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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body:

Name of Water body: Dunbar Inlet Unnamed Stream 1 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #: _____

Revision Year: _____

Revision to: Atlas _____ Catalog _____

Both _____

Revision Code: _____

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Pink Salmon	Sept. 4, 2014	X		X	☒
Chum Salmon	Sept. 4, 2014	X		X	☒
Dolly Varden	June 23, 25, 26, 2014			X	☐
Rainbow Trout	June 23, 25, 26, 2014			X	☐
					☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-3666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson

Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body: 103-40-10420

Name of Water body: Unnamed Stream near Klakas Nephew ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____	_____ Fisheries Scientist	_____ Date
Revision Year: _____	_____ Habitat Operations Manager	_____ Date
Revision to: Atlas ____ Catalog ____ Both ____	_____ AWC Project Biologist	_____ Date
Revision Code: _____	_____ GIS Analyst	_____ Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon			X		☒
Dolly Varden				X	☐
Rainbow trout				X	☐
Cutthroat trout				X	☐
					☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson

Date: 12-9-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for an Unnamed Stream near Klakas Nephew

Four baited minnow traps were soaked for 1-6 hours in an unnamed stream near Klakas Nephew on July 31st, 2013. The attached figure shows the trap locations. The unnamed stream is listed in the Anadromous Waters Catalog (103-40-10420) for the presence of pink and Coho salmon. This current nomination is to include rearing of Coho salmon. It is also noted Dolly Varden, Rainbow and cutthroat trout were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. There were no adult fish counts performed on the stream.

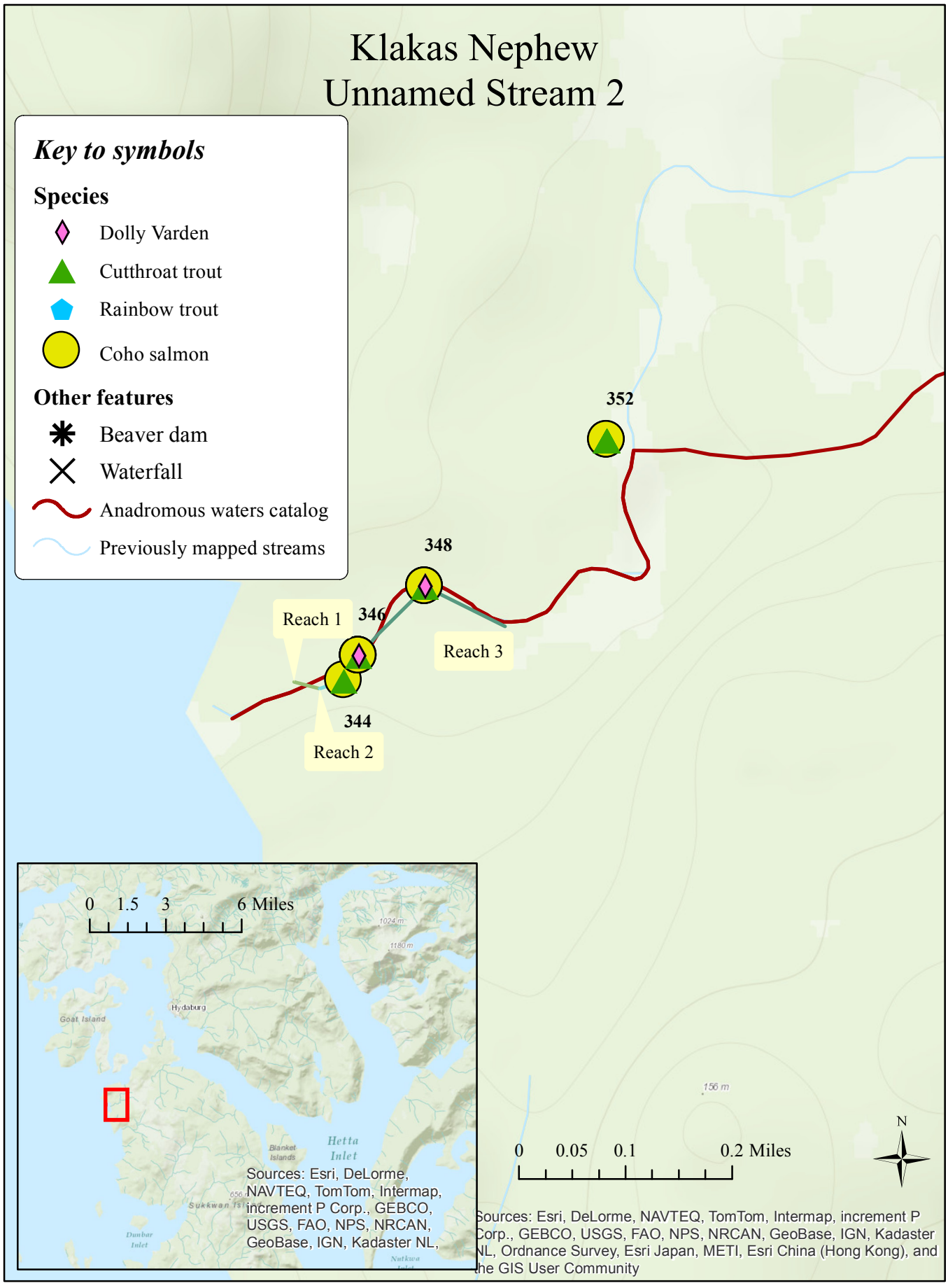
Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 2 on July 31, 2014. Data was taken on three reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

	Reach 1	**Reach 2**	**Reach 3**
Average stream gradient	11.8	2.2	1.3
Average bankfull width	8.7	6.2	8.5
Average channel bed width	3.9	4.5	6.3
Average incision depth	1	0.54	0.51
Bank composition	Bedrock	Mixed	Organic
Dominant substrate	Bedrock	Small cobble	Very coarse gravel
Sub-dominate substrate	Bedrock and large,Med Boulder	Large cobble and very coarse gravel	Coarse gravel and small cobble
Large wood count	6	15	17
Key wood count	3	5	4
Macro-pool count	3	0	18

Reach 1 was classified as HCL (Low incision, high gradient), Reach 2 was classified as LCS (Small low gradient contained channel), and Reach 3 was classified as PAB (Beaver dam/pond) The stream survey crew did not document a barrier on this stream. The stream survey crew trapped after the last point and caught two Coho, but ran out of time to go further in the stream. Therefore the upper extent of fish habitat was not reached.

Photo 1: Taken at the top of reach 3 looking down on Unnamed Stream near Klakas Nephew.

Klakas Nephew
Unnamed Stream 2



ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
344	55.15191	-132.88132	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
344	55.15191	-132.88132	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	185	measured and released
344	55.15191	-132.88132	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	65	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	162	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	240	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
346	55.15224	-132.88097	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	240	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	115	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	96	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	73	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	190	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	170	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	192	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	200	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	115	measured and released
348	55.15317	-132.87938	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	160	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	85	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	270	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	220	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	162	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	170	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	131	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	195	measured and released
352	55.15513	-132.87502	WGS84	GPS	Klekass Nephew	7/31/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	215	measured and released

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body:

Name of Water body: Unnamed Creek near Coffee Chuck ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____

Revision Year: _____

Revision to: Atlas _____ Catalog _____

Both _____

Revision Code: _____

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	August 19, 2014	X	X	X	☒
Pink salmon	August 19, 2014	X		X	☒
Chum salmon	August 19, 2014	X		X	☒
Dolly Varden	August 19, 2014			X	☐
Rainbow and Cutthroat trout	August 19, 2014			X	☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson

Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Unnamed stream near Coffee chuck

Three baited minnow traps were soaked for 1-5 hours in unnamed stream near Coffee Chuck on August 19th, 2014. This Stream is not listed in the Anadromous Waters Catalog. This current nomination is to include the presence, rearing, and spawning of coho salmon, the spawning and presence of pink and chum salmon. It is also noted Dolly Varden, Rainbow and Cutthroat trout were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on August 19th, 2014 and adult pink salmon, chum salmon and Coho salmon were observed in reaches 2 and 3 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for this stream on August 19th, 2014. Data was taken on four reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

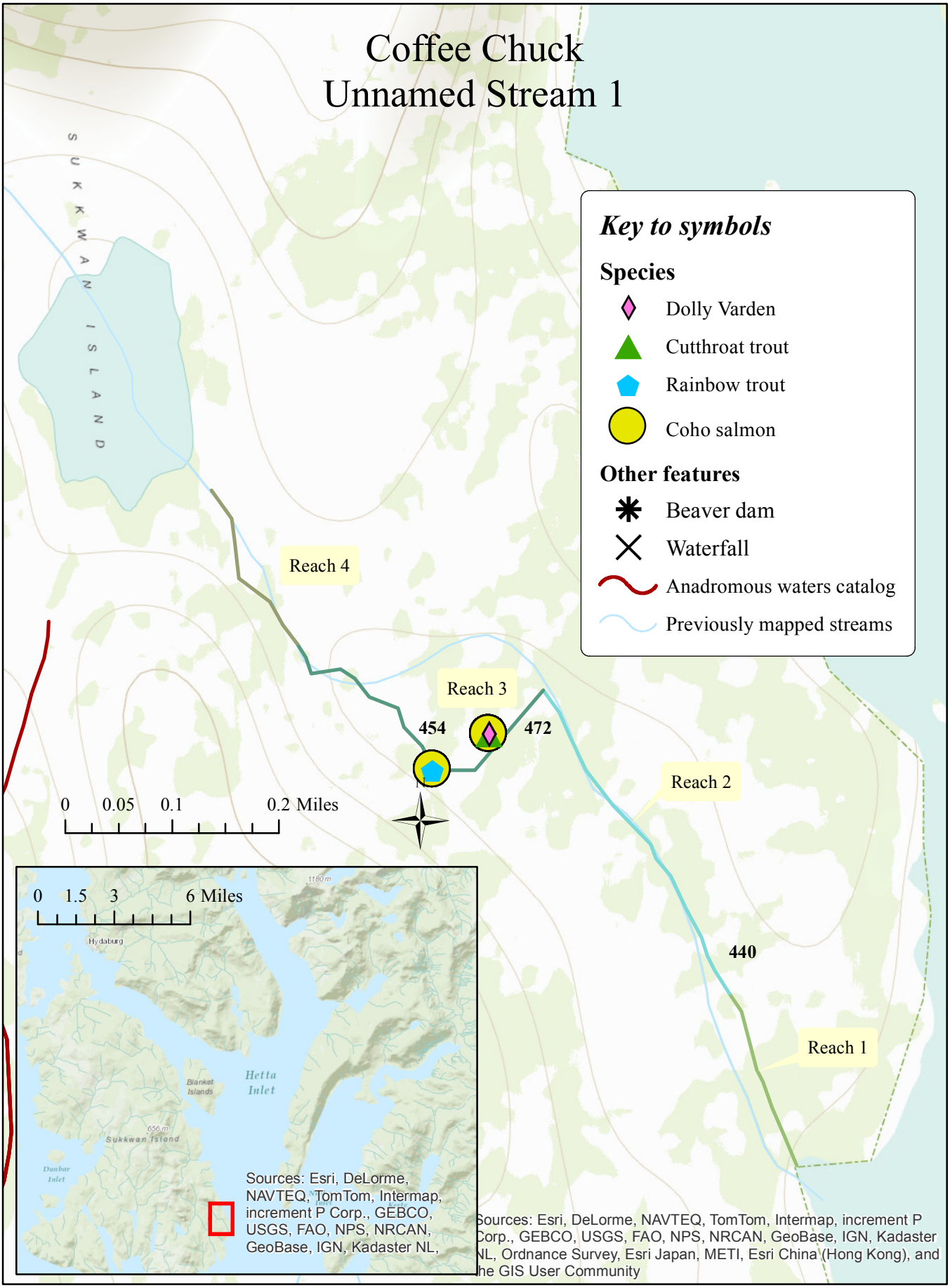
	Reach 1	**Reach 2**	**Reach 3**	**Reach 4**
Average stream gradient	3	3	3	2.1
Average bankfull width	10	5.6	5.6	7.5
Average channel bed width	7.3	6	5.4	5.1
Average incision depth	0.55	0.7	0.65	0.3
Bank composition	Mixed	Mixed	Alluvium	Alluvium
Dominant substrate	Large cobble	Large cobble	Small cobble	Small cobble
Sub-dominate substrate	Small cobble and very coarse gravel	Small cobble and very coarse gravel	Very coarse gravel and coarse gravel	Very coarse gravel and large cobble
Large wood count	19	60	35	34
Key wood count	14	29	20	13
Macro-pool count	23	42	36	23

Reach 1-4 were classified as MMS (moderate gradient mixed control). At the top of Reach 4, the survey crew documented a Lake. There were no other barriers documented by the stream crew. The following pictures show the lake documented on this Stream.

Photo 1. Lake documented at the top of Unnamed stream near Coffee Chuck

Photo 2. Taken down from lake documented at the top of stream.

Coffee Chuck
Unnamed Stream 1



Key to symbols

Species

- Dolly Varden
- Cutthroat trout
- Rainbow trout
- Coho salmon

Other features

- Beaver dam
- Waterfall
- Anadromous waters catalog
- Previously mapped streams

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	100	measured and released
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	103	measured and released
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	100	measured and released
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	92	measured and released
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	115	measured and released
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	87	measured and released
440	55.04394	-132.68834	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	76	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	74	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	69	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	73	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	77	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	69	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
454	55.04703	-132.69524	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	186	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	188	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	136	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	125	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	150	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	176	measured and released

472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	147	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	133	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	113	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	108	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	73	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	59	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released

472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	39	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	84	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	64	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released

472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	69	measured and released
472	55.04750	-132.69391	WGS85	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
472	55.04750	-132.69391	WGS84	GPS	Coffee Chuck	8/19/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	187	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
8-19-14	Coffee Chuck	Stream	2	451

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount										
Intertidal										
In Stream	15-6-35 6 40 20	3	1	1						
Riparian		1111 9								
TOTAL NUMBERS										
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
ICE TS	calm	overcast				

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
8-19	Coffee Chuck		3	

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount										
Intertidal										
In Stream	35			1	6					
Riparian		12								
TOTAL NUMBERS										
Upper GPS Point	352									

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
KE TS	calm	overcast				

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body: 103-40-10440

Name of Water body: Klakas Nephew ☐ USGS Name ☒ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____	_____ Fisheries Scientist	_____ Date
Revision Year: _____	_____ Habitat Operations Manager	_____ Date
Revision to: Atlas ____ Catalog ____ Both ____	_____ AWC Project Biologist	_____ Date
Revision Code: _____	_____ GIS Analyst	_____ Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	July 1, 2, 8 and Sept 8, 2014	X	X		☒
Pink salmon	September 8, 2014	X			☒
Chum salmon	September 8, 2014	X		X	☒
Dolly Varden	July 1, 2, and 8, 2014			X	☐
Rainbow and Cutthroat trout	July 1, 2, and 8, 2014			X	☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson Date: 12-9-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Klakas Nephew Stream 1

Thirteen baited minnow traps were soaked for 1-4 hours in Stream 1 in Klakas Nephew on July 1st, 2nd, & 8th 2014. The attached figure shows the trap locations. Stream 1 in Klakas Nephew is listed in the Anadromous Waters Catalog (103-40-10440). This current nomination is to include the presence and rearing of Coho salmon, spawning of pink salmon, and spawning and presence of chum salmon. It is also noted that dolly Varden, cutthroat and rainbow trout were present this section of the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on September 8th, 2014 and adult pink salmon, chum salmon and Coho salmon were observed through reach 11 and were not present in reach 12 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 1 below on July 1st, 2nd, and 8th of 2014. Data was taken on thirteen reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). Reaches 1-7 were surveyed as part of the mainstem to the stream, and Reaches 8-13 are a tributary. The stream survey data are in the following tables:

	Reach 1	**Reach 2**	**Reach 3**	**Reach 4**
Average stream gradient	2.6	2.6	1.75	3.1
Average bankfull width	8.5	12.2	9.9	11.4
Average channel bed width	7.4	9.2	8.5	9.8
Average incision depth	0.55	0.4	0.45	1.1
Bank composition	Mixed	Alluvium	Mixed	Mixed
Dominant substrate	Very Coarse gravel	Small cobble	Small cobble	Large cobble
Sub-dominate substrate	Small cobble and coarse gravel	Large cobble and very coarse gravel	Very coarse gravel and large cobble	Small, med, large boulder
Large wood count	0	22	6	40
Key wood count	0	14	4	12
Macro-pool count	2	18	8	17

	Reach 5	**Reach 6**	**Reach 7**	**Reach 8**
Average stream gradient	5.7	2.1	4.8	3.1
Average bankfull width	7.2	7.1	7.3	6.5
Average channel bed width	5.9	6.7	6.6	3.9
Average incision depth	0.63	0.56	0.6	0.51
Bank composition	Bedrock	Mixed	Mixed	Mixed
Dominant substrate	Bedrock	Bedrock	Small cobble	Very coarse gravel
Sub-dominate substrate	Small, Med, Large boulder	Small and large cobble	Very coarse gravel and large cobble	Small cobble and coarse gravel
Large wood count	15	27	69	17
Key wood count	8	19	42	10
Macro-pool count	18	14	25	8

	Reach 9	Reach 10	Reach 11	Reach 12
Average stream gradient	5.7	12.3	1.3	3.9
Average bankfull width	4.5	2.5	2.8	5.8
Average channel bed width	3.5	3.5	4.2	3.6
Average incision depth	0.51	0.7	0.79	0.52
Bank composition	Mixed	Mixed	Organic	Organic
Dominant substrate	Small cobble	Small boulder	Sand/silt	Sand/silt
Sub-dominate substrate	Very coarse gravel and large cobble	Small and large cobble	Very fine gravel and organic	Coarse gravel and organic
Large wood count	25	31	56	27
Key wood count	21	12	7	8
Macro-pool count	17	22	12	10

	Reach 13
Average stream gradient	5.3
Average bankfull width	5.5
Average channel bed width	2.7
Average incision depth	0.7
Bank composition	Mixed
Dominant substrate	Small cobble
Sub-dominate substrate	Very coarse gravel and organic
Large wood count	17
Key wood count	17
Macro-pool count	26

Reach 1 was classified as ESSC (Narrow Large, substrate estuarine), Reach 2 was classified as FPM (low gradient, multiple channel flood plain streams), Reach 3 & 6 were classified as LCS (Small low gradient contained channel), Reach 4 was classified as MCM (medium moderate gradient), Reach 5 was classified as MCS (Small moderate gradient), Reach 7, 8, 9, & 13 were classified as MMS (Small moderate gradient missed control channel), Reach 10 was classified as HCL (Low incision, high gradient), Reach 11 was classified as PAB (Beaver dam/pond), and Reach 12 was classified as PAS (low gradient, placid flow) There were no barrier features in Reaches 1-6 that were noted by the stream survey crew, and anadromous fish were found above these reaches. In the top of the main stem, the stream survey crew documented a Waterfall at waypoint 176, with a barrier height of 2 meters, barrier pool depth of 2 meters and barrier gradient of 75%. The stream crew documented a waterfall at the end of tributary 1 at waypoint 198, with a barrier height of 15 meters, barrier pool depth of 0.7 meters and barrier gradient of 85%. The stream crew didn't document a barrier on tributary 2 and fish habitat is present at the end of the tributary. The crew did not map or fish trap beyond this point, so it is unknown if the upper extent of fish habitat was reached.

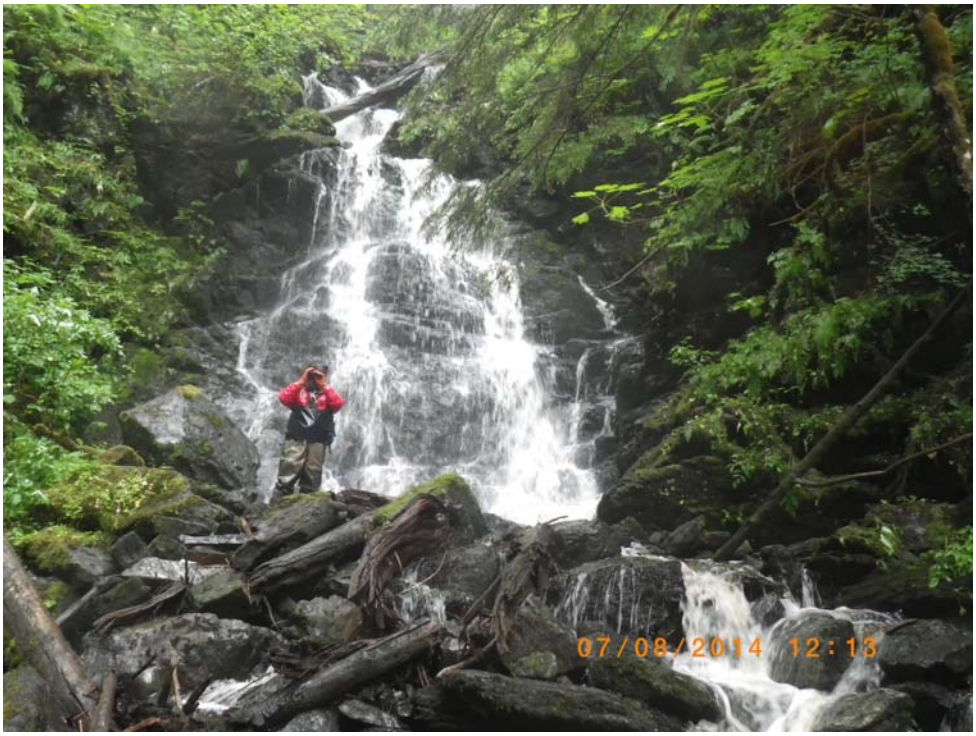
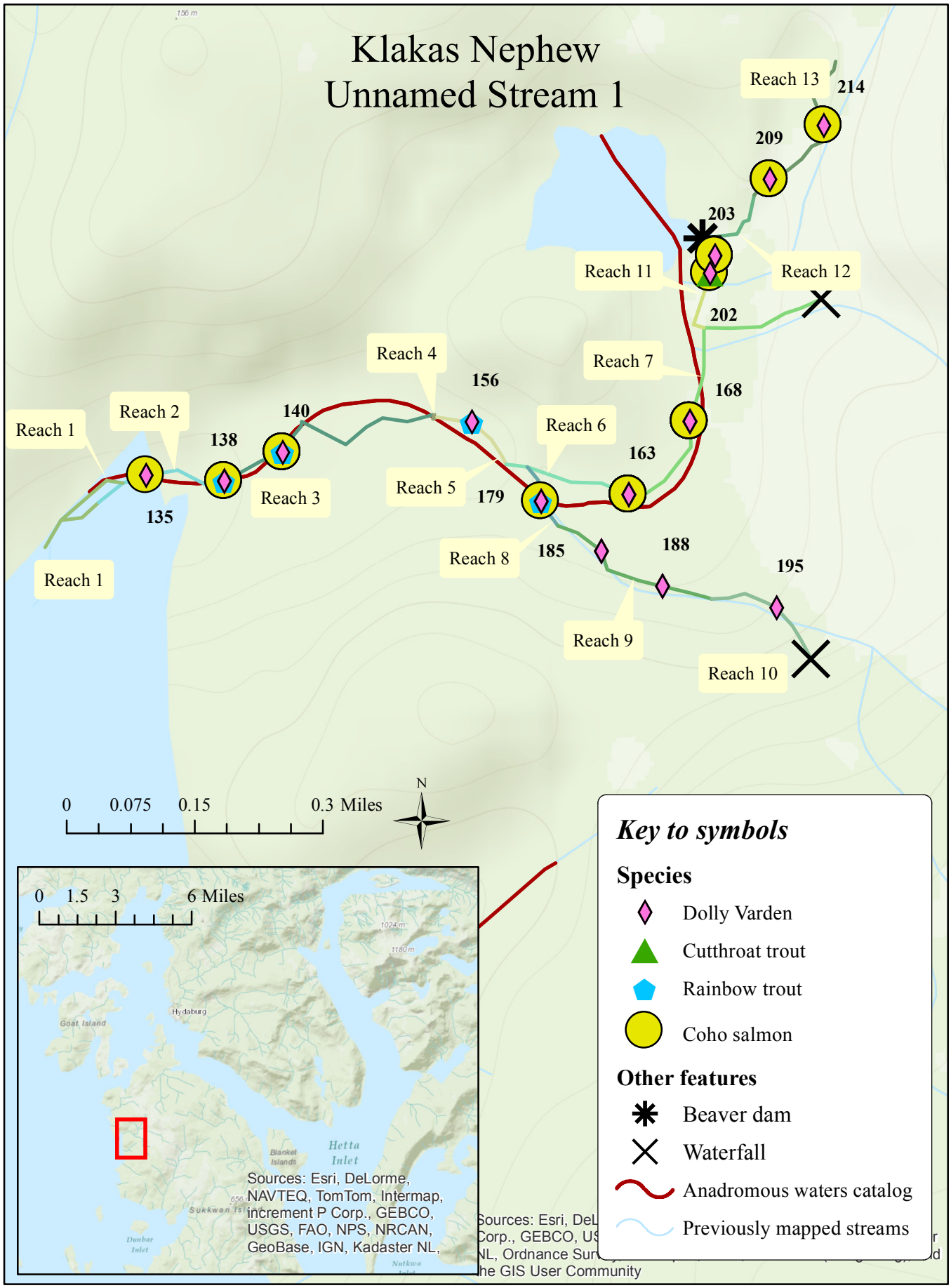


Photo 1: Tony Sanderson taking the downward gradient by th waterfall on trib. 1

Photo 2: Waterfall at the top of Reach 7 on stream 1 at Klekas Nephew


Klakas Nephew
Unnamed Stream 1
Reach 1
Reach 2
Reach 3
Reach 4
Reach 5
Reach 6
Reach 7
Reach 8
Reach 9
Reach 10
Reach 11
Reach 12
Reach 13
135
138
140
156
163
168
179
185
188
195
202
203
209
214
0 0.075 0.15 0.3 Miles
N
0 1.5 3 6 Miles
Goat Island
Hydaburg
Hetta Inlet
Blanket Islands
Sukkwan Island
Dunbar Inlet
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
Key to symbols
Species
Dolly Varden
Cutthroat trout
Rainbow trout
Coho salmon
Other features
Beaver dam
Waterfall
Anadromous waters catalog
Previously mapped streams

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
135	55.13851	-132.87399	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	measured and released
135	55.13851	-132.87399	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	87	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	85	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	98	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	72	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	86	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	87	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	75	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	87	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	102	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	120	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	118	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	85	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	60	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	73	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	82	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	105	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	70	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	75	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	94	measured and released
138	55.13840	-132.87168	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	64	measured and released

140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	81	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	94	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	77	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	87	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout			ID'ed and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	72	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	89	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	50	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	56	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	81	measured and released
140	55.13887	-132.86995	WGS84	GPS	Klekass Nephew	7/1/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	107	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	128	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	78	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	135	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	81	measured and released
156	55.13935	-132.86435	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	83	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	50	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	50	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	84	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released

163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	39	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden			ID'ed and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
163	55.13809	-132.85974	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon			ID'ed and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	105	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released

168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	61	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	38	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
168	55.13932	-132.85791	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	130	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	105	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
179	55.13799	-132.86233	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
185	55.13714	-132.86057	WGS84	GPS	Klekass Nephew	7/2/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	81	measured and released
185	55.13714	-132.86057	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	105	measured and released
185	55.13714	-132.86057	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	measured and released

185	55.13714	-132.86057	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
185	55.13714	-132.86057	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	measured and released
185	55.13714	-132.86057	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
188	55.13653	-132.85878	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
188	55.13653	-132.85878	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
188	55.13653	-132.85878	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
188	55.13653	-132.85878	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	measured and released
188	55.13653	-132.85878	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
195	55.13614	-132.85541	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
202	55.14182	-132.85725	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	cutthroat trout	juvenile	185	measured and released
202	55.14182	-132.85725	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	measured and released
202	55.14182	-132.85725	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
202	55.14182	-132.85725	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	165	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden			ID'ed and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
203	55.14212	-132.85710	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
209	55.14340	-132.85546	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	52	measured and released
209	55.14340	-132.85546	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
209	55.14340	-132.85546	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
209	55.14340	-132.85546	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	54	measured and released
209	55.14340	-132.85546	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
214	55.14430	-132.85384	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	78	measured and released
214	55.14430	-132.85384	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
214	55.14430	-132.85384	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
214	55.14430	-132.85384	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
214	55.14430	-132.85384	WGS84	GPS	Klekass Nephew	7/8/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	52	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
9-8-14	Klakass Nephew	main stream		481

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0	0	0	0	0	0	0
Intertidal	32	273	2	6	0	0	0	0	0	0
In Stream	2424	1495	10	159	51	3	0	0	0	0
Riparian	0	261	0	35	0	0	0	0	0	0
TOTAL NUMBERS	2456	2029	12	190	51	3	0	0	0	0
Upper GPS Point	482									

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Tony S kurt E	NW	clear	clear			NO fish in trib 1

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body:

Name of Water body: Dunbar Inlet Unnamed Stream 8 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #		
	Fisheries Scientist	Date
Revision Year:		
Revision to: Atlas ____ Catalog ____	Habitat Operations Manager	Date
Both ____		
	AWC Project Biologist	Date
Revision Code:		
	GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	July 16, 2014		X	X	☒
Pink salmon	August 28, 2014	X		X	☒
Chum salmon	August 28, 2014	X		X	☒
Dolly Varden	July 16, 2014			X	☐
Rainbow trout	July 16, 2014			X	☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson

Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Dunbar Inlet Stream 8

Two baited minnow traps were soaked for an hour to 2 hours in Stream 8 in Dunbar Inlet on July 16h, 2014. Stream 8 is not listed in the Anadromous Waters Catalog. This current nomination is to nominate the stream reach for the presence and rearing of Coho salmon, and also for spawning and presense of pink and chum salmon. It is also noted Dolly Varden and Rainbow trout were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on August 28th, and adult pink salmon and chum salmon were observed throughout reach 1 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 8 on July 16, 2014. Data was taken on one reach (reach number in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

	Reach 1
Average stream gradient	5.2
Average bankfull width	2.9
Average channel bed width	2.3
Average incision depth	0.34
Bank composition	Mixed
Dominant substrate	Very coarse gravel
Sub-dominate substrate	Organic and coarse gravel
Large wood count	18
Key wood count	4
Macro-pool count	13

Reach 1 was classified as MMS (moderate gradient mixed control). No fish were caught in trap above Reach 1. Stream 8 was not mapped after reach 1 but fish habitat may be present. The photos below show up and down stream at the end of reach 1.

Photo 1. Above reach 1 on stream 8 in Dunbar Inlet

Photo 2. On top of reach 1 going down on stream 8 in Dunbar Inlet

Dunbar Inlet
Unnamed Stream 8

Key to symbols

Species

- Dolly Varden
- Cutthroat trout
- Rainbow trout
- Coho salmon

Other features

- Beaver dam
- Waterfall
- Anadromous waters catalog
- Previously mapped streams

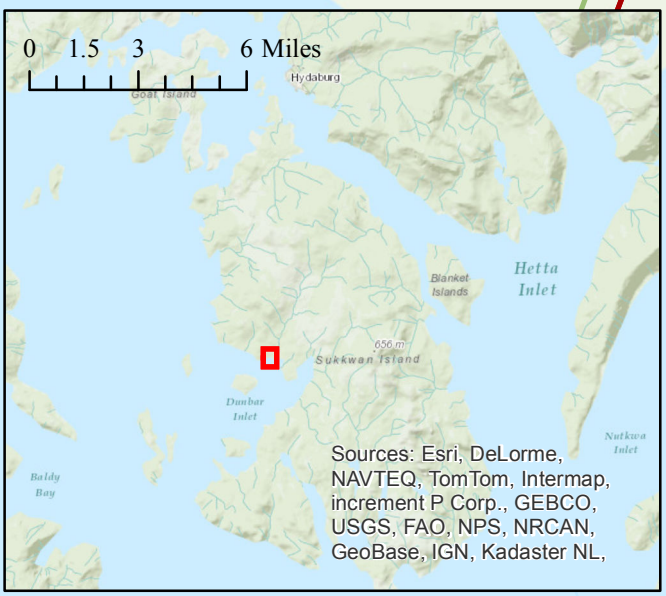
329

Reach 1

325

Reach 2

Reach 1



0 0.0275 0.055 0.11 Miles

N

Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	60	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	71	measured and released
325	55.09564	-132.83831	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	68	measured and released
329	55.09657	-132.83884	WGS84	GPS	Dunbar Inlet	7/16/2014	Tony Sanderson	Minnow Trap	no fish collected or observed			

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
8-28-14	DUNBAR	Stream B		

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0	0	0	0	0		
Intertidal	20	0	12	0	0	0	0	0		
In Stream	0	0	0	0	0	0	0	0		
Riparian	0	0	0	0	0	0	0	0		
TOTAL NUMBERS	20	0	12	0	0	0	0	0		
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt E Tony S	SE	Overcast				

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body: 103-40-10480

Name of Water body: Dunbar Inlet Unnamed Stream 7 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____

Revision Year: _____

Revision to: Atlas _____ Catalog _____

Both _____

Revision Code: _____

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	Aug 13-14 and Sept 11, 2014	X	X		☒
Pink salmon	Aug 13 and Sept 11, 2014	X			☒
Chum salmon	Aug 13 and Sept 11, 2014	X		X	☒
Dolly Varden	Aug 13-14, 2014			X	☐
Rainbow trout	Aug 13-14, 2014			X	☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Dunbar Inlet Stream 7

Seven baited minnow traps were soaked for 1-8 hours in Stream 7 in Dunbar Inlet on August 14th, 2014. Stream 7 in Dunbar Inlet is listed in the Anadromous Waters Catalog (103-40-10480) for Coho and pink salmon presence. This current nomination is to include the spawning and rearing of Coho salmon, spawning of pink salmon, and spawning and presence of chum salmon. It is also noted that Rainbow Trout and Dolly Varden were present this section of the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on August 13thand September 11th and adult pink salmon, Coho salmon, and chum salmon were observed through reach 10 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 7 below on August 13th and 14th, 2014. Data was taken on ten reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). All reaches were the main stem of the stream. The stream survey data are in the following tables:

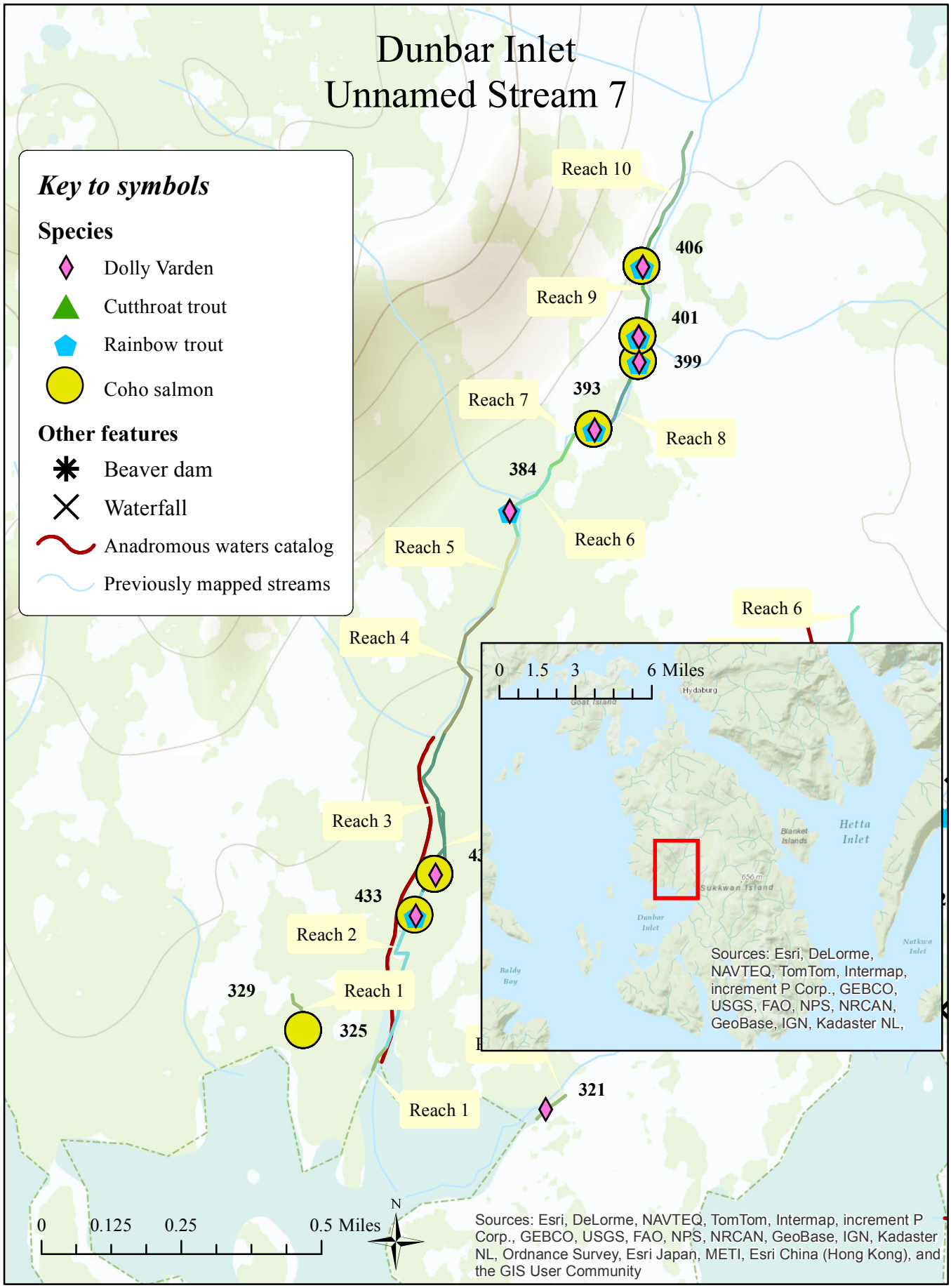
	Reach 1	**Reach 2**	**Reach 3**	**Reach 4**
Average stream gradient	0.85	3.1	3.9	4.3
Average bankfull width	10	11.1	12.7	18.5
Average channel bed width	13.2	12.1	7.9	13.5
Average incision depth	0.9	0.65	0.59	0.85
Bank composition	Mixed	Mixed	Mixed	Mixed
Dominant substrate	Small Cobble	Small Cobble	Small cobble	Small cobble
Sub-dominate substrate	Very Course gravel and Organic	Large cobble and Very Course Gravel	Large cobble and Very Course Gravel	Large cobble and Small boulder
Large wood count	1	49	27	17
Key wood count	3	7	27	2
Macro-pool count	3	14	39	29

	Reach 5	**Reach 6**	**Reach 7**
Average stream gradient	4.8	9.2	1.3
Average bankfull width	10	12.8	12.8
.Average channel bed width	8.6	8.6	9.8
Average incision depth	1.2	0.9	0.85
Bank composition	Mixed	Mixed	Mixed
Dominant substrate	Bedrock	Bedrock	Small cobble
Sub-dominate substrate	Large Med. Boulder and Small Boulder	Large Med. Boulder and Small Boulder	Large cobble and Small boulder
Large wood count	7	11	11
Key wood count	4	8	0
Macro-pool count	11	44	12

	Reach 8	Reach 9	Reach 10
Average stream gradient	5.8	2.6	4.8
Average bankfull width	10	13.4	12.4
.Average channel bed width	9.2	10.6	8.1
Average incision depth	1	0.75	1.2
Bank composition	Mixed	Mixed	Bedrock
Dominant substrate	Bedrock	Small cobble	Bedrock
Sub-dominate substrate	Large Med. Boulder and Small Boulder	Very coarse gravel and large cobble	Large Med. Boulder and Small Boulder
Large wood count	9	27	17
Key wood count	0	5	4
Macro-pool count	11	17	27

Reach 1 was classified as ELS (Large Estuarine Channel), Reach 2-5 and 9 was classified as MMM (Medium width moderate gradient mixed control channel), Reach 6 was classified as HCL (low incision high gradient), Reach 7 was classified as LCM (medium/low gradient contained channel), and Reaches 8 and 10 was classified as MCM (Medium moderate gradient contained channel). There were no barrier features in Reaches 1-10 that were noted by the stream survey crew. The crew did not map or fish trap beyond this point (due to no time), so it is unknown if the upper extent of fish habitat was reached.

Photo 1 was taken at the top of reach 10 going up.


Dunbar Inlet
Unnamed Stream 7
Key to symbols
Species
Dolly Varden
Cutthroat trout
Rainbow trout
Coho salmon
Other features
Beaver dam
Waterfall
Anadromous waters catalog
Previously mapped streams
Reach 10
406
Reach 9
401
399
393
Reach 7
Reach 8
384
Reach 6
Reach 5
Reach 6
Reach 4
Reach 3
433
Reach 2
329
Reach 1
325
321
Reach 1
0 1.5 3 6 Miles
Hydaburg
Goat Island
Hetta Inlet
Blanket Islands
656 m
Sukkwan Island
Dunbar Inlet
Baldy Bay
Nutkwa Inlet
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
0 0.125 0.25 0.5 Miles
N
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	200	measured and released
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	203	measured and released
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	190	measured and released
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	measured and released
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	measured and released
384	55.10897	-132.82881	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	88	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	77	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	116	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	115	measured and released

393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	140	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	70	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	123	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	88	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	99	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	98	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	94	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	89	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	68	measured and released
393	55.11104	-132.82493	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	76	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	64	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	158	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	115	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	115	measured and released

399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	111	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	93	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	112	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	84	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	105	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	91	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile		ID'ed and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile		ID'ed and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	84	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	93	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	75	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	87	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	70	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	78	measured and released
399	55.11278	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	87	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	265	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	230	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	190	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile		ID'ed and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	180	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	200	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	185	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	215	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	200	measured and released

401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	210	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	190	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	195	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	207	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	185	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	190	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	142	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	130	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	102	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	61	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	83	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	145	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	135	measured and released

401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	105	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	125	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	210	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	91	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	118	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	96	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	125	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	134	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	86	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	112	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	115	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	60	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	87	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	84	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	97	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	89	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile		ID'ed and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	78	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	61	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	86	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	70	measured and released
401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	72	measured and released

401	55.11342	-132.82290	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	75	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	210	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile		ID'ed and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	8	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	78	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	88	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	54	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile		ID'ed and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	77	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released

406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	77	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	73	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	104	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	96	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	96	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	103	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	88	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	81	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	109	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	74	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	89	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	93	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	86	measured and released
406	55.11523	-132.82268	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released

432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	56	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	74	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	77	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	74	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	64	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	79	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	83	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	83	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	67	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	54	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released

432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	64	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	82	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	83	measured and released
432	55.09962	-132.83233	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	57	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	110	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	115	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	122	measured and released
433	55.09858	-132.83324	WGS84	GPS	Dunbar Inlet	8/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	77	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
8-13	DUNBAR	Stream 7		409

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	150	0	0	0	0	0				
Intertidal	50	0	0	0	0	0				
In Stream	4389	24	47	12	44	0				
Riparian	0	0	0	0	0	0				
TOTAL NUMBERS	4589	24	47	12	44					
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
TONY S KURT E MINNIE K	SE	RAIN				

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
9-11-14	stream 7 DUNBAR	stream		486

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount										
Intertidal	2	349	0	7						
In Stream	4577	3763	11	171	133	0	0	0	0	0
Riparian	0	273	0	36	0	0	0	0	0	0
TOTAL NUMBERS	4579	4,112	11	214	133	0	0	0	0	0
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt E Tony S Minnie	NW	clear				

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body: 103-40-10500

Name of Water body: Dunbar Inlet Unnamed Stream 5 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____	_____ Fisheries Scientist	_____ Date
Revision Year: _____	_____ Habitat Operations Manager	_____ Date
Revision to: Atlas _____ Catalog _____ Both _____	_____ AWC Project Biologist	_____ Date
Revision Code: _____	_____ GIS Analyst	_____ Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon			X	X	☒
Pink salmon		X			☒
Chum salmon		X		X	☒
Dolly Varden				X	☐
Rainbow trout				X	☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Dunbar Inlet Stream 5

Eight baited minnow traps were soaked for 1-8 hours in Stream 5 in Dunbar Inlet on July 10th, 2014. The attached figure shows the trap locations. Stream 5 in Dunbar Inlet is listed in the Anadromous Waters Catalog (103-40-10500) for pink salmon present. This current nomination is to include the presence and rearing of Coho salmon, spawning of pink salmon, and the spawning and presence of Chum Salmon. It is also noted that rainbow trout and Dolly Varden were present this section of the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on September 4th, 2014 and adult pink salmon and chum salmon were observed through reach 2 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 5 below on July 14, 2014. Data was taken on eight reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). Reaches 1-6 were surveyed as part of the main stem to the stream, and Reaches 7 and 8 are a tributary. The stream survey data are in the following tables:

	Reach 1	**Reach 2**	**Reach 3**
Average stream gradient	3.5	3.9	6.5
Average bankfull width	3.5	5.6	4.8
Average channel bed width	4.7	4.6	3.2
Average incision depth	0.53	0.31	0.54
Bank composition	Mixed	Mixed	Mixed
Dominant substrate	Small boulder	Small cobble	Small cobble
Sub-dominate substrate	Large cobble and bedrock	Very coarse gravel and organic	Large cobble and very coarse gravel
Large wood count	25	26	16
Key wood count	14	15	5
Macro-pool count	22	23	20

	Reach 4	**Reach 5**	**Reach 6**
Average stream gradient	4.4	8.6	4.6
Average bankfull width	1.4	2.5	1.9
Average channel bed width	2.2	1.5	1.9
Average incision depth	0.45	0.52	0.38
Bank composition	Mixed	Mixed	Mixed
Dominant substrate	Very coarse gravel	Small cobble	Very coarse gravel
Sub-dominate substrate	Small cobble and coarse gravel	Large cobble and bedrock	Small cobble and large cobble
Large wood count	17	17	22
Key wood count	4	8	6
Macro-pool count	21	12	10

	Reach 7	Reach 8
Average stream gradient	7.9	6.1
Average bankfull width	1.4	2.9
.Average channel bed width	1.7	2
Average incision depth	0.43	0.55
Bank composition	Mixed	Mixed
Dominant substrate	Small cobble	Small cobble
Sub-dominate substrate	Very coarse gravel and large cobble	Very coarse gravel and large cobble
Large wood count	29	14
Key wood count	4	13
Macro-pool count	20	16

Reach 1 and 8 were classified as MCS (Small moderate gradient), Reach 2 and 6 were classified as MMS (Small moderate gradient), Reach 3 and 5 were classified as HCLw (Low incision, wetland phase), Reach 4 was classified as MMO (Micro moderate gradient), and Reach 7 was classified as HCO (High gradient, micro channel). There were no barrier features in Reaches 1-7 that were noted by the stream survey crew. A tributary came into Reach 2 (discussed as Reach 8). At the top of Reach 8 there was a Cascade at waypoint 317, with the height of 2 meters, pool depth of 0.5 meters and a gradient of 28.4%. The crew did not map or fish trap beyond this point, so it is unknown if the upper extent of fish habitat was reached.

Photo 1: The GCS (geological fixed barrier: Cascade) on top of reach 8 on stream 5 in Dunbar Inlet

Dunbar Inlet
Unnamed Stream 5

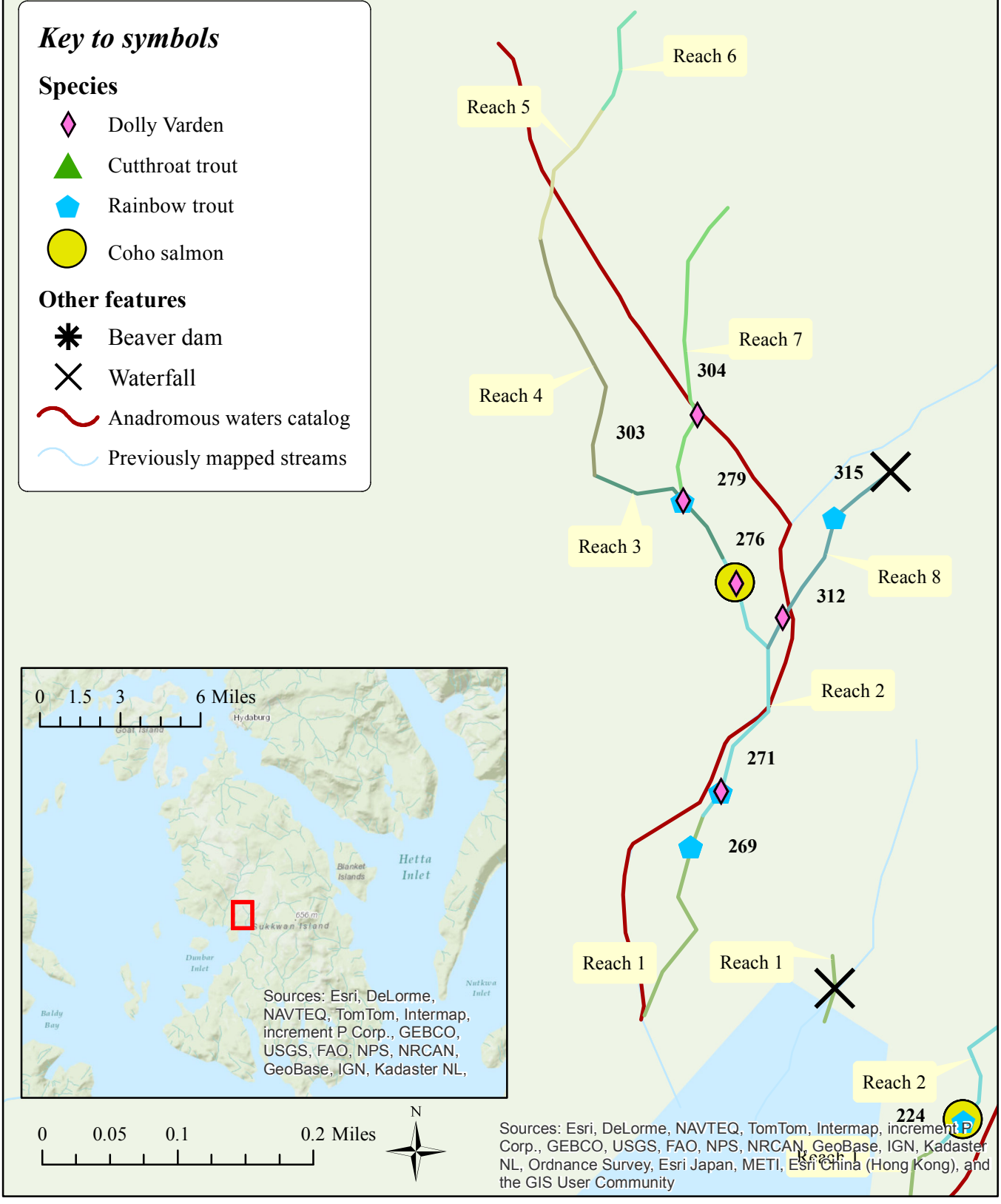
Key to symbols

Species

- Dolly Varden
- Cutthroat trout
- Rainbow trout
- Coho salmon

Other features

- Beaver dam
- Waterfall
- Anadromous waters catalog
- Previously mapped streams



0 0.05 0.1 0.2 Miles

N

Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	145	measured and released
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	89	measured and released
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	91	measured and released
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	measured and released
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	87	measured and released
269	55.09750	-132.81234	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	77	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	101	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	96	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	125	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	113	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	98	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	102	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	175	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	measured and released

271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	81	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	102	measured and released
271	55.09808	-132.81177	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	113	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	99	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	97	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	97	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	71	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	78	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	71	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	77	measured and released
276	55.10029	-132.81144	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	68	measured and released
303	55.10185	-132.81238	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	no fish collected or observed			
304	55.10209	-132.81212	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
304	55.10209	-132.81212	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	measured and released
312	55.09992	-132.81059	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
312	55.09992	-132.81059	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
312	55.09992	-132.81059	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	measured and released

312	55.09992	-132.81059	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
315	55.10099	-132.80960	WGS84	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	86	measured and released
279	55.10118	-132.81241	WGS85	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	130	measured and released
279	55.10118	-132.81241	WGS86	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
279	55.10118	-132.81241	WGS87	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
279	55.10118	-132.81241	WGS88	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
279	55.10118	-132.81241	WGS89	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
279	55.10118	-132.81241	WGS90	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
279	55.10118	-132.81241	WGS91	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
279	55.10118	-132.81241	WGS92	GPS	Dunbar Inlet	7/14/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
9-4-14	Dunbar	Stream 5		480

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0	0	0	0	0	0	0
Intertidal	0	3	0	1	0	0	0	0	0	0
In Stream	22	5	2	8	0	0	0	0	0	0
Riparian	0	13	0	5	0	0	0	0	0	0
TOTAL NUMBERS	22	21	2	14	0	0	0	0	0	0
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt E Tony S	SE	Rain				No fish in TRB 1

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body:

Name of Water body: Dunbar Inlet Unnamed Stream 4 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____

Revision Year: _____

Revision to: Atlas _____ Catalog _____

Both _____

Revision Code: _____

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	July 9-10, 2014		X	X	☒
Dolly Varden	July 9-10, 2014			X	☐
					☐
					☐
					☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Dunbar Inlet Stream 4

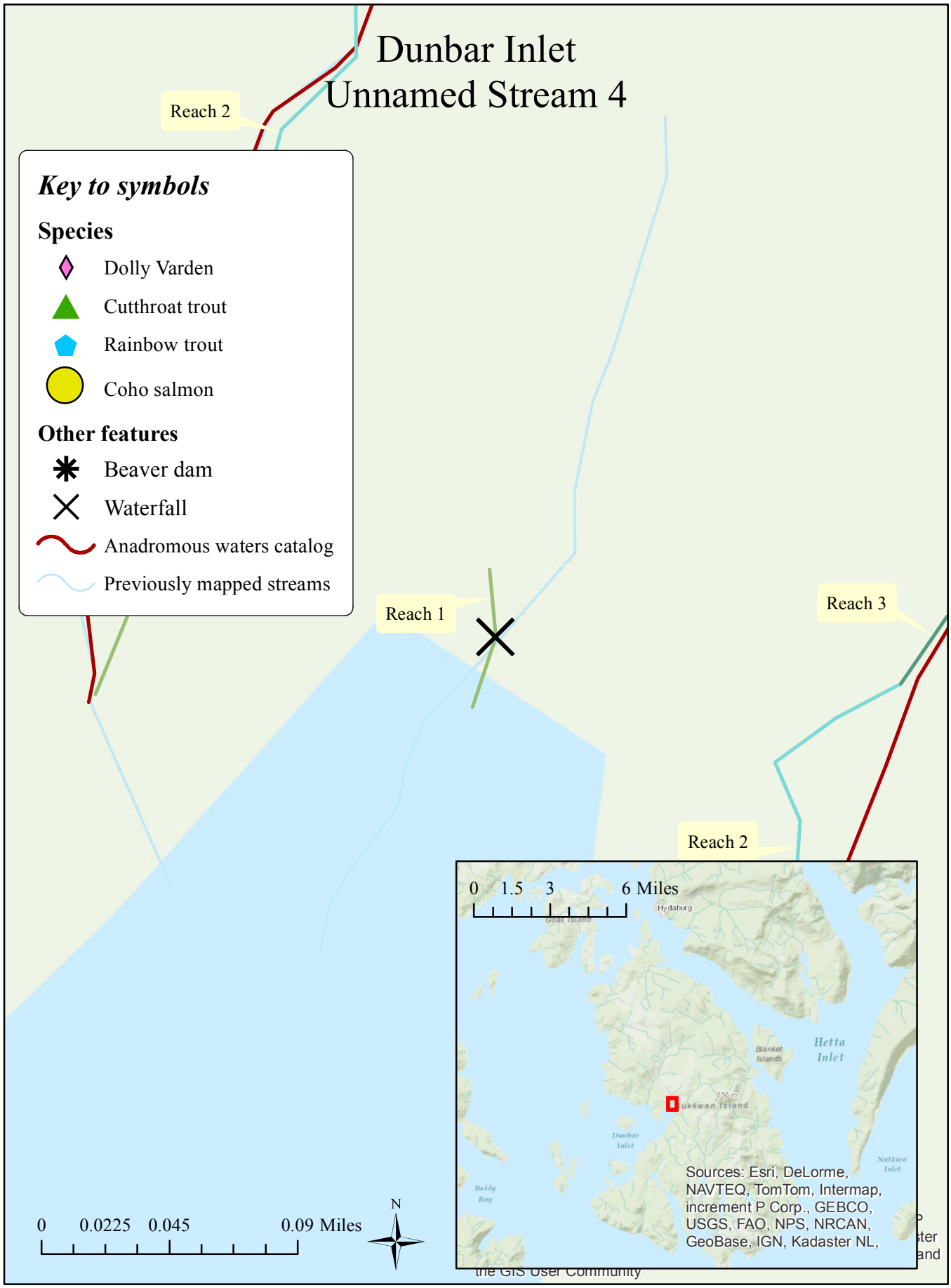
One baited minnow trap was soaked for about an hour in Stream 4 in Dunbar Inlet on July 9th, 2014. Stream is not listed in the Anadromous Waters Catalog. This current nomination is to nominate the presence and rearing of coho salmon. It is also noted Dolly Varden were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on August 28th, 2014 and no adult fish were observed (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 4 on July 9th, 2014. Data was taken on one reach (reach number in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

	Reach 1
Average stream gradient	5.7
Average bankfull width	1.3
Average channel bed width	2.3
Average incision depth	0.31
Bank composition	Organic
Dominant substrate	Sand/Silt
Sub-dominate substrate	Very Fine gravel and fine gravel
Large wood count	14
Key wood count	4
Macro-pool count	6

Reach 1 was classified as PAO (micro placid flow channel). At the top of Reach 1, the survey crew documented a waterfall at waypoint 242, with a barrier height of 1 meters, a pool depth of 0.4 meters and a 90 degree gradient. No anadromous fish were trapped above Reach 1, however Dolly Varden were found in traps. The following pictures show the barriers documented on Stream 4.

Photo 1. Waterfall documented in Reach 1 of Stream 4 in Dunbar Inlet.


Dunbar Inlet
Unnamed Stream 4
Reach 2
Key to symbols
Species
Dolly Varden
Cutthroat trout
Rainbow trout
Coho salmon
Other features
Beaver dam
Waterfall
Anadromous waters catalog
Previously mapped streams
Reach 1
Reach 3
Reach 2
0 1.5 3 6 Miles
Hetta Inlet
Blanket Islands
Dunbar Inlet
Baldy Bay
Nutkwa Inlet
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
0 0.0225 0.045 0.09 Miles
N

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
80	55.09010	-132.80718	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
82	55.09016	-132.80602	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
82	55.09016	-132.80602	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	225	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	75	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	85	measured and released
85	55.08956	-132.80432	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
245	55.08929	-132.79981	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
245	55.08929	-132.79981	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	measured and released
245	55.08929	-132.79981	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
249	55.08834	-132.79908	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
249	55.08834	-132.79908	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	78	measured and released
249	55.08834	-132.79908	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	94	measured and released
249	55.08834	-132.79908	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
249	55.08834	-132.79908	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
249	55.08834	-132.79908	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	51	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	51	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	45	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	63	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	50	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	86	measured and released

261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	56	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	46	measured and released
261	55.09097	-132.79725	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	45	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Assocition Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
8-28-14	DUNBAR	Stream 4		

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0	0	0	0	0		
Intertidal	0	0	0	0	0	0	0	0		
In Stream	0	0	0	0	0	0	0	0		
Riparian	0	0	0	0	0	0	0	0		
TOTAL NUMBERS	0	0	0	0	0	0	0	0		
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt E Tony S	SE	overcast				

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body: 103-40-10520

Name of Water body: Dunbar Inlet Unnamed Stream 3 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____

Revision Year: _____

Revision to: Atlas _____ Catalog _____

Both _____

Revision Code: _____

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	July 9, 2014		X	X	☒
Dolly Varden	July 9, 2014			X	☐
Rainbow trout	July 9, 2014			X	☐
					☐
					☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-3666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Dunbar Inlet Stream 3

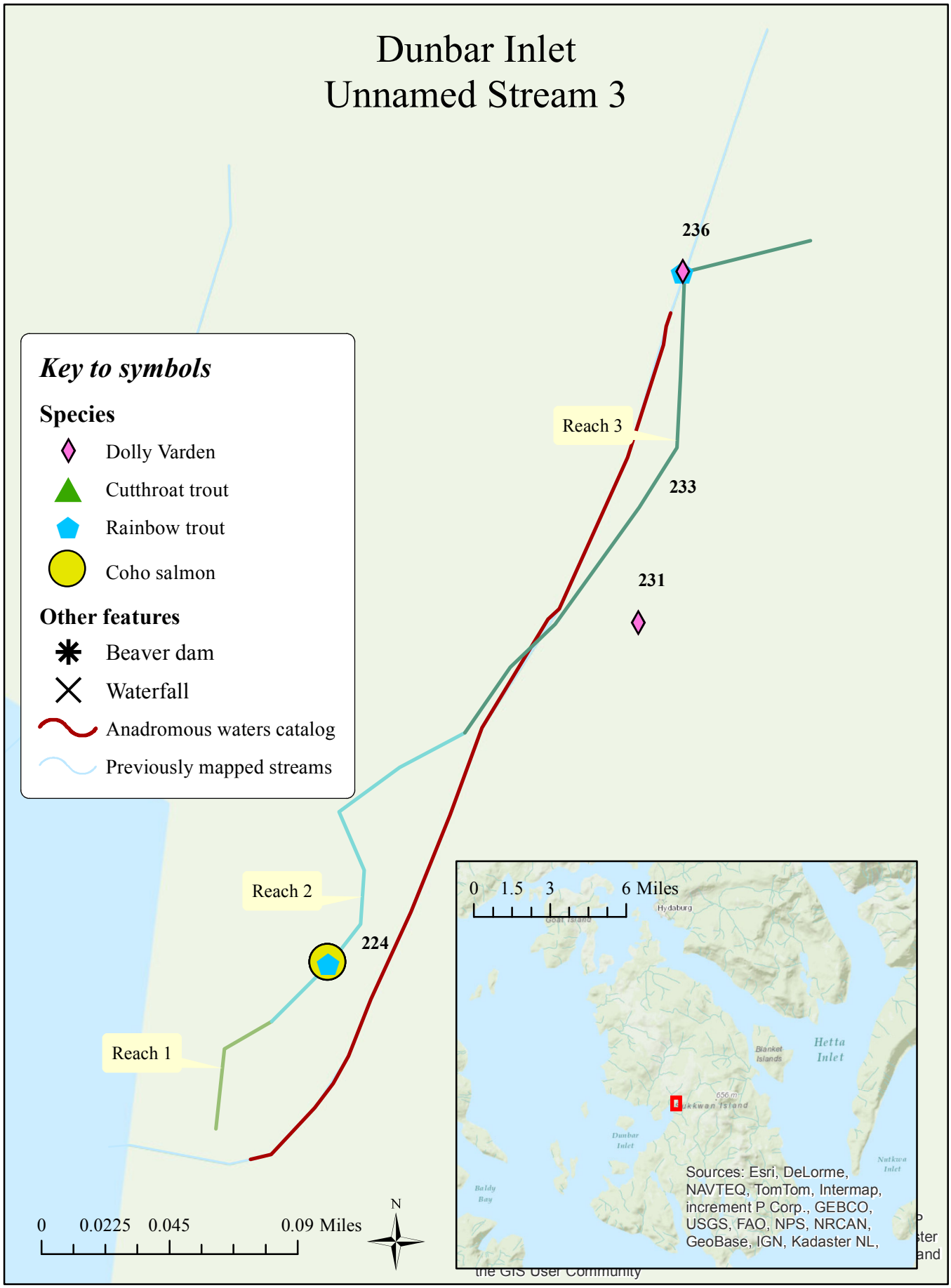
Four baited minnow traps were soaked for 1.5 to 3.5 hours in stream 3 in Dunbar Inlet on July 9th, 2014. Stream 3 is listed in the Anadromous Waters Catalog (103-40-10520) for the spawning of pink salmon. This current nomination is to include the presence and rearing of coho salmon. It is also noted Dolly Varden and Rainbow Trout were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on August 28th, 2014 and no adult fish were observed(see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 1 on July 9th, 2014. Data was taken on three reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

	Reach 1	**Reach 2**	**Reach 3**
Average stream gradient	1.3	1.3	6.1
Average bankfull width	2.8	3.8	2.2
Average channel bed width	3	2.3	2.3
Average incision depth	0.41	0.43	0.45
Bank composition	Organic	Organic	Mixed
Dominant substrate	Very Coarse gravel	Very Coarse gravel	Small cobble
Sub-dominate substrate	Coarse gravel and Small cobble	Coarse gravel and Small cobble	Very coarse gravel and large cobble
Large wood count	2	1	21
Key wood count	1	8	5
Macro-pool count	0	14	25

Reach 1 was classified as ESSg (narrow small substrate estuarine channel), Reach 2 was classified as FPS(narrow low gradient flood plain channel), and Reach 3 was classified as HCLw (low incision, high gradient, wetland phase. No anadromous fish were trapped in Reach 3; however Dolly Varden were found in traps. Given Reach 3 was classified as HCLw with an average stream gradient of 6.1%, it is unlikely that coho salmon rear above Reach 2.The following pictures show the two barriers documented on Stream 1.

Photo 1. The end of reach 3 on stream 3 of Dunbar Inlet.


Dunbar Inlet
Unnamed Stream 3
236
233
231
224
Reach 3
Reach 2
Reach 1
Key to symbols
Species
Dolly Varden
Cutthroat trout
Rainbow trout
Coho salmon
Other features
Beaver dam
Waterfall
Anadromous waters catalog
Previously mapped streams
0 0.0225 0.045 0.09 Miles
N
0 1.5 3 6 Miles
Hydaburg
Goat Island
Hetta Inlet
Bianket Islands
656 m
Dunbar Inlet
Nutkwa Inlet
Baldy Bay
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
the GIS User Community

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
224	55.09454	-132.80734	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	coho salmon	juvenile	62	measured and released
224	55.09454	-132.80734	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	rainbow trout	juvenile	78	measured and released
224	55.09454	-132.80734	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	coho salmon	juvenile	59	measured and released
224	55.09454	-132.80734	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	coho salmon	juvenile	57	measured and released
224	55.09454	-132.80734	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	coho salmon	juvenile	62	measured and released
224	55.09454	-132.80734	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	sculpin-unspe	juvenile	83	measured and released
231	55.09625	-132.80456	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	Dolly Varden	juvenile	109	measured and released
233	55.09684	-132.80456	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	no fish collected or observed			
236a	55.09803	-132.80413	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	no fish collected or observed			
236b	55.09803	-132.80413	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	rainbow trout	juvenile	100	measured and released
236b	55.09803	-132.80413	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	Dolly Varden	juvenile	82	measured and released
236b	55.09803	-132.80413	WGS84	GPS	Dunbar Inlet	7/9/2014	Tony Sanderso	Minnow Trap	Dolly Varden	juvenile	63	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
8-28-14	DUNBAR	Stream 3		

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0						
Intertidal	0	0	0	0						
In Stream	0	0	0	0						
Riparian	0	0	0	0						
TOTAL NUMBERS	0	0	0	0						
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt E Tony S	SE	overcast				

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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-3

AWC Number of Water Body: 103-40-10540

Name of Water body: Dunbar Inlet Unnamed Stream 2 ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination # _____

Revision Year: _____

Revision to: Atlas _____ Catalog _____

Both _____

Revision Code: _____

Fisheries Scientist	Date
Habitat Operations Manager	Date
AWC Project Biologist	Date
GIS Analyst	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	June 26, July 10 &17, Sept 3, 2014	X	X		☒
Pink salmon	Sept. 3, 2014	X			☒
Chum salmon	Sept 3, 2014	X		X	☒
Dolly Varden	June 26, July 10 & 17, 2014			X	☐
Rainbow trout	June 26, July 10 & 17, 2014			X	☐

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

See supplemental information attached. This package was prepared by Cathy Needham and Melanie Kadake. For questions or more information contact Ms. Kadake at 907-285-2666 or mjkadake13@gmail.com or Ms. Needham at 907-723-4436 or cathy@kaienvironmental.com

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson

Date: 12-8-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349

Hydaburg, AK 99922

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 11/13

Name of Area Biologist (please print):

Supplemental information for Dunbar Inlet Stream 2

Ten baited minnow traps were soaked for 1-10 hours in Stream 2 in Dunbar Inlet on June 26th and July 10th & 17th, 2014. The attached figure shows the trap locations. Stream 2 in Dunbar Inlet is listed in the Anadromous Waters Catalog (103-40-10540) for Coho and pink salmon present. This current nomination is to include the spawning and rearing of Coho salmon, spawning of pink salmon, and spawning and presence of chum salmon. It is also noted that rainbow trout and Dolly Varden were present this section of the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on September 3rd, 2014 and adult pink salmon and chum salmon and Coho salmon were observed through reach 5 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 2 below on June 26th and July 10th and 17th of 2014. Data was taken on twelve (reach numbers in the tables correspond to a master dataset; see attached figure for locations). Reaches 1-6, 11 and 12 were surveyed as part of the main stem to the stream, and Reaches 7-10 are tributaries. The stream survey data are in the following tables:

	Reach 1	**Reach 2**	**Reach 3**	**Reach 4**
Average stream gradient	2.6	3.4	3.5	4
Average bankfull width	9.5	9.5	7.8	13.8
Average channel bed width	9	9	8.3	8.8
Average incision depth	0.89	0.8	1.1	0.8
Bank composition	Organic	Organic	Bedrock	Organic
Dominant substrate	Large Cobble	Small cobble	Bedrock	Very Course gravel
Sub-dominate substrate	Small cobble and Very course gravel	Large coble and Small boulder	Large cobble and sand/silt	Small cobble and course gravel
Large wood count	5	0	5	61
Key wood count	7	7	13	46
Macro-pool count	11	9	17	45

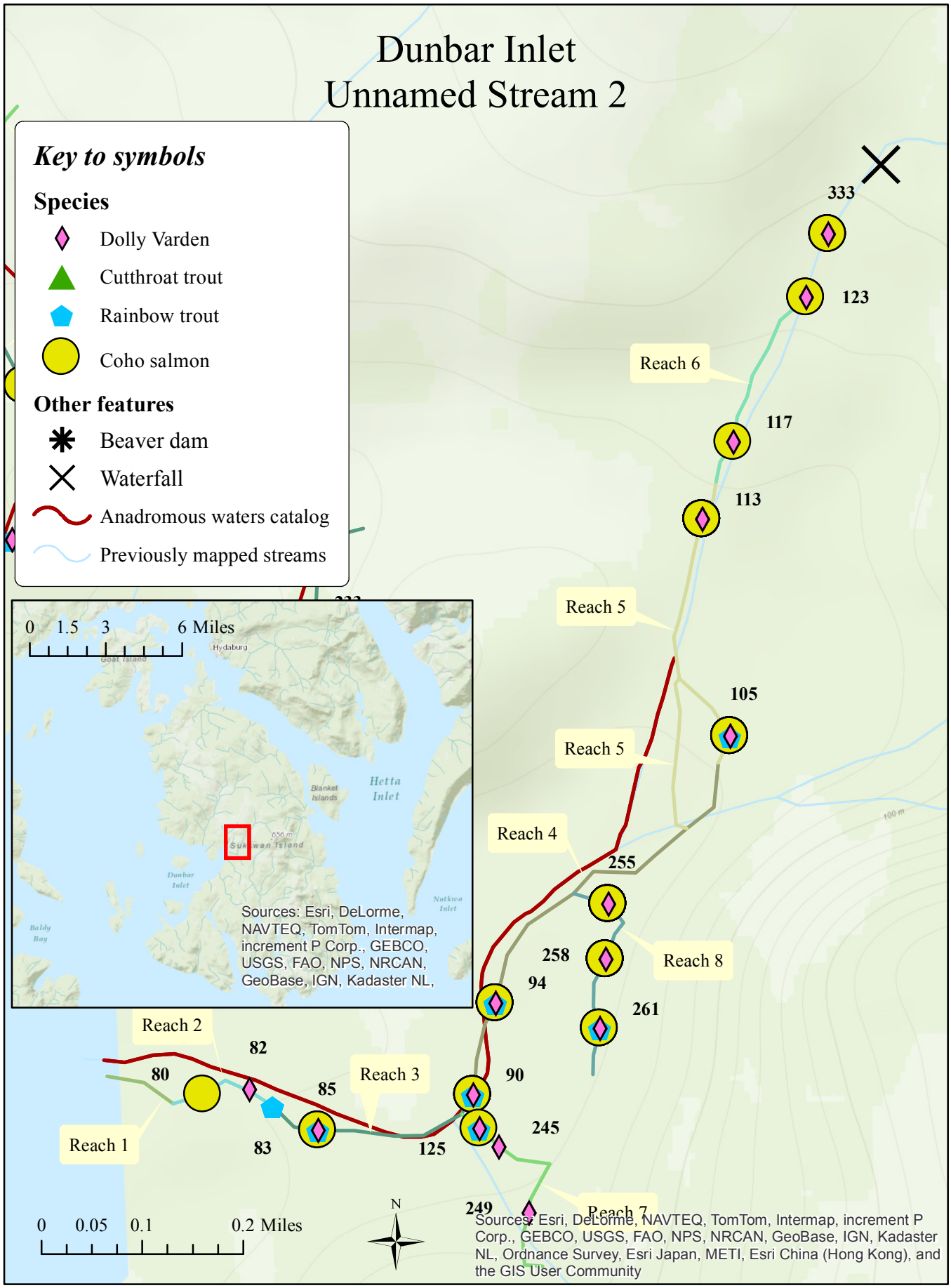
	Reach 5	**Reach 6**	**Reach 11**	**Reach 12**
Average stream gradient	4.35	6.55	15.4	7.9
Average bankfull width	9.6	8	8.4	12.1
Average channel bed width	6.2	6.1	5.8	6.5
Average incision depth	0.86	0.9	0.61	0.41
Bank composition	Mixed	Mixed	Mixed	Mixed
Dominant substrate	Small cobble	Small cobble	Bedrock	Large cobble
Sub-dominate substrate	Large cobble and very course gravel	Large cobble and bedrock	Large cobble and Small boulder	Small cobble and small boulder
Large wood count	16	31	0	18
Key wood count	52	22	8	24
Macro-pool count	36	32	7	25

	Reach 7	Reach 8	Reach 9	Reach 10
Average stream gradient	7.9	14.5	1.7	3
Average bankfull width	1.5	1.8	2.5	2
Average channel bed width	2.7	1.3	2.6	1.9
Average incision depth	0.65	0.5	0.4	0.6
Bank composition	Mixed	Mixed	Organic	Mixed
Dominant substrate	Small cobble	Small cobble	Course gravel	Course gravel
Sub-dominate substrate	Very course gravel and large cobble	Large cobble and Small boulder	Very course gravel and med. gravel	Very course gravel and med. gravel
Large wood count	20	6	34	39
Key wood count	26	1	12	9
Macro-pool count	28	6	14	12

Reach 1, 2, 5, and 10 were classified as MMS (Small Moderate gradient). Reach 3 was classified as MCS (Small moderate gradient) and Reach 4 was classified as MMM (Medium width moderate gradient). Reach 6 was classified as HCLw (Low incision high gradient wetland phase). Reach 7 & 8 were classified as HCO (Micro High gradient). Reach 9 was classified as LCS (Small low gradient). Reach 11 was classified as HCM (Moderate incision high gradient). Reach 12 was classified as HCV (A steep, upper valley, forested stream). There were no barrier features in Reaches 1-6 that were noted by the stream survey crew, and anadromous fish were found above these reaches. A tributary came into Reach 3 (discussed as Reaches 7 & 8). There was no barrier features that were noted by the stream survey crew and no anadromous fish present either. Another tributary came into Reach 4 (Discussed as reaches 9 & 10), there were no barrier featured but there were anadromous fish found in these reaches. At the top of the 12th reach, the crew documented a waterfall at waypoint 336, with a barrier height of 11 meters, a pool depth of 0.80 meters and a gradient of 90 degrees. Even though the crew did not map or fish trap beyond this point, it is unlikely fish would pass the barrier. Therefore the upper extent of the mainstem of Stream 2 is likely at the end of reach 12.

Photo 1: GWF at the top of reach 12 on stream 2

Photo 2: Tony Sanderson setting a minnow trap on Stream 2 Tributary 1.


Dunbar Inlet
Unnamed Stream 2
Key to symbols
Species
Dolly Varden
Cutthroat trout
Rainbow trout
Coho salmon
Other features
Beaver dam
Waterfall
Anadromous waters catalog
Previously mapped streams
0 1.5 3 6 Miles
Hydaburg
Goat Island
Blanket Islands
Hetta Inlet
Sukkwan Island
656 m
Dunbar Inlet
Nutkwa Inlet
Baldy Bay
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
333
123
Reach 6
117
113
Reach 5
105
Reach 5
Reach 4
255
258
Reach 8
94
261
Reach 2
82
80
Reach 3
90
85
245
Reach 1
83
125
249
Reach 7
100 m
0 0.05 0.1 0.2 Miles
N
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	83	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	97	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	105	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	67	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	82	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	72	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	54	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	73	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	77	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	65	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	69	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
90	55.09004	-132.80044	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	153	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	81	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	125	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	128	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout			ID'ed and released

94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	120	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	93	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	96	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	104	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	5	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	74	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	93	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	115	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	100	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	86	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	116	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	102	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
94	55.09135	-132.79985	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	78	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	90	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released

105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	86	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	63	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	63	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	73	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
105	55.09514	-132.79390	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon			ID'ed and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released

113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	39	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	61	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	50	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	35	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released

113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	56	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	46	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	54	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	38	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
113	55.09825	-132.79453	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
117	55.09935	-132.79373	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
117	55.09935	-132.79373	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
117	55.09935	-132.79373	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	measured and released
117	55.09935	-132.79373	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
117	55.09935	-132.79373	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	measured and released
117	55.09935	-132.79373	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	127	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	56	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	106	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	58	measured and released
123	55.10141	-132.79186	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
125	55.08956	-132.80029	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	70	measured and released
125	55.08956	-132.80029	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
125	55.08956	-132.80029	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
125	55.08956	-132.80029	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	measured and released
125	55.08956	-132.80029	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	58	measured and released

125	55.08956	-132.80029	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	68	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	63	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	85	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	80	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	40	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	37	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released

255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	76	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	43	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	54	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	53	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	47	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	41	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	44	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
255	55.09275	-132.79700	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	48	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	73	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	103	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden			ID'ed and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released

258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	63	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon			ID'ed and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile		ID'ed and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	48	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	46	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	51	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	49	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	59	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	50	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	42	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	45	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
258	55.09196	-132.79708	WGS84	GPS	Dunbar Inlet	7/10/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	54	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	78	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	64	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	101	measured and released

333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	71	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	59	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	57	measured and released
333	55.10231	-132.79130	WGS84	GPS	Dunbar Inlet	7/17/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
9-3-14	Dunbar	Stream 2		478

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0	0	0	0	0	0	0
Intertidal	3	1	0	0	0	0	0	0	0	0
In Stream	2500	83	302	77	169	0	0	0	0	0
Riparian	0	44	0	22	0	0	0	0	0	0
TOTAL NUMBERS	2503	128	302	99	169					
Upper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt & Tony S	calm	overcast				no fish in Trib's 1 + 2.

Supplemental information for Dunbar Inlet Stream 1

Ten baited minnow traps were soaked for 2 to 5 hours in Stream 1 in Dunbar on June 23rd, June 25th and June 26th 2014. The attached figure shows the trap locations. This current nomination is to add the whole stream for pink and chum salmon spawning and present. It is also noted Dolly Varden and Rainbow trout were present in traps set in the stream. An ADFG fish trapping permit datasheet is attached to this nomination packet for further details on fish trapping efforts. Adult foot counts were performed on September 4th 2014 and adult pink salmon, chum salmon and Coho salmon were observed through reach 3 and were not present in reach 5 (see map for reach locations; adult foot count data sheets are attached).

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 1 on June 25th 2014. Data was taken on five reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). The stream survey data are in the following table:

	Reach 1	**Reach 2**
Average stream gradient	6.1	4.33
Average bankfull width	4.2	5.2
Average channel bed width	4.1	3.5
Average incision depth	0.74	0.6
Bank composition	Mixed	Mixed
Dominant substrate	Bedrock	Small Cobble
Sub-dominate substrate	Large Med. Boulder and Large Cobble	Large Cobble and Very course gravel
Large wood count	3	18
Key wood count	2	14
Macro-pool count	8	16

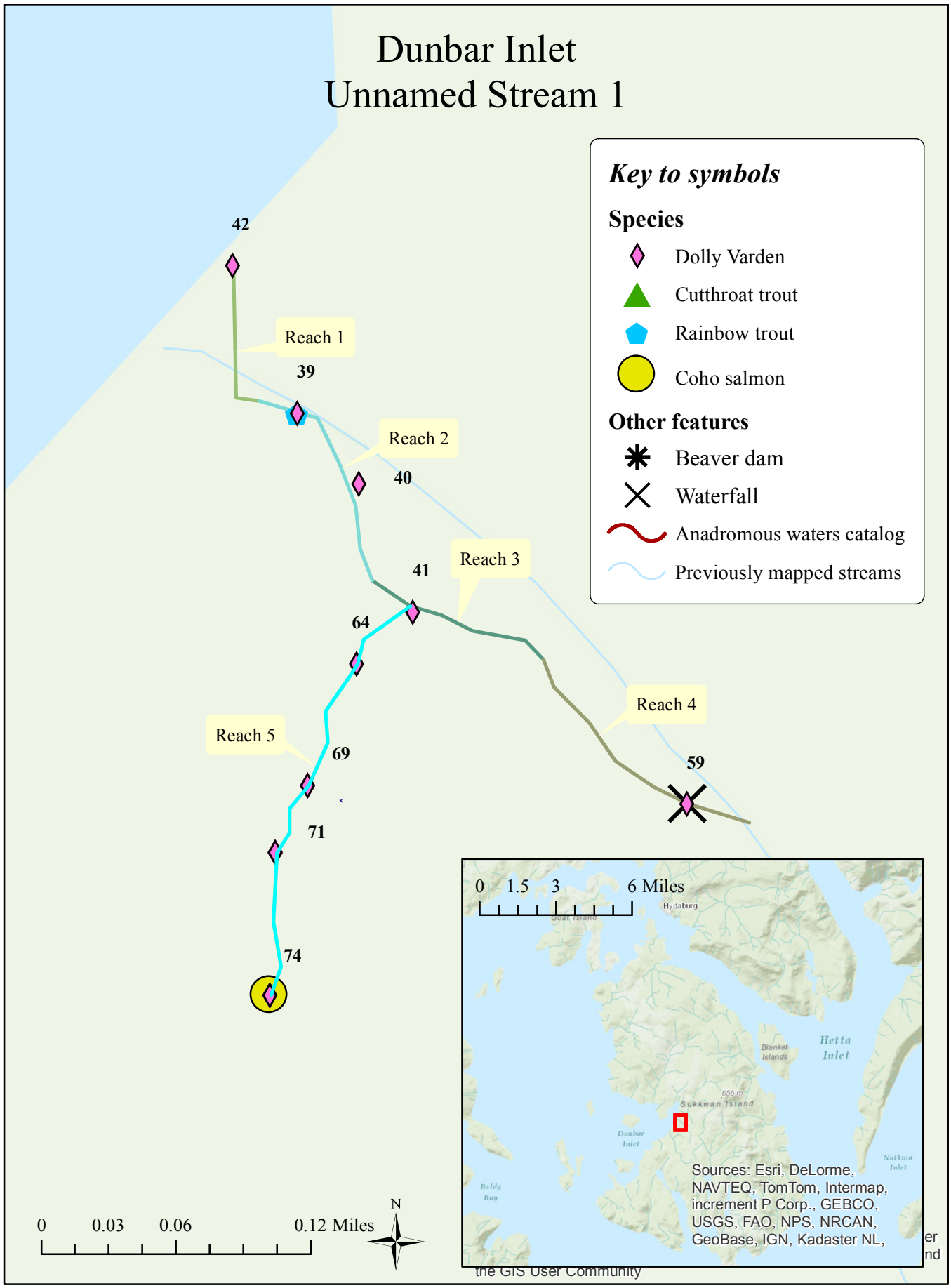
	Reach 3	**Reach 4**	**Reach 5**
Average stream gradient	11.8	9.15	8.3
Average bankfull width	7.8	4.6	1.8
.Average channel bed width	5.4	3.8	2.2
Average incision depth	0.82	0.83	0.25
Bank composition	Mixed	Mixed	Organic
Dominant substrate	Bedrock	Small cobble	Coarse gravel
Sub-dominate substrate	Large med. Boulder and Large cobble	Very coarse gravel and large cobble	Organic and very coarse gravel
Large wood count	11	28	40
Key wood count	7	8	33
Macro-pool count	14	30	39

Reach 1 was classified as MCS (Small Moderate Gradient Contained Channel), Reach 2 was Classified as MMS (Small Moderate Gradient Mixed Control Channel), Reaches 3 and 4 were classified as HCL (Low incision high gradient channel). At the top of Reach 4, the survey crew documented a waterfall at waypoint 59, with a barrier height of 6.1 meters, a pool depth of 0.4

meters and a 42.45% gradient. No fish were trapped above reach 4. Reach 5 was classified as HCO (Micro High Gradient Channel) and there were no anadromous fish trapped. The following pictures show the barrier in stream 1 reach 4.

Photo 1. Waterfall documented in Reach 4 in stream 1 in Dunbar Inlet.

Dunbar Inlet
Unnamed Stream 1



ADF&G permit no. SF2014-154

Summary report of fish collection activity.

The area biologist was contacted on: 6/9/14 at 10:35 a.m.

Location ID (optional)	Latitude	Longitude	Datum	Coordinate determination method	Name of water body	Date	Observer name (first name, middle initial, last name)	Fish collection method	Species	Life stage	Length (mm) No estimates/ranges	Disposition (1)
39	55.08568	-132.80960	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	96	measured and released
39	55.08568	-132.80960	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	measured and released
39	55.08568	-132.80960	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	92	measured and released
39	55.08568	-132.80960	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	73	measured and released
39	55.08568	-132.80960	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	84	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	110	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	104	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	100	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	112	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	116	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	90	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	93	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	85	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	77	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	100	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	84	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	93	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	90	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	92	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	70	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	100	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	84	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	82	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	90	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
40	55.08522	-132.80892	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	measured and released
41	55.08439	-132.80833	WGS84	GPS	Dunbar Inlet	6/23/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released

42	55.08664	-132.81031	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	measured and released
59	55.08313	-132.80528	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	101	measured and released
59	55.08313	-132.80528	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	measured and released
64	55.08406	-132.80897	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	55	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	61	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	measured and released
66	55.08398	-132.08907	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
69	55.08328	-132.80954	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	115	measured and released
69	55.08328	-132.80954	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	120	measured and released
69	55.08328	-132.80954	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	measured and released
69	55.08328	-132.80954	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	measured and released
69	55.08328	-132.80954	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	measured and released
71	55.08285	-132.80991	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	measured and released
71	55.08285	-132.80991	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	measured and released
71	55.08285	-132.80991	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	53	measured and released
71	55.08285	-132.80991	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
71	55.08285	-132.80991	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	measured and released
74	55.08193	-132.80999	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	measured and released
74	55.08193	-132.80999	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	59	measured and released
74	55.08193	-132.80999	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	measured and released
74	55.08193	-132.80999	WGS84	GPS	Dunbar Inlet	6/25/2014	Tony Sanderson	Minnow Trap	coho salmon	juvenile	74	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	140	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	133	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	145	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	90	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	70	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	110	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	109	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	76	measured and released

83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	95	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	113	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	105	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	69	measured and released
83	55.08992	-132.80544	WGS84	GPS	Dunbar Inlet	6/26/2014	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	74	measured and released

FISH ESCAPEMENT COUNTS

Hydaburg Cooperative Association Stream Habitat Surveys

Fish Habitat permit: SF2014-154 (various stream)

Date of Survey	Watershed	Stream/Tributary	Reach	Survey End GPS Point
9-4-14	DUNBAR	Stream 1		479

Index Area	Pink Salmon		Chum Salmon		Coho Salmon		Sockeye Salmon		Other	
	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass	Live	Carcass
Mount	0	0	0	0	0	0	0	0		
Intertidal	0	0	0	0	0	0	0	0		
In Stream	5	2	0	5	0	0	0	0		
Riparian		2		2	0	0	0	0		
OTAL NUMBERS	5	4	0	7	0	0	0	0		
pper GPS Point										

Observers	Wind	Weather	Water	Visibility	Bottom	Additional Comments
Kurt. E Tony. S	SE	Rain				No fish in TRB 7