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

Nomination Form
Anadromous Waters Catalog

M 4

Region: Southeast

USGS Quad(s): Craig B-3

Anadromous Waters Catalog Number of Waterway: 103-40-10350 - 2041

Name of Waterway: Natzuhini River

[X] USGS Name [X] Local Name

[X] Addition [ ] Deletion [ ] Correction [ ] Backup Information

For Office Use

Nomination #	140086	James J Hasbrouck Fisheries Scientist	9/3/2014 Date
Revision Year:	2015	Habitat Operations Manager	9/3/14 Date
Revision to:	Atlas ____ Catalog ____ Both X	AWC Project Biologist	5/30/14 Date
Revision Code:	C-9, A-2, B-2	TA Cartographer	9/16/2014 Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Coho Salmon	August 12-15, 2013		x		[x]
Dolly Varden	August 12-15, 2013			x	[ ]
					[ ]
					[ ]
					[ ]

Ref from #
14-087
14-089
14-090
14-085
14-088

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

ALASKA DEPT. OF FISH & GAME
MAY 19 2014

Revise hydrography for 103-40-10350 & add Coho salmon Rearing
Add new stream 103-40-10350-2041 w/ coho salmon Rearing

Name of Observer (please print): Tony Sanderson

Signature: [signature]

Date: 5/12/14

Agency: Hydaburg Cooperative Association

Address: P.O. Box 349
Hydaburg, Alaska 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

02/08

Supplemental information for Natzuhini River (Tributary 5)

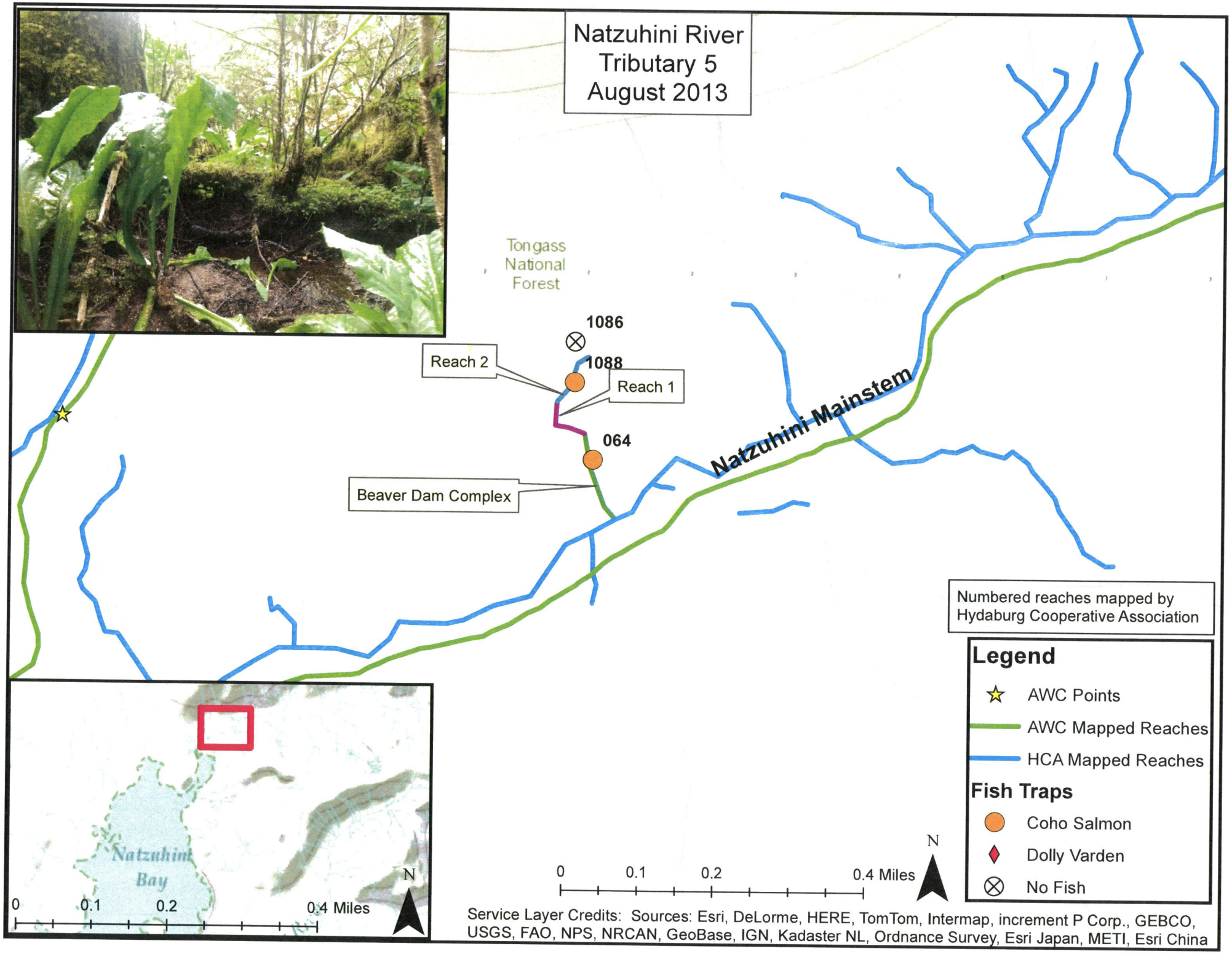
Three baited minnow traps, soaked for 40 minutes to 2 hours and 45 minutes, were set in this unnamed tributary of the Natzuhini River in August of 2013. The attached figures show the trap locations. This tributary to the Natzuhini River mainstem is not currently listed or mapped in the Anadromous Waters Catalog. This current nomination is to add an additional tributary to the mainstem as coho rearing habitat, as shown by the number of juvenile coho salmon caught throughout the survey area. 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 the Natzuhini River from August 12 – 15, 2013. Data was taken on two reaches in this tributary (reach numbers in the tables correspond to a master dataset; see attached figures for locations). Based on low water levels and a high stream gradient, the stream crew determined that they reached the upper extent of fish habitat and completed mapping this tributary to the Natzuhini River. Photo 1 shows low water conditions near the upper extent of Reach 2. In addition to two reaches mapped there was a beaver dam complex which the crew passed through, but took limited data in. Stream survey data taken are included in the following table:

	Reach 1	**Reach 2**
Average stream gradient	3.9	12.7
Average bankfull width	1.3	1.8
Average channel bed width	1.8	0.933
Average incision depth	0.4	0.47
Bank composition	Organic	Organic
Dominant substrate	SS	Coarse Gravel
Sub-dominate substrate	Organic	Very Coarse Gravel
Large wood count	16	0
Key wood count	13	3
Macro-pool count	13	0

Both of the reaches were classified as a MM1 (small moderate gradient mixed control channel). The beaver dams documented prior to Reach 1 were 0.65 and 0.95 meters in height. As coho salmon were trapped above these dams, they are not a barrier to fish passage.

Photo 1: Low water levels near the top of Reach 2.


Natzuhini River
Tributary 5
August 2013
Tongass
National
Forest
1086
1088
Reach 2
Reach 1
064
Beaver Dam Complex
Natzuhini Mainstem
Numbered reaches mapped by
Hydaburg Cooperative Association
Legend
AWC Points
AWC Mapped Reaches
HCA Mapped Reaches
Fish Traps
Coho Salmon
Dolly Varden
No Fish
Natzuhini
Bay
0
0.1
0.2
0.4 Miles
N
Service Layer Credits: Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO,
USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China

ADF&G permit no. SF2013-208

Summary report of fish collection activity.

The area biologist was contacted on: 3:09pm on 5/29/13

GPS Unit #	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)
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	60	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	60	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	65	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	45	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	60	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile		fork	ID'ed and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	45	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	50	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	70	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	55	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	55	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	55	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	60	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	55	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	50	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	45	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	stickleback-unspecified	juvenile	60	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	Dolly Varden	juvenile	95	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	Dolly Varden	juvenile	85	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	60	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	65	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile		fork	ID'ed and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	85	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	65	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	95	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile		fork	ID'ed and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released

1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released
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1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	80	fork	measured and released
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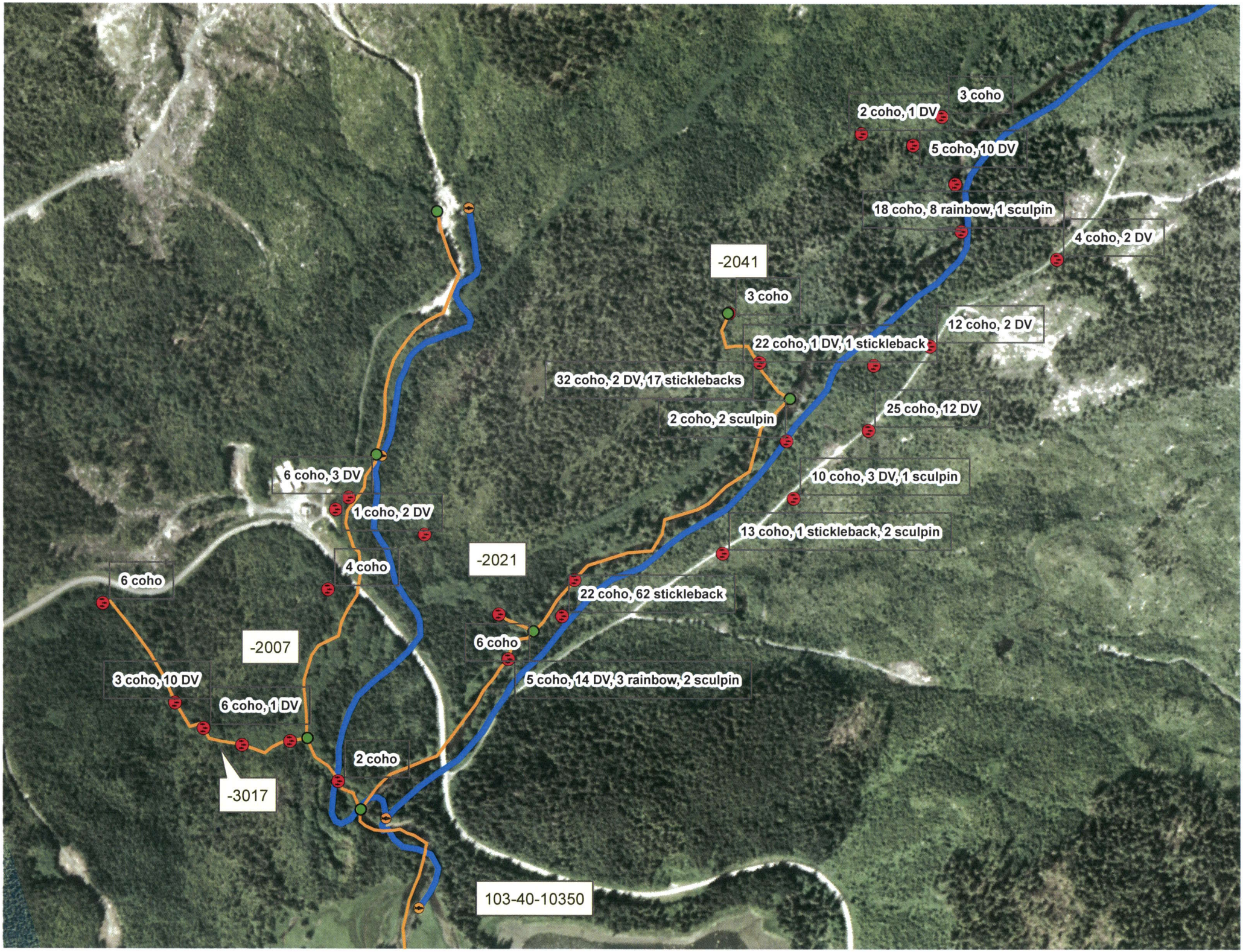
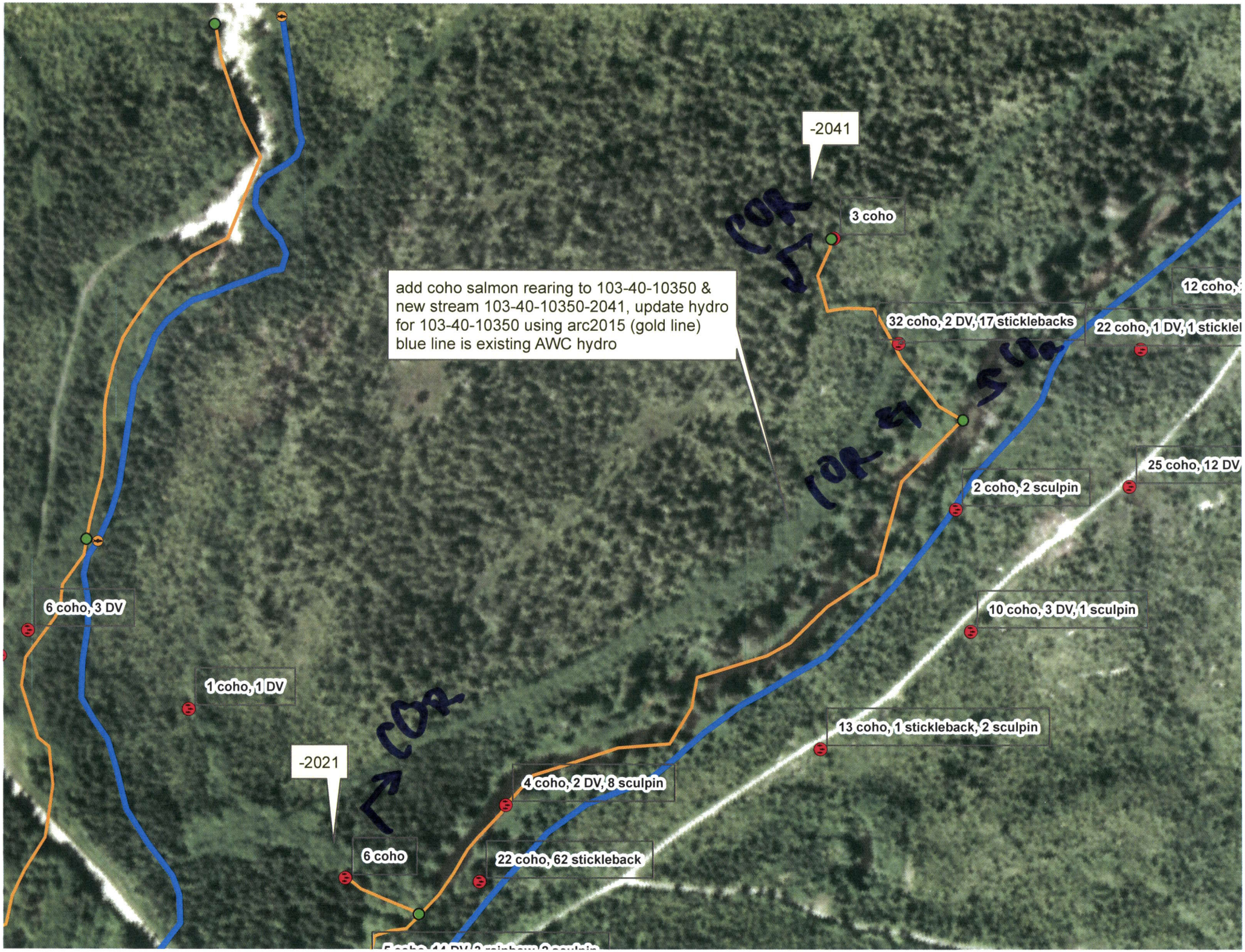
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	65	fork	measured and released
1	64	55.287812	-132.816772	WGS84	GPS	Natzuhini	8/12/2013	Cathy Needham	Minnow Trap	coho salmon	juvenile	75	fork	measured and released
2	1088	55.288658	-132.817131	WGS84	GPS	Natzuhini	8/15/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	70	fork	measured and released
2	1088	55.288658	-132.817131	WGS84	GPS	Natzuhini	8/15/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	83	fork	measured and released
2	1088	55.288658	-132.817131	WGS84	GPS	Natzuhini	8/15/2013	Tony Sanderson	Minnow Trap	coho salmon	juvenile	52	fork	measured and released
2	1086	55.289101	-132.817125	WGS84	GPS	Natzuhini	8/15/2013	Tony Sanderson	Minnow Trap	no fish collected or observed	juvenile	48	fork	measured and released


3 coho
2 coho, 1 DV
5 coho, 10 DV
18 coho, 8 rainbow, 1 sculpin
4 coho, 2 DV
-2041
3 coho
12 coho, 2 DV
22 coho, 1 DV, 1 stickleback
32 coho, 2 DV, 17 sticklebacks
2 coho, 2 sculpin
25 coho, 12 DV
6 coho, 3 DV
10 coho, 3 DV, 1 sculpin
1 coho, 2 DV
13 coho, 1 stickleback, 2 sculpin
-2021
4 coho
6 coho
22 coho, 62 stickleback
-2007
6 coho
3 coho, 10 DV
5 coho, 14 DV, 3 rainbow, 2 sculpin
6 coho, 1 DV
2 coho
-3017
103-40-10350


-2041
3 coho
add coho salmon rearing to 103-40-10350 &
new stream 103-40-10350-2041, update hydro
for 103-40-10350 using arc2015 (gold line)
blue line is existing AWC hydro
32 coho, 2 DV, 17 sticklebacks
22 coho, 1 DV, 1 stickle
12 coho,
25 coho, 12 DV
2 coho, 2 sculpin
10 coho, 3 DV, 1 sculpin
13 coho, 1 stickleback, 2 sculpin
6 coho, 3 DV
1 coho, 1 DV
-2021
4 coho, 2 DV, 8 sculpin
6 coho
22 coho, 62 stickleback