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

Nomination Form
Anadromous Waters Catalog

Region: Southeast

USGS Quad(s): Craig A-2

Anadromous Waters Catalog Number of Waterway: 103-21-10180

Name of Waterway: Keete Inlet Unnamed Stream 2 lower

USGS Name Local Name

x Addition Deletion Correction Backup Information

For Office Use

Nomination #	14-508	Fisheries Scientist	4/25/14 Date
Revision Year:	2015	Habitat Operations Manager	4/25/14 Date
Revision to:	Atlas ____ Catalog ____ Both x	AWC Project Biologist	3/24/14 Date
Revision Code:	~~A~~, B-2, C-9	Cartographer	5/19/14 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	July 16, 2013		x		x
Rainbow trout	July 16, 2013			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 attached supplemental information.

This application was prepared by Cathy Needham, who may be reached at (907)723-4436 or cathy@kaienvironmental.com.

Update hydrography, reposition lower pt
add coho salmon rearing to stream ref 14-509

Name of Observer (please print): Tony Sanderson

Signature: Tony Sanderson Date: 1-9-14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349
Hydaburg, Alaska 99922

ALASKA DEPT. OF FISH & GAME
JAN 10 2014

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

02/08

Supplemental information for Keete Inlet Stream 2 below the lake

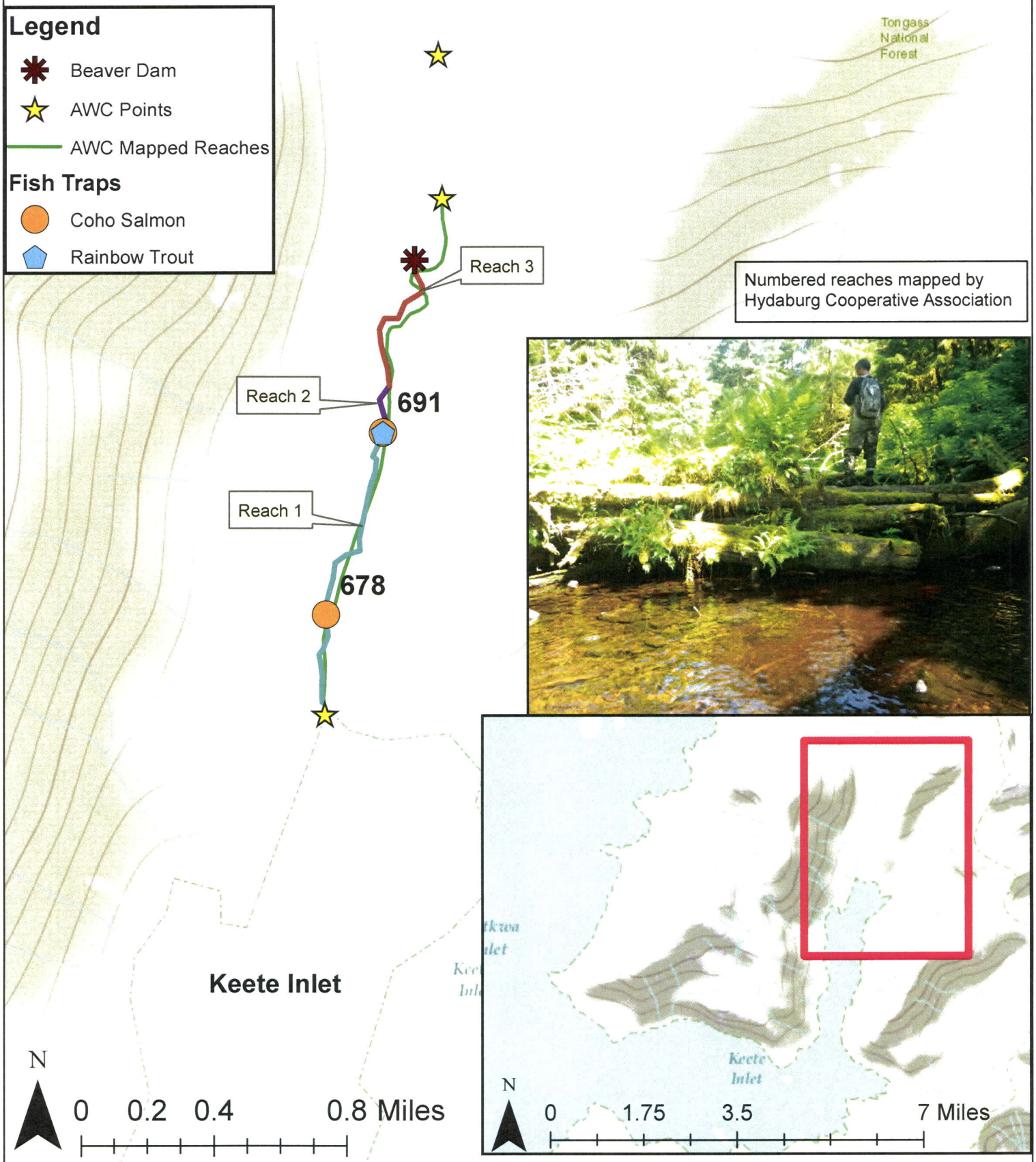
Three baited minnow traps were soaked for 2-4 hours in lower portion of Stream 2 in Keete Inlet on July 16, 2013. The attached figure shows the trap locations for the traps with anadromous fish. Stream 2 below the lake in Keete Inlet is listed in the Anadromous Waters Catalog (103-21-10180) for the presence of coho salmon, chum salmon and pink salmon. This current nomination is to include rearing coho salmon. It is also noted that 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.

Stream mapping and survey data was collected by the Hydaburg Cooperative Association Stream Survey crew for Stream 2 below the lake in Keete Inlet on July 16, 2013. Data was taken on 3 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	1.725	2.6	2.15
Average bankfull width	12.4	19.2	16.8
Average channel bed width	11.6	10.56	9.76
Average incision depth	0.58	0.65	0.57
Bank composition	Organic	Organic	Organic
Dominant substrate	Small cobble	Small cobble	Small cobble
Sub-dominate substrate	Large cobble and Very course gravel	Large cobble and Very course gravel	Large cobble and Very course gravel
Large wood count	109	62	175
Key wood count	17	3	52
Macro-pool count	28	4	10

Reach 1 was classified as FPM (moderate width low gradient floodplain), while Reaches 2 and 3 were classified as MCM (moderate gradient contained). In the upper portion of Reach 3, the stream crew documented a beaver dam (see attached figure). The dam had a barrier height of 1 meter with a pool depth of 0.75 meters and barrier gradient of 7%. The end of Reach 3 was the outlet of the lake, and anadromous fish were trapped in tributaries to the lake, therefore the beaver dam was not considered an impediment to fish passage. The picture below shows the beaver dam.

Keete Inlet
Unnamed Stream 2 Lower
July 16, 2013



Service Layer Credits: Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO,

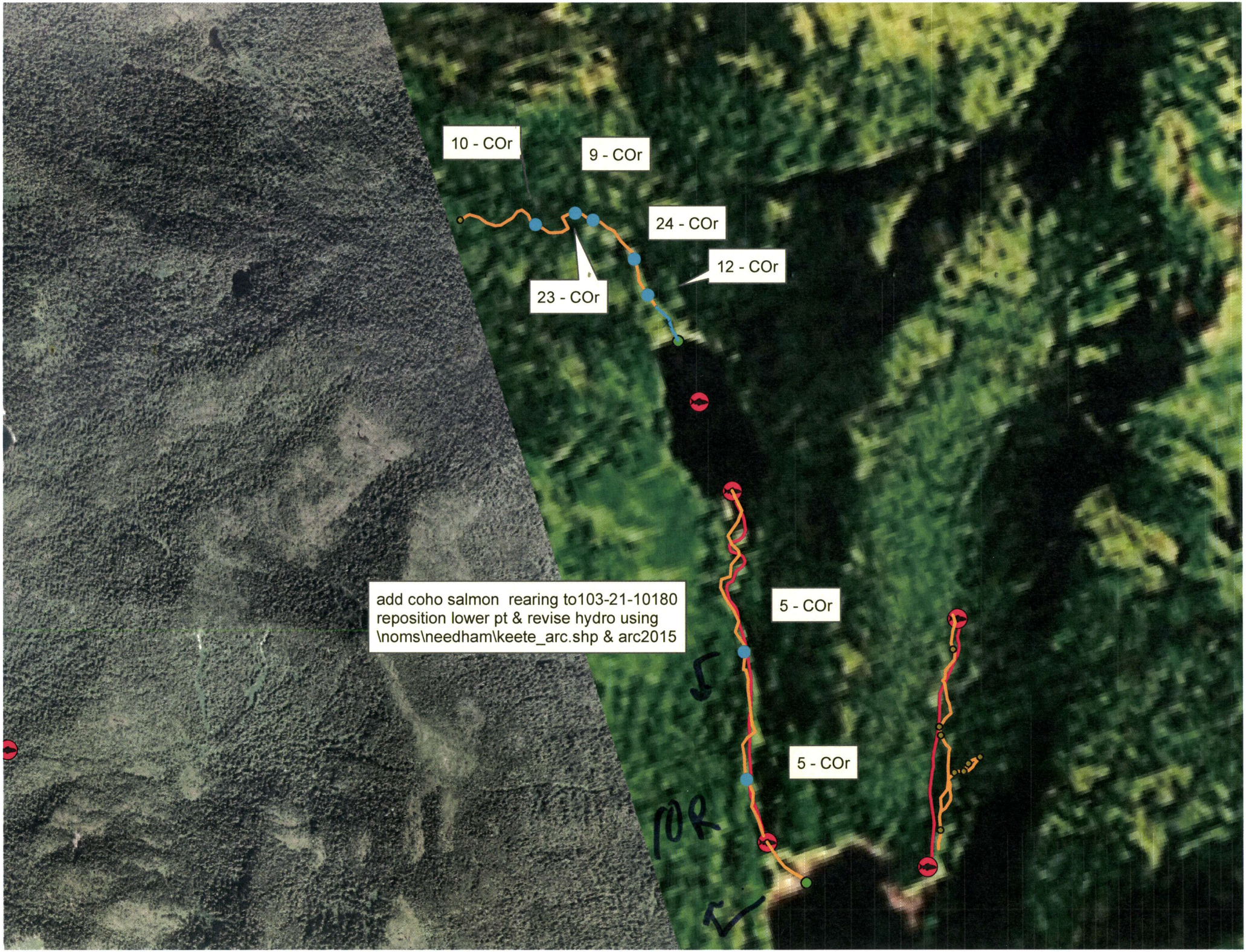
Date: 1/9/2014

ADF&G permit no. SF2013-208

Summary report of fish collection activity.

The area biologist was contacted on: 3:07pm on 5/29/13

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	Length method	Disposition (1)
678	55.08795298	-132.48603	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	fork	measured and released
678	55.08795298	-132.48603	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	69	fork	measured and released
678	55.08795298	-132.48603	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	61	fork	measured and released
678	55.08795298	-132.48603	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	71	fork	measured and released
678	55.08795298	-132.48603	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	fork	measured and released
678	55.08795298	-132.48603	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	101	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	145	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	120	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile			ID'ed and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	85	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	92	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	fork	measured and released
691	55.09248197	-132.483542	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	55	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	55	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	52	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	45	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	50	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	55	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	49	fork	measured and released
705	55.09569903	-132.482575	WGS84	GPS	Keete	7/16/2013	Tony Sanderson	Minnow Trap	stickleback-unspecified	juvenile	42	fork	measured and released


10 - COr
9 - COr
24 - COr
12 - COr
23 - COr
add coho salmon rearing to103-21-10180
reposition lower pt & revise hydro using
\noms\needham\keete_arc.shp & arc2015
5 - COr
5 - COr
10R