



State of Alaska
Department of Fish and Game
Division of Sport Fish

Nomination Form
Anadromous Waters Catalog

ME

Region Southwest USGS Quad(s) Kodiak A-4
 Anadromous Waters Catalog Number of Waterway 258-52-10014
 Name of Waterway Sculpin Creek USGS Name Local Name
 Addition Deletion Correction Backup Information

For Office Use

Nomination #	<u>140222</u>	<u>James J. Hasbrouck</u>	<u>9/3/2014</u>
Revision Year:	<u>2015</u>	Fisheries Scientist	Date
Revision to:	Atlas _____ Catalog _____ Both <u>X</u>	<u>Will Frost</u>	<u>9/3/14</u>
Revision Code:	<u>C-5, B2</u>	Habitat Operations Manager	Date
		<u>JF</u>	<u>6/10/14</u>
		AWC Project Biologist	Date
		<u>TA</u>	<u>9/5/2014</u>
		Cartographer	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Y-O-Y Pink Salmon	5/17/2014		<u>X</u>	<u>X</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

Relocate stream channel and lower point add pink salmon rearing
 Sculpin Creek was relocated for the Old Harbor Airport project. I used a GPS to locate the new stream channel. I observed and captured y-o-y pink salmon in the new stream channel (Figure1). See the May 17, 2014 trip report.

ALASKA DEPT. OF
FISH & GAME
JUN 6 2014

Name of Observer (please print): Will Frost, Habitat Biologist
 Signature: [Signature] Date: 6/6/2014
 Agency: ADF&G, Division of Habitat
 Address: 333 Raspberry Road
Anchorage, AK 99518

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 Anadromous Waters Catalog.

Signature of Area Biologist: _____ Date: _____
 Name of Area Biologist (please print): _____ Revision 05/08



State of Alaska
Department of Fish and Game
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Nomination Form
Anadromous Waters Catalog

4

Region Southwest USGS Quad(s) Kodiak A-4
 Anadromous Waters Catalog Number of Waterway 258-52-10014
 Name of Waterway "Sculpin Creek" USGS Name Local Name
 Addition Deletion Correction Backup Information

For Office Use

Nomination #	<u>120346</u>	<u>me cl</u>	<u>9/4/12</u>
		Fisheries Scientist	Date
Revision Year:	<u>2013</u>	<u>[Signature]</u>	<u>9/4/12</u>
Revision to:	Atlas _____ Catalog _____	Habitat Operations Manager	Date
	Both <u>X</u>	<u>[Signature]</u>	<u>7/26/12</u>
Revision Code:	<u>A-2</u>	AWC Project Biologist	Date
		<u>[Signature]</u>	<u>9/20/12</u>
		Cartographer	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho Salmon (2)	5/5/2012		X		<input checked="" type="checkbox"/>
Dolly Varden	5/5/2012			X	<input type="checkbox"/>
Sculpin	5/5/2012			X	<input type="checkbox"/>
Coho Salmon (20)	6/17/2012		X		<input checked="" 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 new spec of coho salmon REARING
 I used an electrofisher to sample Sculpin Creek that flows into Midway Bay in Old Harbor. See the June 16-17, 2012 Old Harbor Airport Project trip report.
ref num #12-251

Name of Observer (please print): Will Frost, Habitat Biologist
 Signature: [Signature] Date: 7/6/2012
 Agency: ADF&G, Division of Habitat
 Address: 333 Raspberry Road
Anchorage, AK 99518

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 Anadromous Waters Catalog.

Signature of Area Biologist: _____ Date: _____ Revision 05/08
 Name of Area Biologist (please print): _____

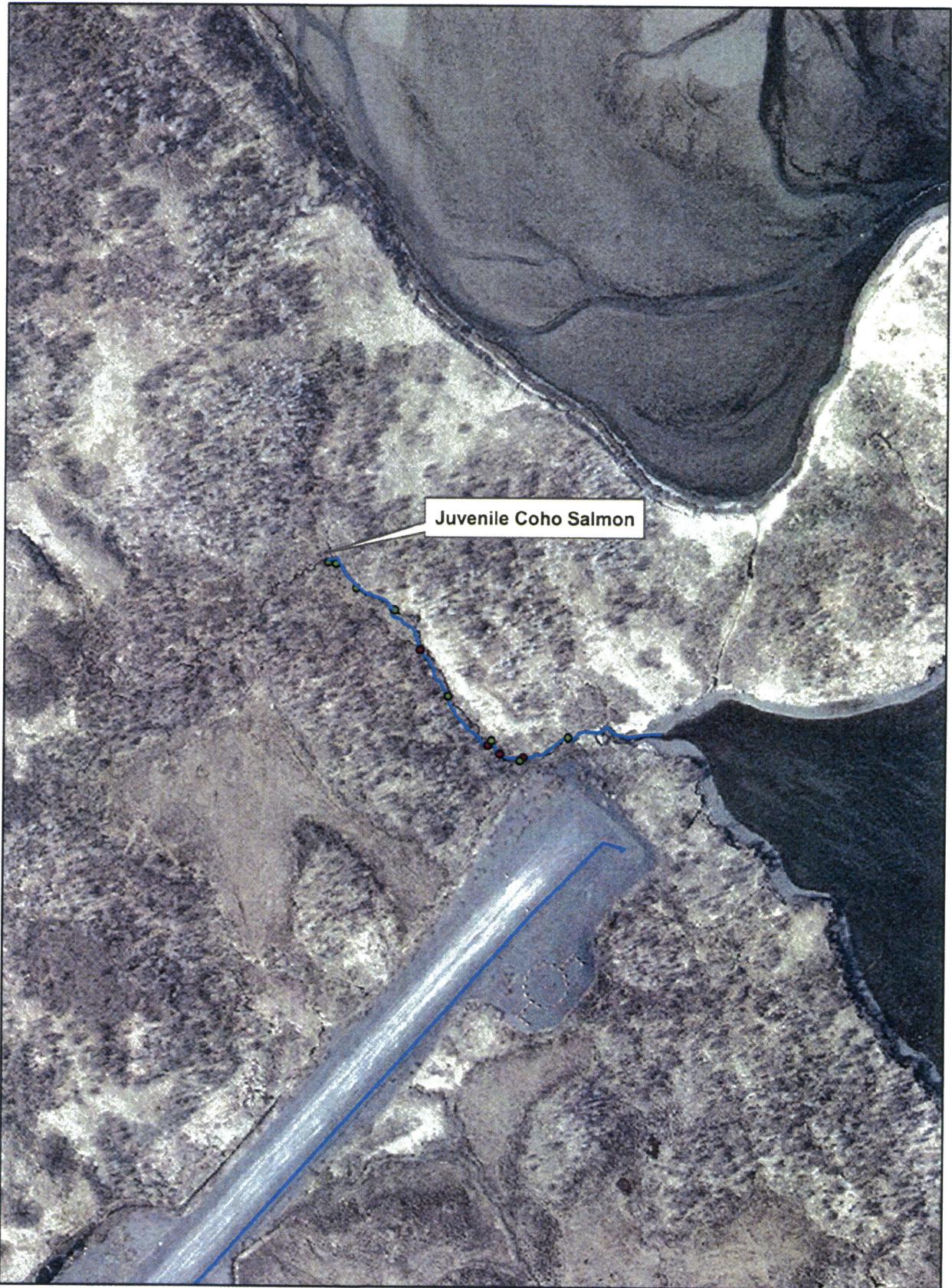
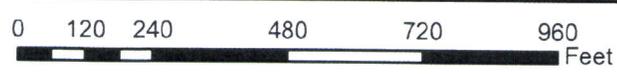


Figure 1



ADF&G

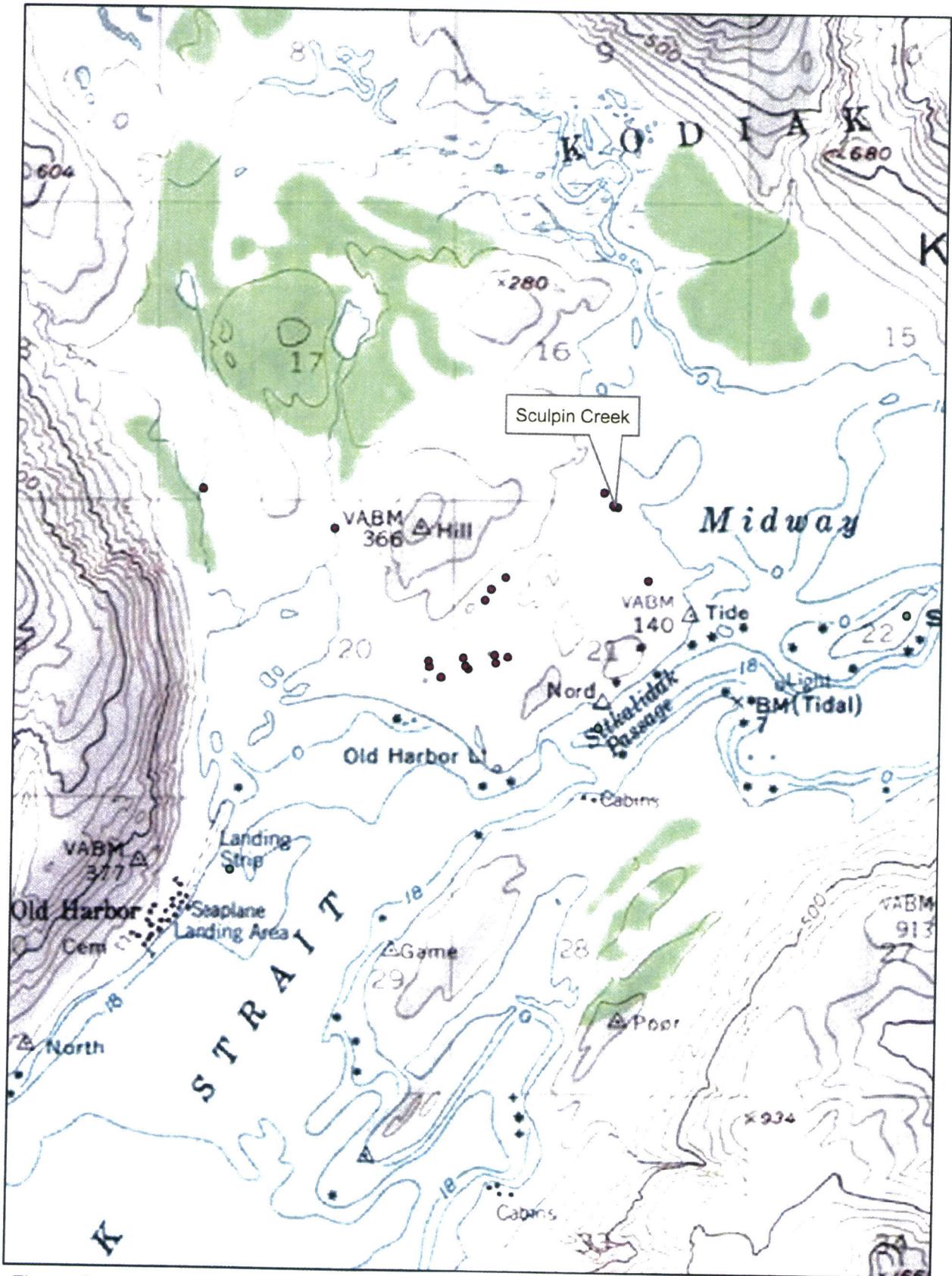


Figure 2.



ADF&G

MEMORANDUM

State of Alaska

Department of Fish and Game
Division of Habitat

TO: Michael Daigneault
Central Region
Regional Supervisor

DATE: July 5, 2012

PHONE NO: 267-2813

FROM: Will Frost
Habitat Biologist

SUBJECT: Old Harbor Airport Project

On June 16 to 17, 2012, I joined Andy Dickerson and Brian Wiebe, Shearwater Systems (Shearwater) in Old Harbor to conduct a second sampling effort for the presence of fish in streams which may be impacted by the proposed Old Harbor Airport runway extension project. A previous joint sampling effort was conducted in May 2012.

The city of Old Harbor is proposing to extend the single north/south runway about 2,000 linear feet (Figure 1). The purpose of the extension is to allow a DC-6 aircraft to transport fish out of Old Harbor from a proposed fish processing plant. An Environmental Assessment is being written by the U.S. Army Corps of Engineers. Shearwater will be conducting monthly sampling efforts this summer using an electrofisher in streams and a beach seine in marine waters that may be impacted by the project. The sampling is to gather baseline information of fish presence in streams that may be impacted by the project. I was present to assist and train Shearwater in the use of the electrofisher. The stream channel geomorphology was visually estimated based on the Rosgen stream classification system.

Mr. Dickerson and I used a 17-foot skiff to travel to the north side of the proposed runway extension at the outlet of "Sculpin Creek". The outlet is located in a marine estuary that may be filled for the north runway extension. At high tide, we used a gill net with a 3-inch mesh to sample for the presence of fish that are present in the estuary. We made two sets by placing one end of the gill net on the beach and deploying the net from the skiff, making an arc back to the beach (Figure 2). We captured one starry flounder. We believe the mesh size was too large to capture small fish and Mr. Dickerson will acquire a beach seine to conduct future sampling efforts.

We used the electrofisher to sample an unnamed stream ("Stream #1") that flows into Stream No. 258-52-10012 (Figure 1). This stream was sampled during the May 2012 effort. We began where the stream flows into the specified waterbody and worked upstream about 600 linear feet (Figure 3). We captured 4 juvenile Dolly Varden and 10 sculpin. Juvenile coho salmon were captured during the May sampling effort. Based on the May effort, the unnamed stream will be nominated to the Anadromous Waters Catalog. The proposed runway project will not impact this stream. The existing channel is about 2-feet wide and was estimated to be Rosgen type E4.

We sampled an unnamed stream ("Stream #2") that flows into Stream No. 258-52-10012 (Figure 1). This stream was sampled during the May 2012 effort. We began where the stream flows into the specified waterbody and worked upstream about 600 linear feet. We captured 1 juvenile Dolly Varden. Juvenile coho salmon were captured during the May sampling effort. Based on the May effort, the unnamed stream will be nominated to the Anadromous Waters Catalog. The existing channel is about 2-feet wide and was estimated to be Rosgen type E4. We walked to the headwater of the stream to determine the stream location in relation to Stream No. 258-52-10012 (Figure 1). The lower reach of Stream No. 258-52-10012, in the project area, may be diverted into Stream #2.

On the morning of June 17, 2012, we set 5 baited minnow traps in Kuingcuk Creek that flows into the Old Harbor Lagoon (Figure 4). The stream is located in an area of recent beaver activity. We set two traps in an unnamed tributary stream, two traps below a beaver dam and one trap above the beaver dam. The traps soaked about seven hours. The stream reach below this sampling effort was sampled with minnow traps during the May sampling effort. Juvenile coho salmon were located during the May sampling effort. The stream is not located in the airport project area. The two traps in the unnamed tributary captured 15 juvenile coho salmon and 2 Dolly Varden. The traps below the beaver dam captured 6 juvenile coho salmon and 4 Dolly Varden. The trap above the beaver dam captured no fish and no fish were observed. The beaver dam may be a barrier to juvenile fish passage (Figure 5).

The location of Stream No. 258-52-10012 is incorrectly located in the Anadromous Waters Catalog. I used a hand held Garmin Global Positioning System unit to correct the stream location by walking the stream channel from tidewater to its headwater. The corrected stream location will be nominated to the Anadromous Waters Catalog (Figure 1).

We sampled Stream No. 258-52-10012. We began above the airport access road and worked upstream about 1,700 linear feet (Figure 6). We captured 10 juvenile coho salmon and 45 Dolly Varden. The presence of coho rearing will be nominated to the Anadromous Waters Catalog.

The proposed runway extension will fill about 350 linear feet of Stream No. 258-52-10012 below the airport access road (Figure 7). Shearwater is proposing to relocate the lower end of the creek by constructing a new channel on the west side of the airport access road and divert the stream into "Stream #2". A survey will be conducted in 2012 to determine the feasibility of relocating the stream. The existing channel is about 4-feet wide and was estimated to be Rosgen type E3.

We sampled Sculpin Creek located on the north side of the runway (Figure 1). Sculpin Creek flows into Midway Bay. We started at tidewater and worked upstream about 840 linear feet. We captured and released 20 juvenile coho salmon, 36 Dolly Varden, and over 35 sculpin. The stream was sampled during the May sampling effort. Based on the May and June sampling efforts, Sculpin Creek will be nominated to the Anadromous Waters Catalog.

The proposed north runway extension will fill about 400 linear feet of Sculpin Creek and a portion of the marine habitat at the channel outlet. Shearwater is proposing to relocate the lower end of Sculpin Creek by constructing a new channel through a low hill that will divert the stream into the Big Creek estuary (Stream No. 258-52-10010). The diversion will require blasting to create the new channel and closely replicate the existing channel features. The existing channel is about 3-feet wide and was estimated to be Rosgen type E3.

Stream No. 258-52-10012-2008 will also be directly impacted by the south end runway extension (Figure 1). Shearwater is proposing to construct a new channel through a low hill southeast of the runway that will divert the new channel back into Stream No. 258-52-10012 south of the new runway extension. The stream will have to be relocated to the southeast of the new runway embankment. The diversion will require blasting to create the new channel and closely replicate the existing channel features. The existing channel is about 5-feet wide and was estimated to be Rosgen type E2.

cc: S. Schrof, ADF&G
L. Van Daele, ADF&G
D. Tracy, ADF&G
A. Ott, ADF&G
B. Cassidy, KIB
B. Lance, NOAA
B. Rice, USFWS
M. Salyer, COE
A. Dickerson, Shearwater Systems
C. Berns-Lopez, Old Harbor Native Corp.

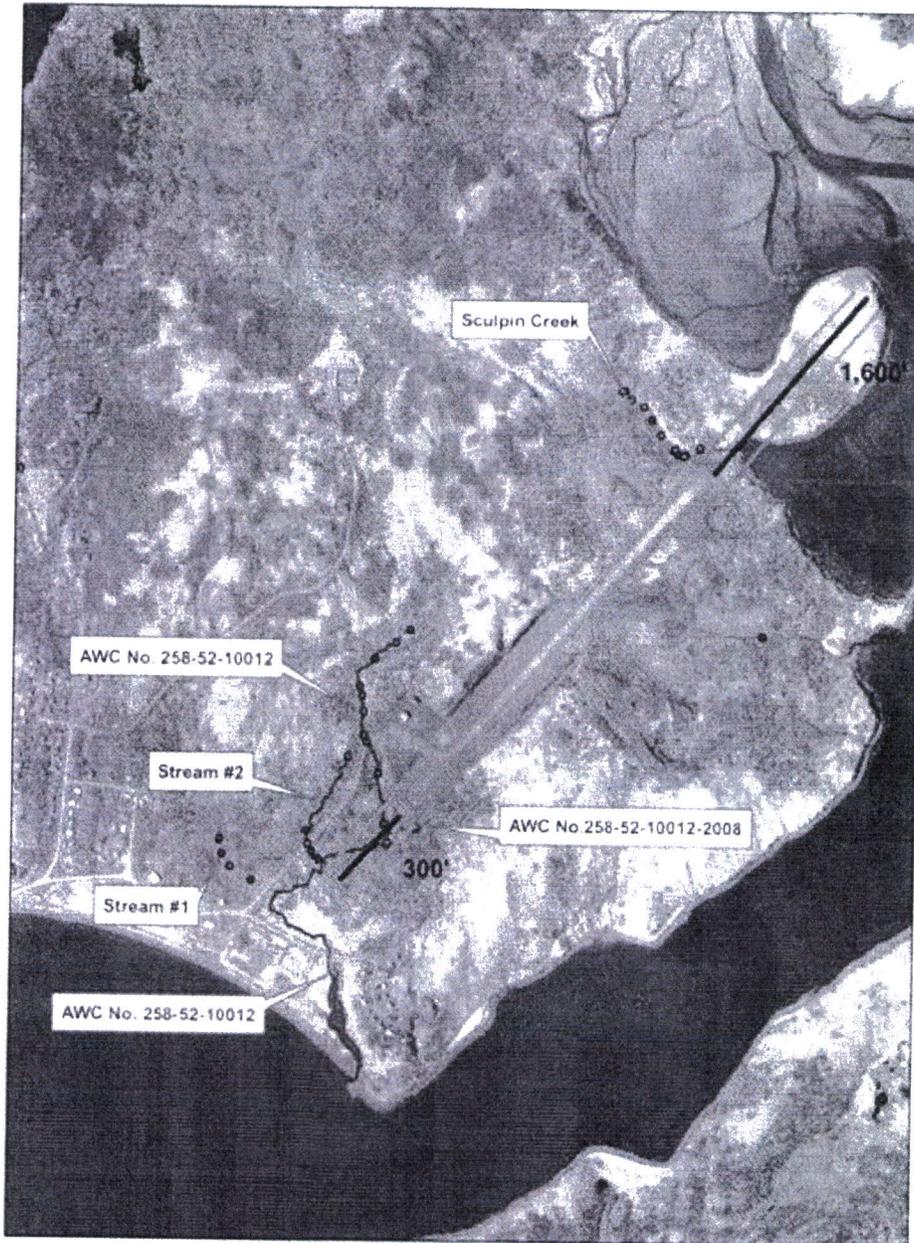


Figure 1

0 0.05 0.1 0.2 0.3 0.4
Miles

ADF&G

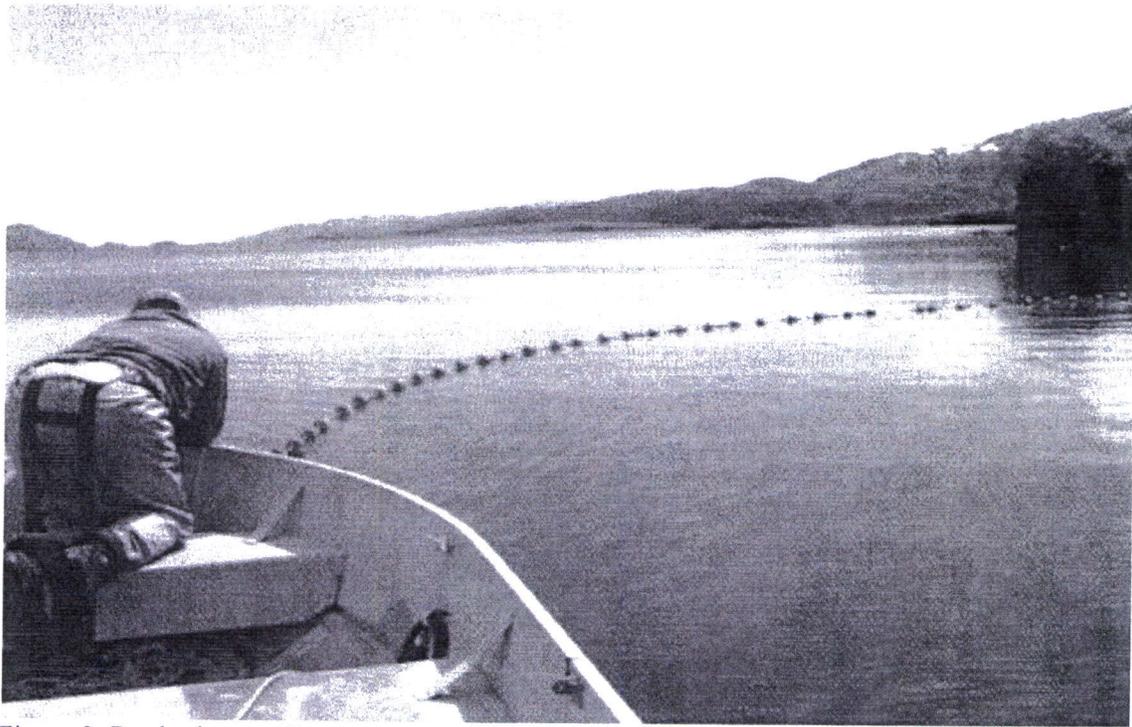


Figure 2. Deploying a gill net in the mouth of Sculpin Creek.



Figure 3. Sampling Stream # 1.



Figure 4. Kuingcuk Creek.



Figure 5. Beaver dam in Kuingcuk Creek.

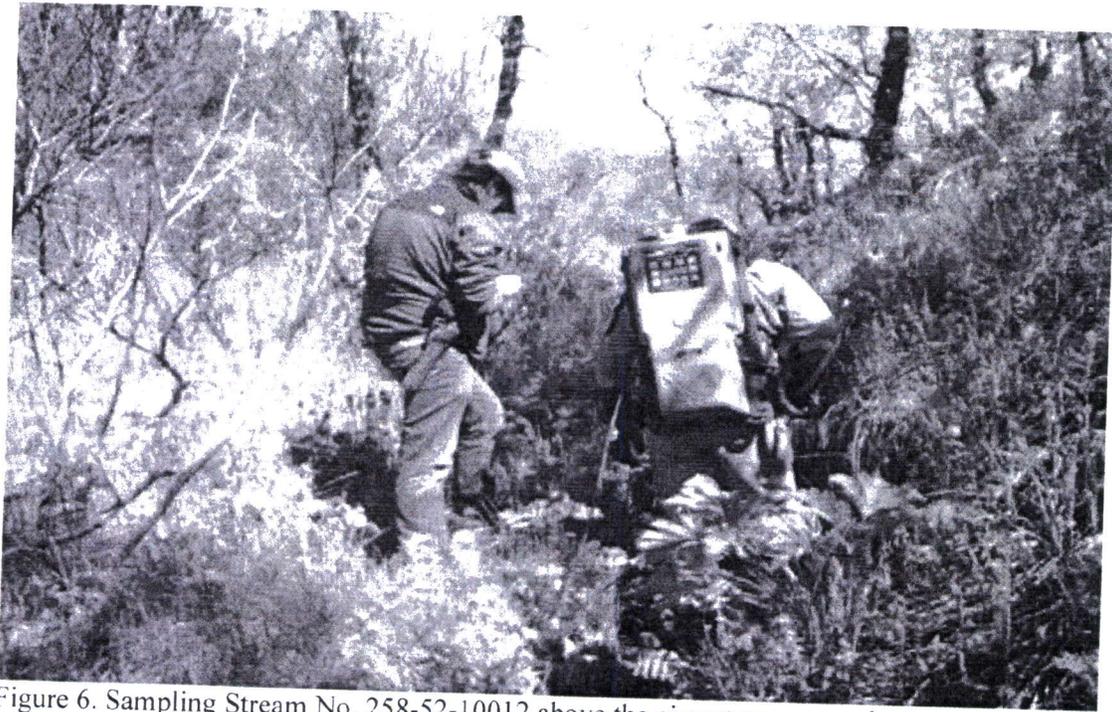


Figure 6. Sampling Stream No. 258-52-10012 above the airport access road.



Figure 7. Reach of Stream No. 258-52-10012 that is proposed to be filled for the south runway extension.

change lower stream channel & lower pt location for 258-52-10014
& add pink salmon rearing, use 2015\noms\frost\05_17\tracks.shp
(purple line) & arc2015 (orange line) to update AWC (blue line) hydrography

PR
PR





Figure 1

0 0.02 0.04 0.08 0.12 0.16
Miles

ADF&G

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF HABITAT

SEAN PARNELL, Governor

333 RASPBERRY RD.
ANCHORAGE, ALASKA 99518
PHONE: (907) 267-2342
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MEMORANDUM

TO: Michael Daigneault
Central Region
Regional Supervisor

FROM: Will Frost *WF*
Habitat Biologist

DATE: June 6, 2014

SUBJECT: Trip Report, May 2014 Old Harbor Airport Project

On May 17, 2014 I joined Richard Wiebe, Shearwater and Andy Dickerson, Strategic Green International in Old Harbor to inspect the recently constructed new stream channel for Sculpin Creek (Stream No. 258-52-10014). The stream was relocated because of the Old Harbor Airport runway extension project. The work was completed under Fish Habitat Permit FH 13-II-0078. The city of Old Harbor is extending the single north/south runway about 2,000 linear feet. The purpose of the extension is to allow a DC-6 aircraft to transport fish out of Old Harbor from a proposed fish processing plant.

The proposed north runway extension will fill about 400 linear feet of Sculpin Creek and a portion of the marine habitat at the old channel outlet. A new channel through a low hill was constructed that is about 825 linear feet and diverted the stream into the Big Creek estuary (Stream No. 258-52-10010) (Figures 1 and 2). The diversion required blasting to create the new channel and closely replicates the existing channel features.

On May 16, 2014, Shearwater used an electrofisher under Fish Resource Permit SF2014-126, and the help of Old Harbor school children to remove about 200 juvenile coho salmon and sculpin from the reach of the stream that was to be filled and moved them to the new stream channel. The U.S. Marine Corps was used to move live vegetation from the area of Sculpin Creek that will be filled and placed the material along the riparian zone of the new stream channel. I observed the recently installed vegetation, rootwads, live trees, and boulder that were installed along and in the creek (Figures 3 through 6). I observed young-of-year pink salmon in the new stream channel and observed some migrating to the estuary (Figure 7 and 8). I used a GPS to map the new stream channel location. The young-of-year pink salmon and the new stream channel location will be nominated to the Anadromous Waters Catalog.

We discussed additional work that is to be completed on the new stream channel; the exposed hill slopes above the riparian zone will be hydro seeded with an Alaska seed mix, select pools will be deepened in the new stream channel, additional live vegetation mats will be placed at the lower end of the stream channel, salt tolerant vegetation mats will be placed in the new estuary, and the mouth of

the new stream channel will be deepened. Shearwater agreed to the additional work. I requested that the additional inwater work be delayed until the pink salmon leave the stream.



Figure 1. New Sculpin Creek, view to north.



Figure 2. New Sculpin Creek, view to north.



Figure 3. Vegetation mats along the new Sculpin Creek stream channel, view looking downstream.



Figure 5. Boulders and rootwads in the new Sculpin Creek stream channel, view looking upstream.



Figure 6. Boulders and rootwads in the new Sculpin Creek stream channel, view looking upstream.

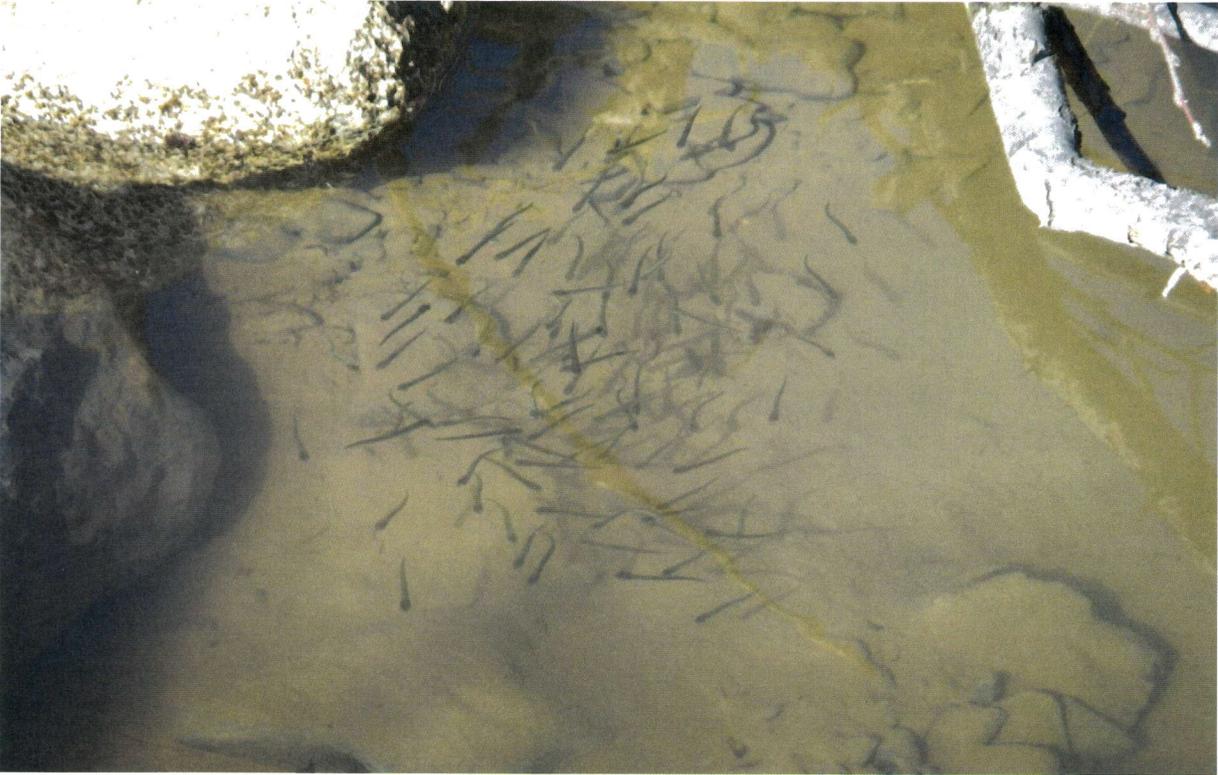


Figure 7. Young-of-year pink salmon in the new Sculpin Creek stream channel.



Figure 8. Young-of-year pink salmon in the new Sculpin Creek stream channel.

cc: S. Schrof, ADF&G
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