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

Nomination Form
Anadromous Waters Catalog

M E

Region: Southeast

USGS Quad(s): Craig A-2

Anadromous Waters Catalog Number of Waterway: 103-21-10250 -2020

Name of Waterway: Keete Inlet Unnamed Stream 4

USGS Name | Local Name

x Addition | Deletion | Correction | Backup Information

For Office Use

Nomination #	140038	[signature] Fisheries Scientist	4/25/14 Date
Revision Year:	2015	[signature] Habitat Operations Manager	4/25/14 Date
Revision to:	Atlas ____ Catalog ____ Both x	[signature] AWC Project Biologist	3/24/14 Date
Revision Code:	B-2, C-9, A-2d	[signature] Cartographer	5/21/14 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho salmon	6/18; 7/8; 8/2 of 2013		X	X	X
Dolly Varden	6/18; 7/8; 8/2 of 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 upper pt, add coho salmon rearing to 103-21-10250, add new stream 103-21-10250-2020 w/coho salmon rearing

Name of Observer (please print): Tony Sanderson

Signature: [signature] Date: 1-9-14

Agency: Hydaburg Cooperative Association

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

ALASKA DEPT. OF FISH & GAME
JAN 10 2014
Revision

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: _____

02/08

Supplemental information for Keete Inlet Stream 4

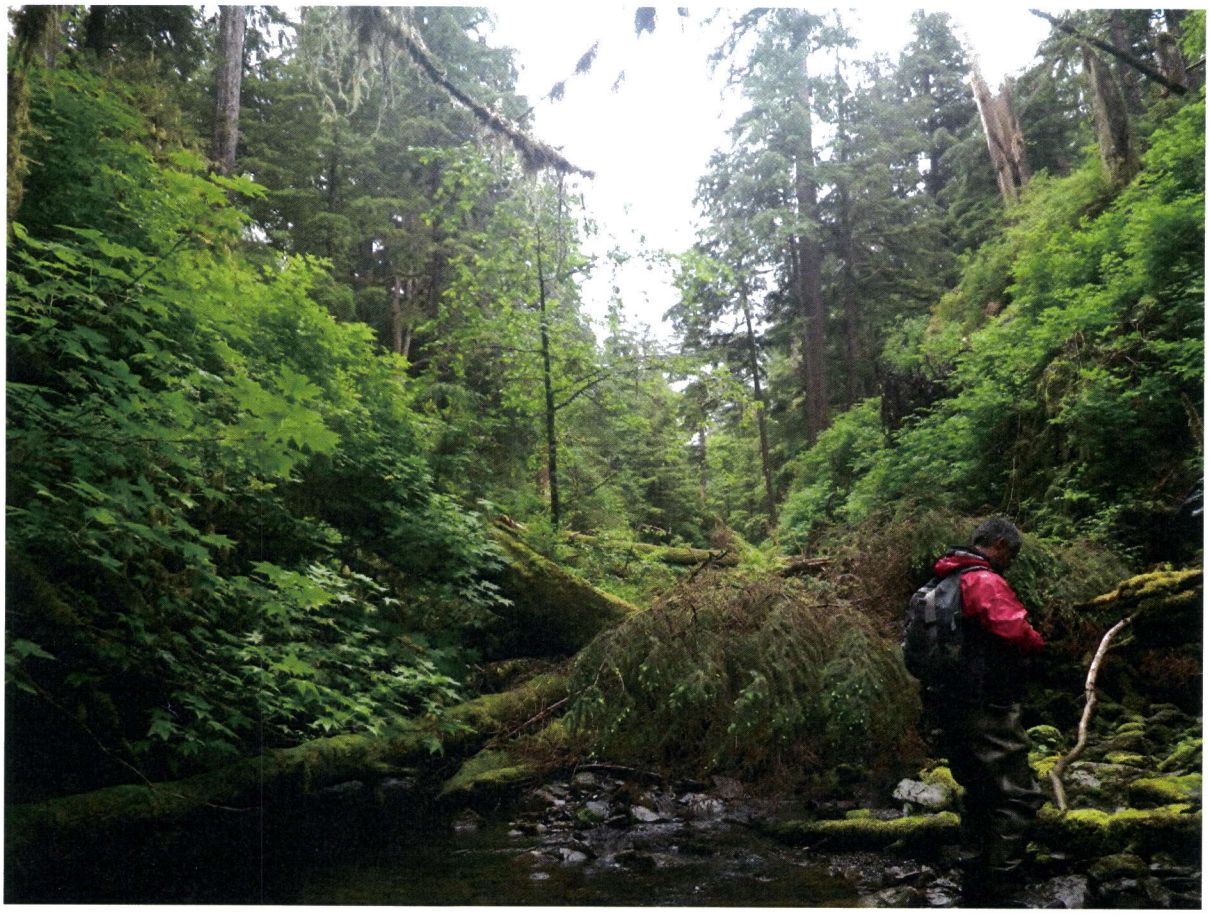
Eight baited minnow traps were soaked for 2-4 hours in Stream 4 in Keete Inlet on July 18, 2013. The attached figure shows the trap locations. Stream 4 in Keete Inlet is listed in the Anadromous Waters Catalog (102-31-10220) for the presence of coho and pink salmon. This current nomination is to include the rearing of coho salmon in previously mapped mainstem, as well as the presence and rearing of coho in a newly mapped tributary. It is also noted that rainbow trout and Dolly Varden were present in Stream 4. 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 4 on July 18, 2013. Data was taken on seven reaches (reach numbers in the tables correspond to a master dataset; see attached figure for locations). Reaches 1-4 were surveyed as part of the mainstem to the stream, and Reaches 5-7 are part of a tributary. The stream survey data are in the following tables:

	Reach 1	Reach 2	Reach 3	Reach 4
Average stream gradient	3.25	2.15	1.3	2.6
Average bankfull width	12.3	13.5	8.8	10.9
Average channel bed width	8.3	6.4	9.8	5.23
Average incision depth	0.6	0.8	0.74	0.75
Bank composition	Organic	Bedrock	Organic	Organic
Dominant substrate	Large cobble	Small cobble	Small cobble	Small cobble
Sub-dominate substrate	Small cobble and Very course gravel	Very course and course gravel	Very course and course gravel	Very course and course gravel
Large wood count	52	13	21	421
Key wood count	30	5	26	224
Macro-pool count	17	6	28	29

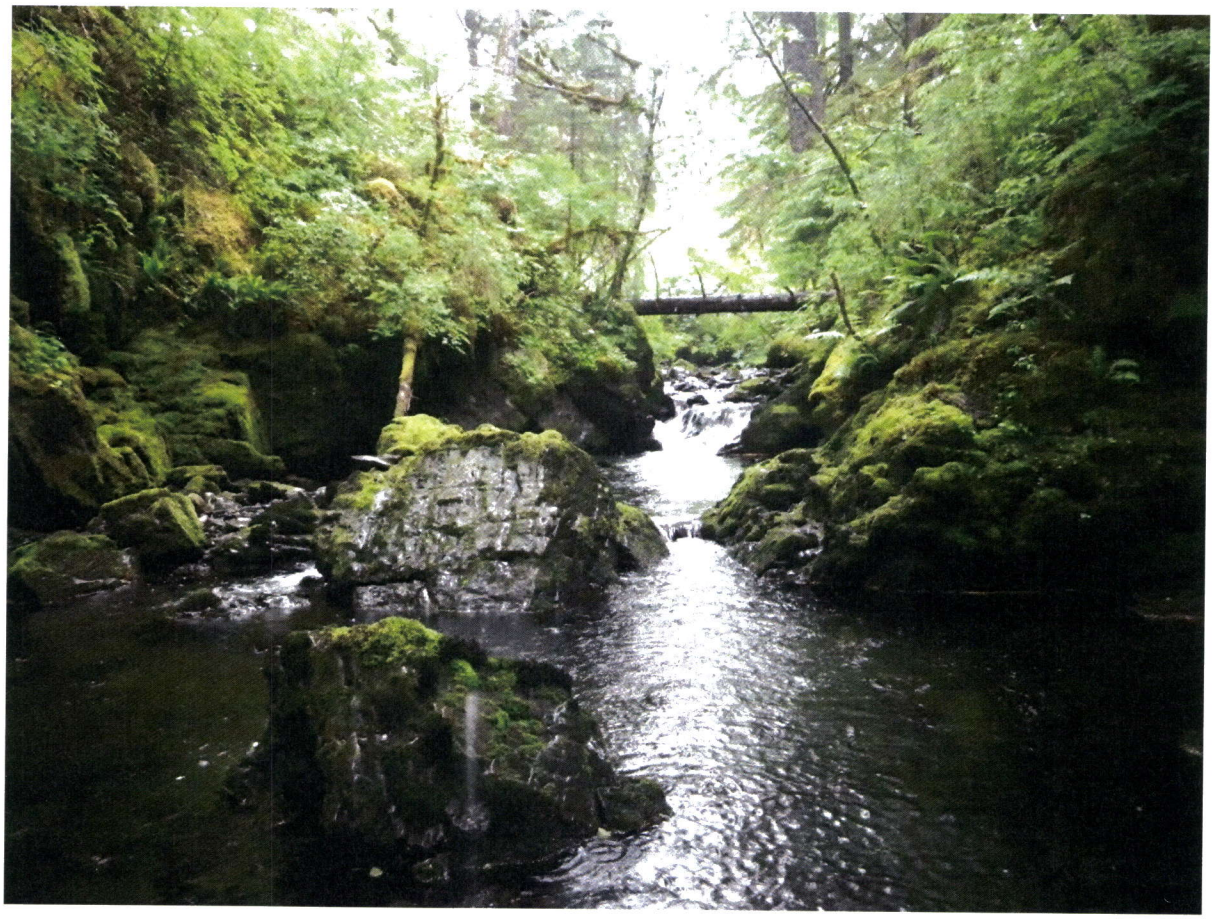
	Reach 5	Reach 6	Reach 7
Average stream gradient	3.45	9.675	8.725
Average bankfull width	4.7	6.3	2.6
.Average channel bed width	3.56	3.3	1.46
Average incision depth	0.52	0.54	0.37
Bank composition	Organic	Organic	Organic
Dominant substrate	Very course gravel	Very course gravel	Very course gravel
Sub-dominate substrate	Small cobble and Course gravel	Small cobble and Course gravel	Course gravel and small cobble
Large wood count	44	39	6
Key wood count	82	50	4
Macro-pool count	45	30	8

Reaches 1 and 2 were classified as MCM (moderate gradient contained). In Reach 1 the crew documented an area where a landslide occurred on the left bank (looking downstream) which created an obstruction in the stream channel (see picture below). Anadromous fish were trapped above this area, so the landslide is not considered an impediment to fish passage.



In Reach 2, a small waterfall was documented with a barrier height of 2 meters, a pool depth of 1 meter and a 19.4% gradient. Coho were documented above the waterfall, so it was not considered an impediment to fish passage. The following pictures shows the waterfall.

Reach 3 was classified as LCS (low gradient small contained channel), with no features documented by the stream crew. Reach 4 was classified as MMM (moderate gradient mixed control). Reach 4 has a tributary coming into it in the lower section, as well as a waterfall. While Reach 4 was mapped up to the end of the extent of the Anadromous Waters Catalog layer, and anadromous fish were found in trap 532 above the waterfall, the mapping layer was not available for this nomination package at the time of submittal. The documented waterfall had a barrier height of 1.5 meters, a pool depth of 1 meter and gradient of 5.2%. Coho salmon and Dolly Varden were trapped above the waterfall in trap 532, so the waterfall was not considered an impediment to fish passage. The following is a picture of the waterfall.



Reach 5 was classified as MMS (moderate gradient mixed control) and Reaches 6 and 7 were classified as HCL (high gradient contained). Coho salmon were trapped in Reach 5, but only Dolly Varden were found in Reach 6. The map layer for reach 7 was not available for this nomination packet. There were no features mapped in reaches 5-7 that would impede fish passage so the upper extent of anadromous reach was not determined.

Keete Inlet
Unnamed Stream 4
July and August 2013

Numbered reaches mapped by
Hydaburg Cooperative Association

Keete Inlet

220

Reach 1

Landslide

507

509

Reach 2

Waterfall

510

Reach 3

517

Waterfall

Reach 4

885

887

Reach 5

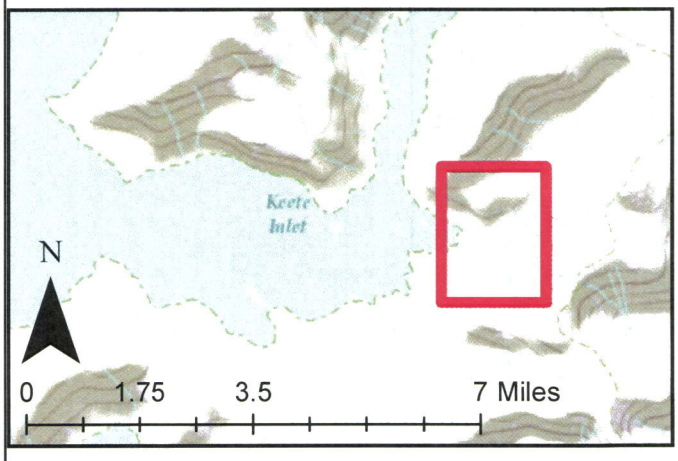
893

Reach 6

903

907

532



0 0.125 0.25 0.5 Miles

N

Legend

- Dolly Varden
- Rainbow Trout

Fish Traps

- Coho Salmon
- AWC Points
- AWC Mapped Reaches

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)
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	121	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	125	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	70	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	135	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	122	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	131	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	61	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	fork	measured and released
509	55.05240298	-132.472507	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	88	fork	measured and released
510	55.05244296	-132.471725	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	fork	measured and released

510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	fork	Unitended mortality
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	90	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	74	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	54	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	97	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile			ID'ed and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	68	fork	measured and released
510	55.05244296	-132.471725 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	60	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	96	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released

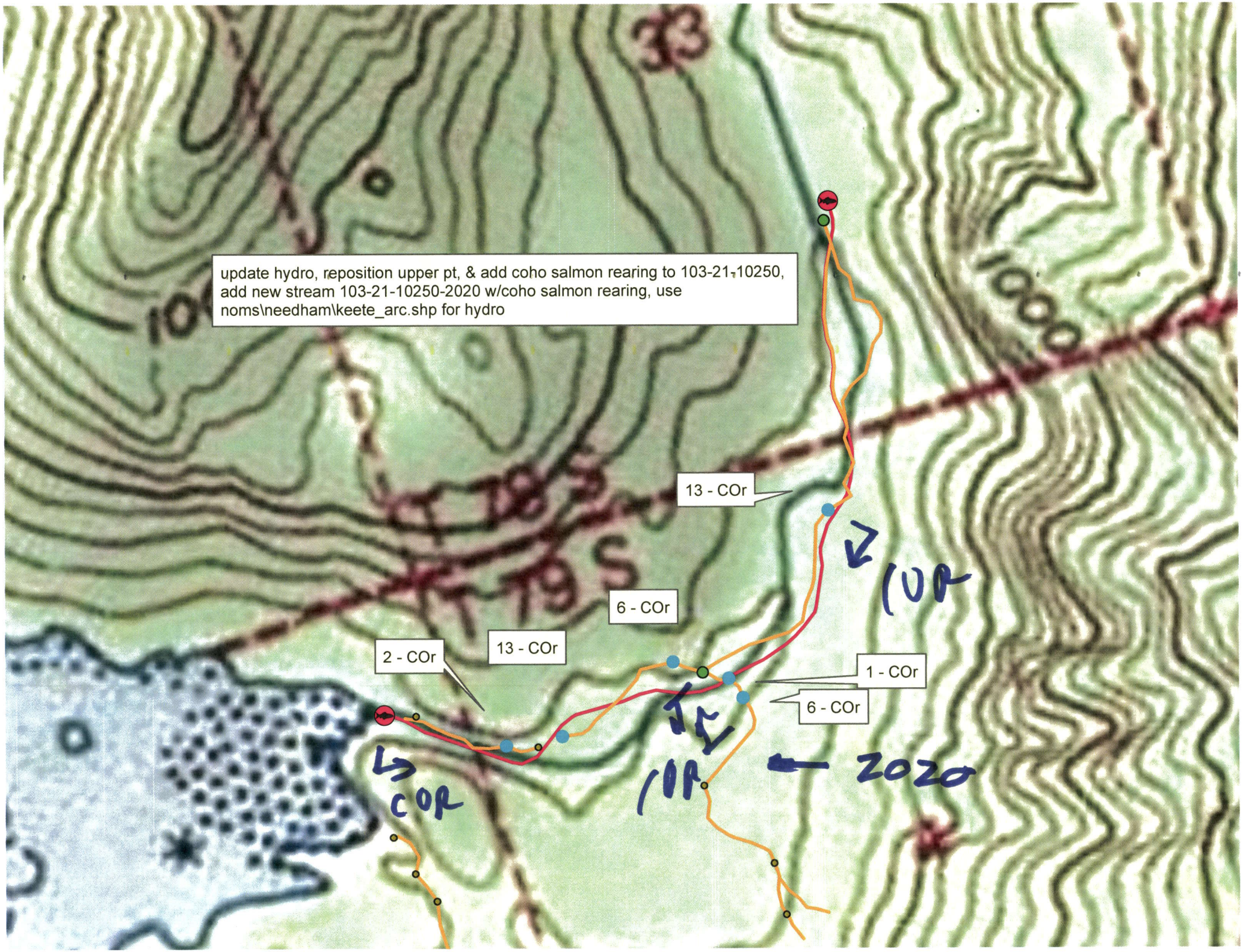
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	69	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	81	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	97	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	78	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	88	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	69	fork	measured and released
517	55.05304101	-132.467882 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	73	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile			ID'ed and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	62	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	55	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	50	fork	measured and released
532	55.05464698	-132.462035 WGS84	GPS	Keete	7/8/2013 Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released

532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile		ID'ed and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	63	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	102	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	65	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	62	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	58	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile		ID'ed and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	57	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	76	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	66	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork measured and released

532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	63	fork	measured and released
532	55.05464698	-132.462035	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	60	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile			ID'ed and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	144	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	74	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	87	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	83	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	77	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	71	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	67	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	fork	measured and released
220	55.053572	-132.475695	WGS84	GPS	Keete	6/18/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	140	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	115	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile			ID'ed and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	75	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile			ID'ed and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	91	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	70	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile			ID'ed and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	sculpin-unspecified	juvenile	80	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	80	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	rainbow trout	juvenile	75	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	fork	measured and released

507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
507	55.05259803	-132.473404	WGS84	GPS	Keete	7/8/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	78	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	85	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	120	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	92	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	72	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	90	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	82	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	89	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	105	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	100	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	82	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	75	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	103	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	87	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	65	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released
887	55.05207399	-132.466245	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released

893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	130	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	112	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	99	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	113	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	116	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	121	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	86	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	96	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	93	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	84	fork	measured and released
893	55.050868	-132.468183	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	81	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	160	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	155	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	113	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	111	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	106	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	70	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	111	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	66	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	80	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	71	fork	measured and released
903	55.04922003	-132.466932	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	102	fork	measured and released
907	55.048323	-132.467078	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	105	fork	measured and released
907	55.048323	-132.467078	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	110	fork	measured and released
907	55.048323	-132.467078	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	95	fork	measured and released
907	55.048323	-132.467078	WGS84	GPS	Keete	8/2/2013	Tony Sanderson	Minnow Trap	Dolly Varden	juvenile	72	fork	measured and released


update hydro, reposition upper pt, & add coho salmon rearing to 103-21-10250, add new stream 103-21-10250-2020 w/coho salmon rearing, use noms\needham\keete_arc.shp for hydro
13 - COr
6 - COr
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