Waterway 212-20
 Name of Waterway _____ USGS Name Local Name
 Addition Deletion Correction Backup Information

For Office Use

Nomination # <u>98 034</u>	_____	_____
Revision Year: _____	Regional Supervisor	Date
Revision to: Atlas _____ Catalog _____	_____	_____
Both _____	AWC Project Biologist	Date
Revision Code: _____	_____	_____
	Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
<u>coho</u>	<u>7/26/97</u>		<u>X 6</u>		<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

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Comments:

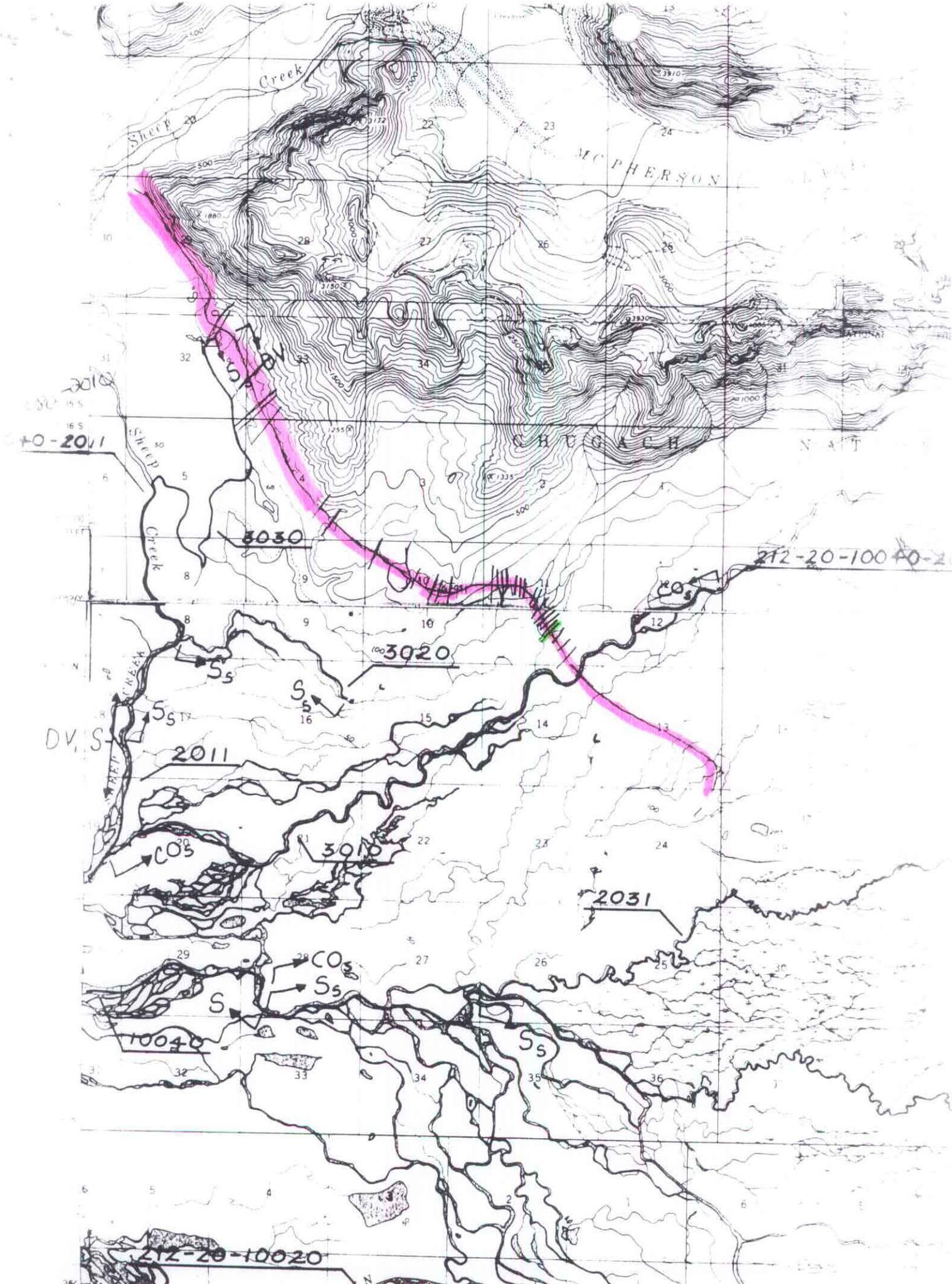
Section Sampled (P-line for road)
Stream Sampled

ALASKA DEPT. OF FISH & GAME

Name of Observer (please print) Samantha Greenwood SEP 02 1997
 Date: 11/25/96 Signature: Samantha Greenwood
 Address: PO Box 2551
Cordova, AK 99574 HABITAT AND RESTORATION DIVISION

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: [Signature] Revision 11/96



Anadromous Stream Mapping Project

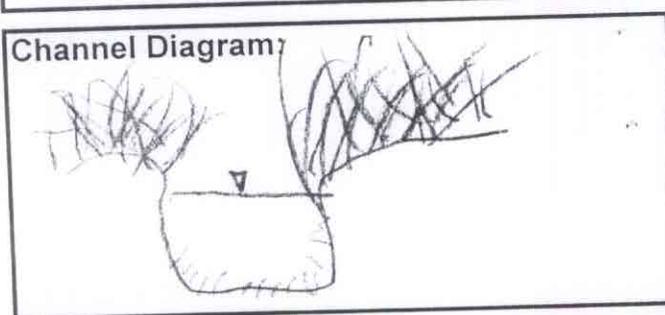
Date: 7 26 97	Time: 1445	Crew: PI
Weather: Sun		Last Precipitation:
Stream ID: #42		Stream Location: 387 15

Habitat:	Water Clarity: Muddy Murky Stained <u>Clear</u>
Substrate (%):	Silt: 100 Sand: Gravel: Cobble: Boulders:
PRR ratio (%):	Pool: Riffle: Run:

Riparian Habitat:
 Dominant Vegetation: Grass
 Wildlife Observations:

Physical: Temperature (C): 13.5 Dissolved Oxygen (mg/L): 7.7
 Conductivity (µS): EF

Morphology: Width: Present: 1 m Bank Full: 11 Grade:
 Depth: 1/4 1/2 54 cm 3/4
 Flow: 1/4 1/2 < 1 m/s 3/4



Comments:
 Connected by pond down stream
 with previous streams
 Small side channel up stream
 Photos 7 + 8

Fish Sampling:	Electro-Shocking Time:	Netting/Trapping Time:	Visual
Coho Salmon juv. adult		<u>60</u> <u>NI</u>	
Sockeye Salmon juv. adult			
Pink Salmon juv. adult			
Chum Salmon juv. adult			
King Salmon juv. adult			
Cutthroat Trout juv. adult			
Dolly Varden juv. adult			
Other			

St. Louis University

Region II SouthCentral

USGS Quad Cordova C-3, B2

Anadromous Water Catalog Number of Waterway 212-20

Name of Waterway _____ USGS Name Local Name

Addition Deletion Correction Backup Information

For Office Use

Nomination # <u>98 035</u>	_____	_____
Revision Year: _____	Regional Supervisor	Date
Revision to: Atlas _____ Catalog _____	_____	_____
Both _____	AWC Project Biologist	Date
Revision Code: _____	_____	_____
	Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
<u>coho</u>	<u>7/26/97 + 8/5/97</u>		<u>X 15</u>		<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

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Comments:

Section Sampled (P-line for road)

Stream Sampled

ALASKA DEPT. OF FISH & GAME

Name of Observer (please print) Samantha Greenwood

Date: 11/25/96 Signature: Samantha Greenwood

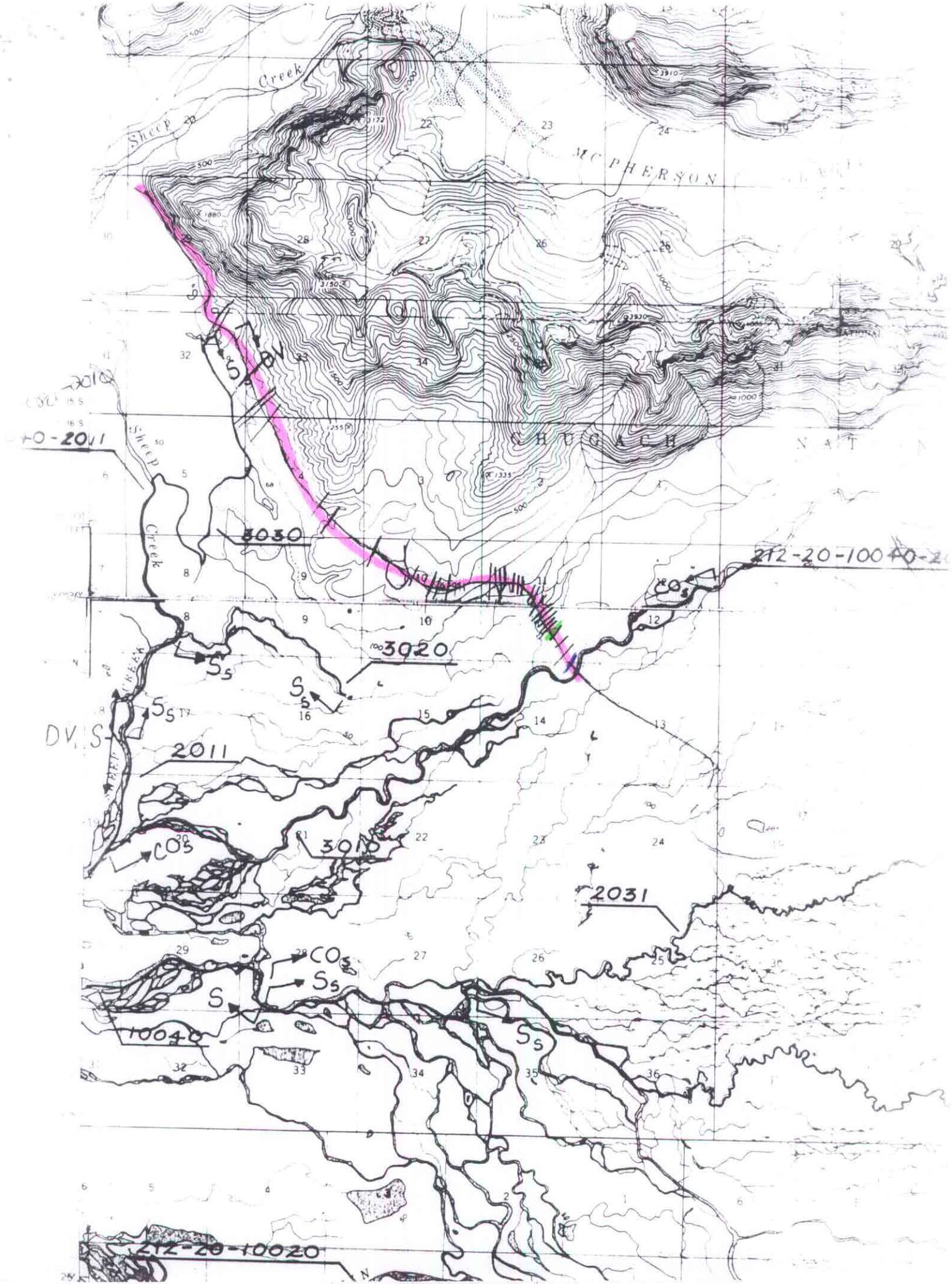
Address: PO Box 2551
Cordova, AK 99574

SEP 02 1997

REGION II HABITAT & WILDLIFE RESTORATION DIVISION

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Signature of Area Biologist: _____



Anadromous Stream Mapping Project

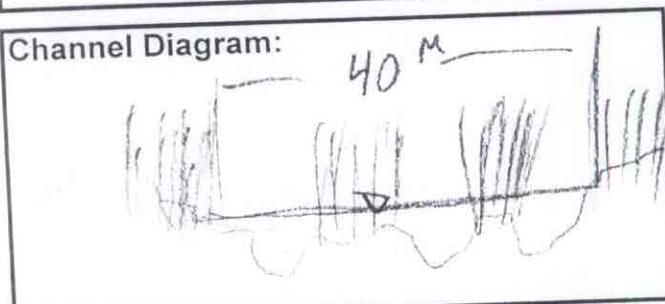
Date: 7 26 97	Time: 1504	Crew: same
Weather: sun	Last Precipitation:	
Stream ID: #43	Stream Location: 390 72 - 391 26	

Habitat:	Water Clarity:	Muddy	Murky	Stained	Clear
Substrate (%):	Silt: 90	Sand:	Gravel: 10	Cobble:	Boulders:
PRR ratio (%):	Pool: 80	Riffle: 10	Run: 10		

Riparian Habitat:	Dominant Vegetation: Grasses Alder
Wildlife Observations:	

Physical:	Temperature (C): 12.4	Dissolved Oxygen (mg/L): 7.44
	Conductivity (µS): EF	

Morphology:	Width: Present: 40 m	Bank Full:	Grade: low
	Depth: 1/4	1/2 10 - 75 cm	3/4
	Flow: 1/4	1/2	3/4



Comments:
 large flooded area with tall grass in standing water
 9-12 side channel
 Photo 10 + 11 + (12 + 13)

Fish Sampling:	Electro-Shocking Time:	Netting/Trapping Time:	Visual
Coho Salmon juv. adult	40 15 Multi Age Class	1 trap 8/5/97 0830 - 1430	connected down stream
Sockeye Salmon juv. adult			
Pink Salmon juv. adult		2000 5 CD 5 SB	
Chum Salmon juv. adult			
King Salmon juv. adult			
Cutthroat Trout juv. adult			
Dolly Varden juv. adult			
Other SB			1

Anodromous Waters

212-20-10040-2011-3024

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(CONTOUR C-21)

4051 cor

4055 cor

4059 cor

4060 cor

4056

5005 cor

5007 cor

0910 cor

4087 cor

5030 cor

6010 cor

4085

4090 cor

3051

5032

5025 cor

5027 cor

6010 cor

4031

3067

3061

4010

4020

3080

3098

3094

3040

2029

2025

3020

2030

2031

2051

10040

2011

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