Appendix F: Haines

Guide to direct fieldwork for cataloging anadromous water bodies in Southeast Alaska

Alaska Department of Fish and Game

Division of Habitat



Symbols and Abbreviations

K Chinook salmon
CH chum salmon
CO coho salmon

CT cutthroat trout (anadromous and resident juveniles and adults)

DV Dolly Varden char

OU eulachon

S sockeye salmon P pink salmon

RT rainbow trout (unknown juvenile or resident adult)

SC sculpin sp.

SH steelhead trout (adult)
SB threespine stickleback

s spawning
r rearing
p presence
EF electrofish

VI visual identification

HN handnet
RS route survey
MT minnow trap
BS beach seine
FN fyke net

(ginger pink) route correction

(apatite blue) addition

(solar yellow) future investigation

(poinsettia red) resident fish
(lepidolite lilac) conveyance
(electron gold) deletion
(lapis lazuli) AWC

(lapis lazuli) overflow channel

* (electron gold) barrier

This appendix is a working document updated as new information is acquired. Figures and tables are numbered per water body. Pages numbers are eliminated to prevent document reprinting when individual pages are inserted or removed.

HAINES STREAM SURVEYS

The Haines Borough is about 2,318.6 square miles with the community of Haines located on the Chilkat Peninsula between the Chilkoot and Chilkat River drainages which flow into Northern Lynn Canal. The 2010 census documents 2,508 people living in City and Borough of Haines. The Haines Highway begins at Main and Lutak streets and extends 39.72 miles to the border. The Porcupine Creek Road is accessed by the 26 Mile steel bridge and provides access to the Porcupine and Tsirku River locations. The Kelsall drainage and Mosquito Lake are accessed from Mile 24 of the Haines Highway on Mosquito Lake Road (Figure 1).

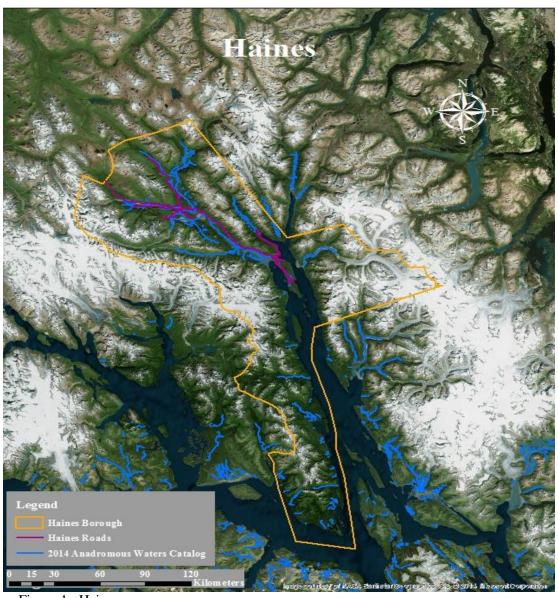


Figure 1.—Haines survey map.

¹ U.S. Census Bureau. 2010. Borough/Census area maps for Haines Borough. 2010 Census: Alaska demographic profiles. Retrieved from: http://labor.alaska.gov/research/census/borcamaps/5_9_0map.pdf (Accessed August 26, 2013).

² U.S. Census Bureau. 2010. Demographic profile for Haines Borough. 2010 Census: Alaska demographic profiles. Retrieved from: http://live.laborstats.alaska.gov/cen/dp.cfm. (Accessed August 15, 2013).



115-32-10120 CORRECTION

Water body name: Moose Meadows Creek
Water body number: 115-32-10120
Species & Lifestage: COr, CTsr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C032S060E **Quad:** Skagway A-1

Findings: Moose Meadows Creek meanders through the forest with rearing coho throughout (Table 1). One rearing Chinook salmon was caught in the lower reach of the creek. This route of

Moose Meadows Creek differs from that illustrated in the AWC.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 12-543

Table 1.-115-32-10120 survey data.

		20 survey data.	Notes	Commis Effect	Commis Desuite
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
65	59.1309	-135.3797	Mouth of creek going into		
			ocean/river. The tide is low		
			so we are starting track at high		
			water line.		
66	59.1303	-135.3780	This is where foot trail		
			crosses creek. There is no		
			bridge or culvert here, the		
			trail just runs through creek.		
67	59.1302	-135.3780	Electrofished got 1 K and 1	EF	1 K, 1 CT
			CT about 45mm.		
68	59.1301	-135.3766	Electrofished got 1 CT about	EF	1 CT
			70mm.		
69	59.1301	-135.3759	Electrofished and got 1 CO	EF	1 CO, 1 CT
			about 40mm and 1 CT about		
			85mm.		
70	59.1304	-135.3743	Foot trail bridge crosses		
0.7	70.1207	105.05.10	creek.	-	1 577 66
87	59.1305	-135.3740	Electrofished and caught 1 DV	EF	1 DV, SC
0.0	7 0.4 0 0.5	105.0504	and several SC.	-	4 CT CC
88	59.1306	-135.3736	Electrofished, caught 1 CT	EF	1 CT, SC
00	TO 1205	105.0505	and several SC.	-	1 00 1 00
89	59.1307	-135.3735	Electrofished, caught 1 CO	EF	1 CO, 1 CT
			about 85mm and 1 ginormous		
			CT female that is ready to		
0.0	TO 1205	105.0501	spawn.	-	1.00
90	59.1307	-135.3731	Electrofished, caught 1 CO	EF	1 CO
0.1	50 1005	105.0504	about 65mm.	DD.	2.00
91	59.1307	-135.3724	Electorfished, caught 2 CO	EF	2 CO
0.2	50 1001	105.0510	between 60-70mm.		
92	59.1304	-135.3718	Tributary enters on river left.	DD.	1 DV 1 00
111	59.1304	-135.3712	Electrofished, caught 1 DV	EF	1 DV, 1 SC
			and 1 SC.		

Table 2.—Continued.

Table 2	-Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
112	59.1303	-135.3710	Electrofished, caught 1 DV	EF	1 DV, 2 SC
			and 2 SC.		
113	59.1303	-135.3708	Electrofished, caught 1 CO	EF	1 CO
			about 64mm.		
114	59.1300	-135.3697	Electrofished, caught 1 CO	EF	1 CO, 1 CT, 1 SC
			about 65mm, 1 CT about		
			75mm and 1 SC.		
115	59.1299	-135.3692	Electrofished, caught 1 CO	EF	1 CO
			about 60mm.		
116	59.1297	-135.3683	Electrofished, caught 2 CT.	EF	2 CT
117	59.1298	-135.3679	Electrofished, caught 1 CT.	EF	1 CT
118	59.1296	-135.3677	Tributary enters on river left.		
169	59.1297	-135.3677	Electrofished and caught 1 DV	EF	1 DV, 2 CT, 2 SC
			about 30mm, 2 CT between 55-		
			60mm and 2 SC.		
170	59.1297	-135.3673	1 CT about 110mm.	EF	1 CT
171	59.1294	-135.3667	1 CT about 95mm and 1 SC.	EF	1 CT, 1 SC
172	59.1293	-135.3665	Spot where stream goes under	EF	1 CT
			trail bridge. Captured 1 CT		
			about 40mm.		
173	59.1293	-135.3663	Electrofished, 1 DV about	EF	1 DV, 3 CT
			65mm and 3 CT between 45-		
			110mm.		
174	59.1294	-135.3657	Tributary enters on river left.		
182	59.1295	-135.3656	1 DV about 65mm and 4 CT	EF	1 DV, 4 CT
			between 40-60mm.		
183	59.1295	-135.3653	3 CT between 50-60mm.	EF	3 CT
184	59.1299	-135.3652	Gradient increases, but will		
			continue to fish our way		
			upstream, no apparent		
			barriers.		
185	59.1315	-135.3647	Calling it the top, likely well		
			above anadromous habitat		
			although habitat quality		
			remains good. We attempted		
			fishing several nice pools and		
			haven't caught anything for		
			quite a while.		

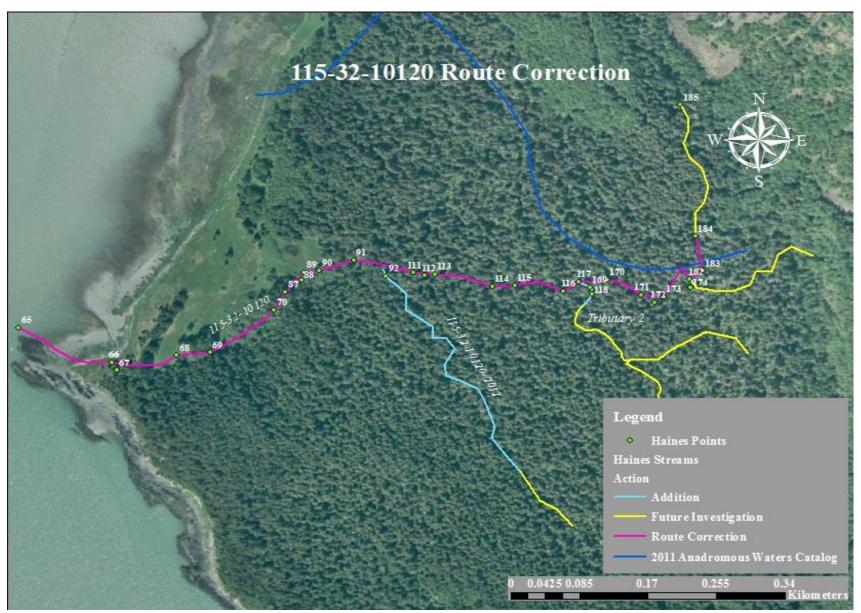


Figure 1.–115-32-10120 route correction map.



115-32-10120 ADDITION

Water body name: Survey date: 7/11/2012 Water body number: 115-32-10120 Tributary 2 Species & Lifestage:

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C032S060E **Quad:** Skagway A-1

Findings: We surveyed this uncataloged tributary to Moose Meadows Creek using a backpack electrofisher and a GPS (Table 1). We captured rearing coho salmon, cutthroat trout, and Dolly

Varden char in this small stream (Figure 1).

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: Not Accepted, not enough anadromous fish.

Table 1.–115-32-10120 tributary 2 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
118	59.1296	-135.3677	Tributary enters on river left.		
148	59.1295	-135.3680	Electrofished, caught 1 CO	EF	1 CO, 1 CT
			about 65mm and 1 CT about		
			85mm.		
149	59.1293	-135.3682	Electrofished, caught 1 CT.	EF	1 CT
150	59.1292	-135.3681	Electrofished, caught 3 CT, 2	EF	3 CT, 2 DV
			DV.		
151	59.1291	-135.3678	Electrofished, caught 1 CT, 1	EF	1 CT, 1 DV
			DV.		
152	59.1290	-135.3676	Electrofished, caught 1 DV.	EF	1 DV
153	59.1287	-135.3675	Trail crossing, bridge.		
154	59.1287	-135.3675	Tributary of a tributary enters		
			on river right.		



Figure 1.-Juvenile coho salmon captured in Moose Meadows Creek tributary 2.

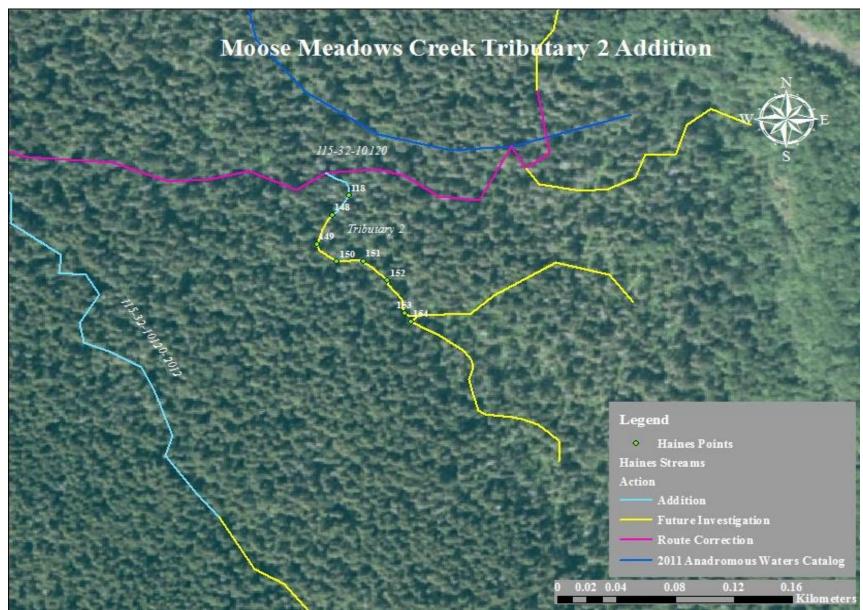


Figure 2.–Moose Meadows Creek tributary 2 addition map.

115-32-10120-2012

ADDITION

Water body name: Survey date: 7/11/2012 Water body number: 115-32-10120-2012 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C032S060E Quad: Skagway A-1

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We

captured rearing coho salmon, cutthroat trout, and Dolly Varden char in this small stream.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-544

Table 1.–115-32-10120-2012 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
92	59.1304	-135.3718	Tributary enters on river left.		
93	59.1300	-135.3716	Electrofished and caught 1	EF	1 DV, 1 CT, 1 SC
			DV, 1 CT and 1 SC.		
94	59.1297	-135.3712	Electrofished and caught 1 DV	EF	1 DV, 1 SC
			and 1 SC.		
95	59.1296	-135.3713	Electrofished and caught 2	EF	2 DV
			DV.		
96	59.1295	-135.3710	Stream disappears under		
			rootwad. Dry, but very muddy		
			channel for about 15' then		
			resurfaces, possible barrier.		
97	59.1294	-135.3709	Electrofished and caught 1 CO	EF	1 CO
			about 80mm.		
98	59.1292	-135.3712	Electrofished, caught 1 DV.	EF	1 DV
99	59.1291	-135.3712	Electrofished, caught 2 DV.	EF	2 DV
100	59.1290	-135.3710	Electrofished, caught 1 DV.	EF	1 DV
101	59.1288	-135.3707	Electrofished, caught 1 DV.	EF	1 DV
102	59.1287	-135.3706	Electrofished, caught 2 DV	EF	2 DV, 1 SC
			and 1 SC.		
103	59.1284	-135.3706	Electrofished, caught 1 DV.	EF	1 DV
104	59.1282	-135.3707	Electrofished, caught 2 DV.	EF	2 DV
105	59.1279	-135.3705	Trail crossing, bridge.		
106	59.1278	-135.3704	Electrofished, caught 1 CO.	EF	1 CO
107	59.1278	-135.3703	Electrofished, caught 1 DV.	EF	1 DV
108	59.1270	-135.3696	End of tributary, branches,		
			both branches are pretty		
			piddly, a little marshy, calling		
			it the end, haven't caught a fish		
			in a while.		

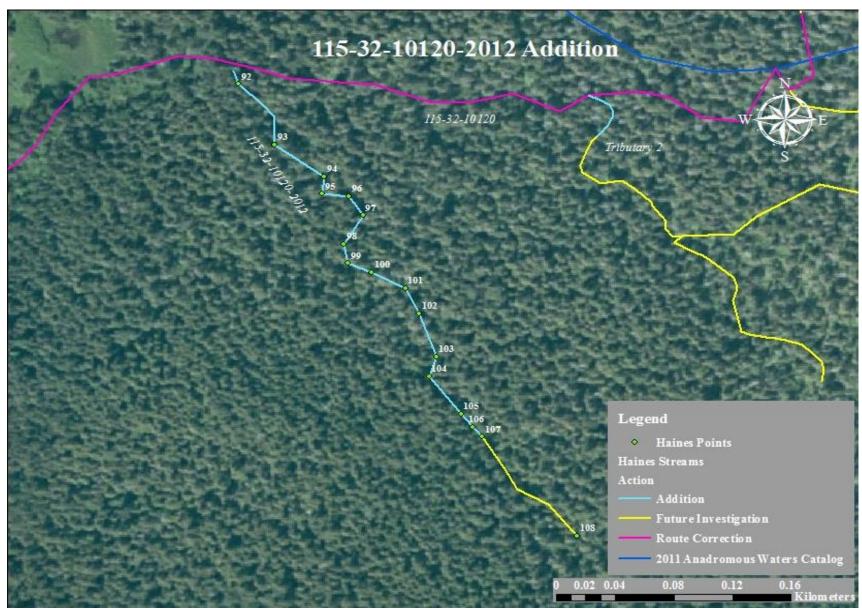


Figure 1.–115-32-10120-2012 addition map.

115-32-10230 CORRECTION

Water body name: Cannery Creek
Water body number: 115-32-10230
Species & Lifestage: COr, DVr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C031S060E **Quad:** Skagway A-2

Findings: We surveyed Cannery Creek using a backpack electrofisher, handnet, and a GPS (Table 1). Cannery Creek flows through two culverts that may be restricting fish passage. The downstream culvert only passes fish at high tides, while the series of culverts upstream had a debris jam (Figures 1, 2). Dolly Varden char and cutthroat trout were abundant all the way up to the headwaters in this system (Figure 3).

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 4).

Nomination: 12-551

Table 1.–115-32-10230 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.1722	-135.3885	Mouth of Cannery Creek.		
2	59.1713	-135.3878	Floating dock. Water is		
			disconnected now, but will		
			reconnect at high tide.		
3	59.1710	-135.3874	Culvert damaged in center.	HN	3 CO
			Might be a fish barrier or in		
			intertidal zone so fish might be		
			able to pass occasionally.		
			Handnetted 3 juvenile CO in		
			pool below culvert.		
4	59.1708	-135.3873	Inlet of culvert is rusting out		
			and water is going under		
			culvert. Does not seem to		
			allow fish to pass.		
5	59.1706	-135.3871	Handnetted 1 juvenile DV.	HN	1 DV
6	59.1702	-135.3858	Electrofished 1 CO about	EF	1 CO
			80mm. Double road culvert.		
7	59.1702	-135.3856	Inlet of both culverts. Culverts		
			are blocked with woody		
			debris. Restricted flow. We		
			cleared one culvert. Flow is		
			now unrestricted through one		
			culvert.		
8	59.1702	-135.3854	Electrofished 1 CO about	EF	1 CO
			108mm.		
9	59.1702	-135.3851	Electrofished 1 DV about	EF	1 DV
			85mm.		<u> </u>

Table 1.—Continued.							
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results		
10	59.1706	-135.3840	Creek becomes marshy and spread out. Horsetail and skunk cabbage.				
11	59.1711	-135.3813	End of marsh area. Stream rechannelizes.				
12	59.1712	-135.3813	Electrofished 4 DV about 35-45mm.	EF	4 DV		
13	59.1710	-135.3802	Electrofished 1 CT about 160mm and 1 SB about 35mm.	EF	1 CT, 1 SB		
14	59.1707	-135.3798	Electrofished 1 DV about 60mm.	EF	1 DV		
15	59.1705	-135.3796	Electrofished 3 DV about 55-65mm and 1 CT about 60mm.	EF	3 DV, 1 CT		
16	59.1704	-135.3791	Electrofished 1 CT about 64mm and 1 dead DV in a pool.	EF	1 CT, 1 DV		
17	59.1703	-135.3789	Electrofished 2 CT about 75 and 58mm.	EF	2 CT		
18	59.1699	-135.3787	Electrofished 2 CT about 180 and 60mm and 1 DV about 70mm.	EF	2 CT, 1 DV		
19	59.1697	-135.3782	Electrofished 5 CT between 60-180mm.	EF	5 CT		
20	59.1697	-135.3778	Electrofished 1 CT.	EF	1 CT		
21	59.1696	-135.3775	Electrofished 3 CT between 50-140mm.	EF	3 CT		
22	59.1695	-135.3771	Electrofished 2 CT between 60-70mm.	EF	2 CT		
23	59.1693	-135.3766	Electrofished 1 DV about 65mm and 1 CT about 130mm.	EF	1 DV, 1 CT		
24	59.1691	-135.3762	Electrofished 1 DV about 35mm.	EF	1 DV		
25	59.1692	-135.3755	Electrofished 2 DV between 25-100mm and 1 CT about 60mm.	EF	3 DV, 1 CT		
26	59.1689	-135.3749	Electrofished 1 CT about 85mm, 1 DV and 70mm.	EF	1 DV, 1 CT		
59	59.1685	-135.3727	Electrofished 1 CT about 55mm.	EF	1 CT		
60	59.1684	-135.3723	Electrofished 1 CT about 95mm.	EF	1 CT		
61	59.1682	-135.3716	Electrofished 1 CT about 80mm and 1 DV about 65mm.	EF	1 DV, 1 CT		

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
62	59.1680	-135.3699	Electrofished 1 DV about	EF	1 DV
			50mm.		
63	59.1678	-135.3698	Electrofished 1 CT about	EF	1 CT
			115mm.		
64	59.1680	-135.3665	Calling it the top of tributary.		
			Water is still trickling though		
			the moss. Substrate is mud		
			with small woody debris.		



Figure 1.—Culvert filled with debris, restricting flow (WPT# 7).



Figure 2.—Perched and damaged culvert near mouth of Cannery Creek (WPT# 3)



Figure 3.—Tess Quinn surveying Cannery Creek.

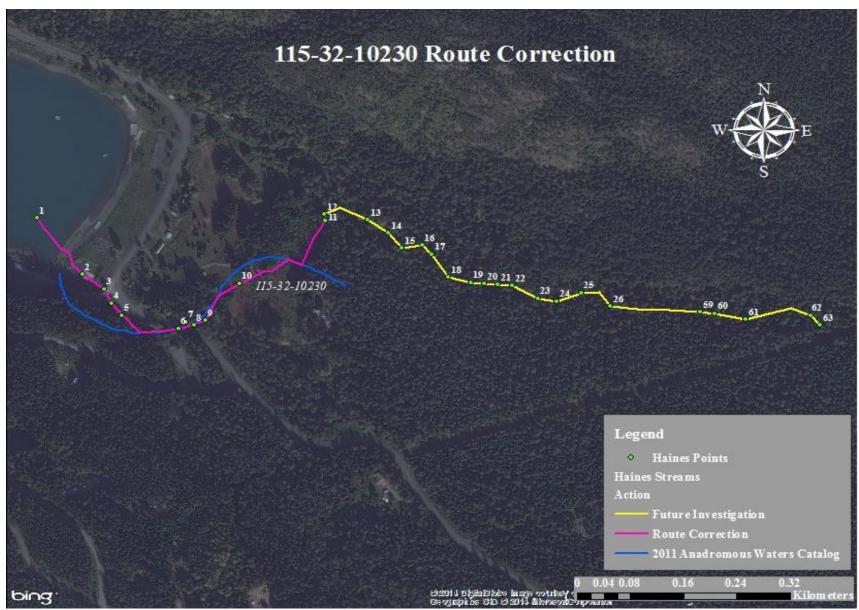


Figure 4.–115-32-10230 route correction map.

115-32-10236 ADDITION

Water body name: 3 ½ Mile Mud Bay Road Creek

Survey date: 7/19/2011

Water body number: 115-32-10236

Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C031S059E **Quad:** Skagway A-2

Findings: Stream number 115-32-10236 is located at 3 ½ mile Mud Bay Road. We surveyed it using a backpack electrofisher and a GPS (Table 1). The lower section of stream is beautiful fish habitat (Figure 1). There is a potential barrier of large boulders and steep gradient just below the culvert under road and potential velocity barrier above the culvert comprised of bedrock and no resting pools. No fish were found above the culvert.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 12-571

Table 1.–115-32-10236 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
205	59.1906	-135.4129	This point is at mouth of creek	EF	1 S
			entering into the Chilkat River		
			and ocean mix. Made contact		
			with family member of land		
			owner and got ok to walk		
			stream. Electrofished 1 S		
			about 40mm. Even with		
			average high tide line.		
206	59.1907	-135.4128	Electrofished and got 1 P	EF	2 CO, 1 P
			about 20mm and 2 CO about		
			45mm.		
207	59.1907	-135.4127	Electrofished and got 2 CO	EF	2 CO, 1 DV
			between 35-55mm and 1 DV		
200	7 0.4000	107 1100	about 65mm.		• 60
208	59.1908	-135.4128	Electrofished the water boiled	EF	2 CO
			with fish at least ten fish. Able		
			to net 2 CO between 35-		
			60mm. This is even with the		
200	7 0.4000	107 1107	highest high tide line.		• 60
209	59.1908	-135.4127	Electrofished and got 2 CO	EF	2 CO
210	5 0.1000	105 4106	about 60mm.	E.E.	1.00
210	59.1909	-135.4126	Electrofished and got 1 CT	EF	1 CT
211	70.1011	125 4126	about 80mm.	IDI	1.00
211	59.1911	-135.4126	Handnetted without the	HN	1 CT
			electrofisher 1 CT about		
212	70.1011	105 4104	65mm.	E.E.	2.07
212	59.1911	-135.4124	Electrofished and got 3 CT	EF	3 CT
212	50 1011	125 4122	between 40-90mm.	EE	2.00
213	59.1911	-135.4123	Electrofished and got 2 CO	EF	2 CO
			about 50mm.		<u>.</u>

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
214	59.1912	-135.4122	Electrofished and got 1 big	EF	1 DV, 1 CT, 1 SC
			DV about 70mm and 1 CT		
			about 60mm and a SC.		
215	59.1912	-135.4119	Where culvert that crosses		
			Mud Bay Road. From here to		
			WPT#214 there are big		
			boulders and steep gradient.		
			Problem for both up and		
			downstream migration.		
			Specially for downstream		
			migration if Lily lake is		
			pumping out fish.		
216	59.1917	-135.4107	Calling the top. The beach	EF	No Fish
			side is a barrier and then once		
			across road there is a place		
			where flow is running across		
			bedrock and no pools for		
			resting as jumping. Making a		
			velocity barrier. Electrofished		
			above road and got nothing.		



Figure 1.–Looking upstream from near mouth of 3 ½ Mile Creek.



Figure 2.–115-32-10236 addition map.



115-32-10240 CORRECTION

Water body name: Survey date: 7/31/2012 Water body number: 115-32-10240 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C031S059E **Quad:** Skagway A-2

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We found the route differs from the AWC. Several rearing chum salmon were milling at the mouth of the stream. It looked like the culvert outlet could be a barrier to fish passage except at high tide. This stream does not have a lot of flow and substrate comprised of mid-sized cobble (Figure 1)

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 2).

Nomination: 12-595

Table 1.–115-32-10240 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
65	59.2026	-135.4311	Mouth of 1 Mile Creek.	HN	1 CH
			Several milling chum around		
			confluence (10-20) handnetted		
			1. Looks like the culvert		
			outfall is a barrier to fish		
			passage except at rather high		
			tides. Some kind of rock or		
			other fish ladder would allow		
			fish passage at other times.		
66	59.2029	-135.4304	Electrofished 2 DV, 1 CT.	EF	2 DV, 1 CT
67	59.2028	-135.4303	Caught 1 unknown about	EF	3 CT, 1 Unknown
			25mm salmonid and 3 CT		
			between 60-70mm.		
68	59.2028	-135.4301	Captured 2 CO between 50-	EF	2 CO
			65mm.		
69	59.2030	-135.4293	Captured 3 CT between 50-	EF	3 CT
			85mm.		
70	59.2030	-135.4292	3 CT between 25-75mm.	EF	3 CT
71	59.2030	-135.4288	5 CT between 45-80mm.	EF	5 CT
72	59.2030	-135.4281	Captured 3 CT between 65-	EF	3 CT
			80mm. Habitat remains good-		
			lots of small pools, plenty of		
			resting habitat and refugia.		
			Channel shows evidence of		
			occasional high flows.		
			Channel bed width ~ 4 ft.		
73	59.2031	-135.4278	Electrofished 4 CT between	EF	4 CT, 1 DV
			35-85mm and 1 DV about		
			60mm.		

Table 1.-Continued

	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
74	59.2029	-135.4271	Captured 2 DV between 55-	EF	8 CT, 2 DV
			75mm and 8 CT between 35-		
			65mm. Habitat remains		
			similar to before, but no CO		
			since near the mouth. Will		
			continue to track and fish		
			periodically until a barrier is		
			reached.		
75	59.2028	-135.4263	Captured 3 CT between 55-	EF	3 CT
			85mm. Habitat remains good		
			and connected. Now very low		
			gradient.		
76	59.2027	-135.4259	Captured 2 CT between 75-	EF	2 CT
			85mm. Still low gradient, but		
			less water.		
77	59.2030	-135.4257	Captured 2 CT between 60-	EF	2 CT
			95mm. Visual on more CT.		
78	59.2028	-135.4249	Small tributary enters on river		
			right. Little flow, but some		
			connected deep pool.		
79	59.2029	-135.4248	Electrofished 3 CT between	EF	3 CT
			35-85mm. Top of really good		
			looking habitat, still some		
			pools and likely some more		
			cutthroat.		
80	59.2024	-135.4233	Handnetted 1 CT about 50mm.	HN	1 CT
			Gradient about to increase		
			slightly.		
81	59.2024	-135.4218	Calling it the top, no barrier		
			but getting late. Still numerous		
			CT present in stream. Could		
			return to track until barrier		
			another time.		



Figure 1.—Representative reach of stream number 115-32-10240.

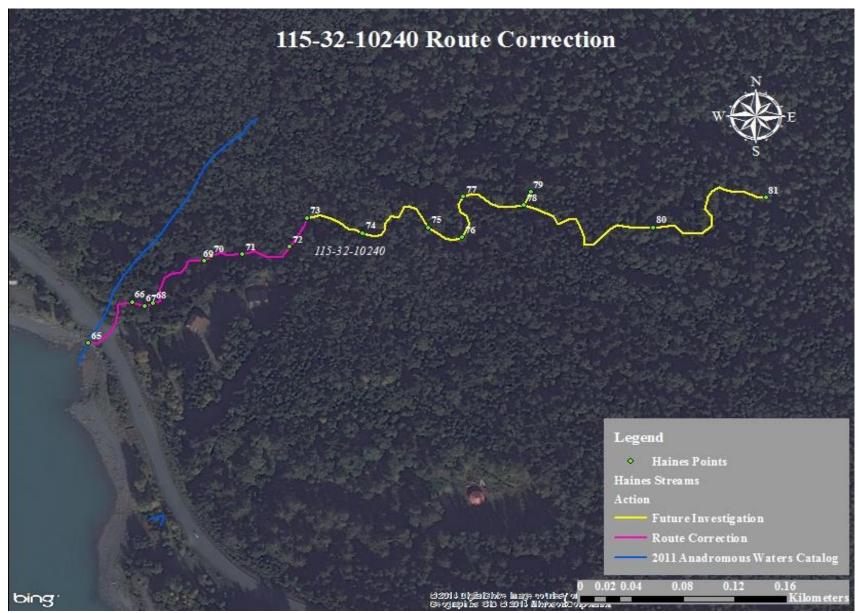


Figure 2.–115-32-10240 route correction map.



115-32-10250-2002

CORRECTION

Water body name: Survey date: 4/19/2013 Water body number: 115-32-10250-2002 Species & Lifestage: COsr, DVr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C030S059E **Quad:** Skagway A-2

Findings: On March 18-20 and April 18-19 2013 we tracked and conducted fish surveys in this stream and associated ponds (Table 1). We found overwintering coho salmon in this stream and ponds (Figure 1). The upper portion of the stream has great rearing and overwintering habitat for coho salmon. The upper portion of the creek had many ice free sections and appears not to completely freeze during the winter (Figure 2). The creek flows into two ponds after crossing under the airport road.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 3).

Nomination: 13-515

Table 1.-115-32-10250-2002 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
123	59.2495	-135.5333	Stream No. 115-32-10250-		
			2002. Steep gradient. Less		
			likely to have anadromous fish.		
			Stopped tracking.		
124	59.2487	-135.5329	Stream No. 115-32-10250-		
			2002. Upstream side of		
			culvert. Culvert looks really		
			good. Substrate and flow are		
			good. Any fish should be able		
			to pass.		
126	59.2485	-135.5327	Downstream side of culvert.		
129	59.2470	-135.5265	Continue tracking Stream No.	MT	50 CO, 12 SB
			115-32-10250-2002.		
			Upstream side of culvert near		
			East pond. Set 3 minnow traps		
			in creek. It was partially frozen		
			but we were able to break		
			though the ice.		
130	59.2467	-135.5263	Downstream side of culvert.		
131	59.2464	-135.5264	Upstream side of culvert.		
132	59.2462	-135.5266	Downstream side of culvert.		
133	59.2461	-135.5266	East pond completely frozen.	MT	15 CO
			Chopped ice and set 1 minnow		
			trap.		
136	59.2459	-135.5256	Approximate location of		
			upstream culvert.		

Table 1.—Continued.

	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
137	59.2452	-135.5254	Downstream side of culvert.		
138	59.2443	-135.5210	Confluence of Stream No. 115-		
			32-10250-2002 and Stream		
			No. 115-32-10250-2002-		
			3017.		
140	59.2441	-135.5203	Upstream side of culvert.		
141	59.2440	-135.5197	Downstream side of culvert.		
143	59.2426	-135.5135	Upstream side of culvert.		
144	59.2424	-135.5130	Downstream side of culvert.		
147	59.2405	-135.5099	Mouth of Stream No. 115-32-		
			10250-2002 and Chilkat River.		
150	59.2428	-135.5143	Mouth of drainage culvert.	-	



Figure 1.—Coho salmon caught in a minnow trap in East Pond.



Figure 2.-Stream number 115-32-10250-2002 upstream of airport.

Haines

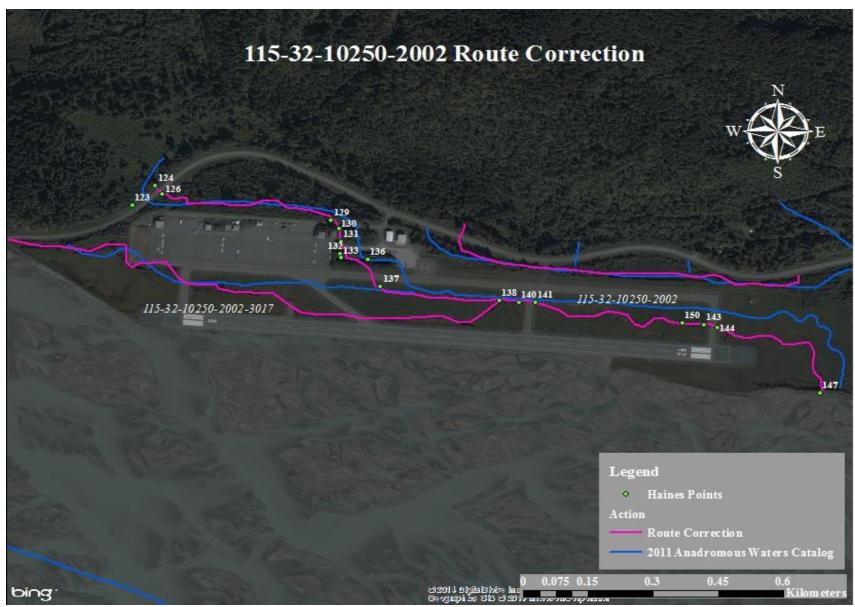


Figure 3.–115-32-10250-2002 route correction map.



115-32-10250-2002-3017

CORRECTION

Water body name: Survey date: 8/16/2012 Water body number: 115-32-10250-2002-3017 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C030S059E **Quad:** Skagway A-2

Findings: Over the course of two days we tracked and surveyed stream number 115-32-10250-2002-3017 at the Haines Airport (Table 1). We found rearing coho salmon above the current AWC upper extent for this stream.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 12-604

Table 1.-115-32-10250-2002-3017 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
111	59.2441	-135.5203	Culvert under runway, thick		
			with equisetum.		
110	59.2449	-135.5275	Culvert that runs under		
			runway.		
109	59.2453	-135.5289	Electrofished 1 CO.	EF	1 CO
108	59.2455	-135.5290	Tributary entering on river		
			left. A man made channel full		
			of grass. Double culvert under		
			the runway.		
107	59.2457	-135.5298	Electrofished 2 CO. Very	EF	2 CO
			good flow and channel.		
106	59.2470	-135.5336	1 SB	EF	1 SB
105	59.2471	-135.5350	End of track.		
98	59.2476	-135.5348	Beginning of polygon.		
99	59.2478	-135.5365	Electrofished 1 CO about	EF	1 CO
			75mm.		
100	59.2478	-135.5367	Electrofished 1 CO about	EF	1 CO
			75mm.		
101	59.2481	-135.5379	Electrofished 1 CO about	EF	1 CO
			65mm in a pool. All CO so far		
			have been captured in marsh		
			pools.		
102	59.2482	-135.5387	Electrofished 1 CO about	EF	1 CO
			65mm in a pool.		
104	59.2482	-135.5389	Continued track.		
103	59.2483	-135.5391	Stopped near road, maybe		
			upwelling or seepage. End of		
			water.		

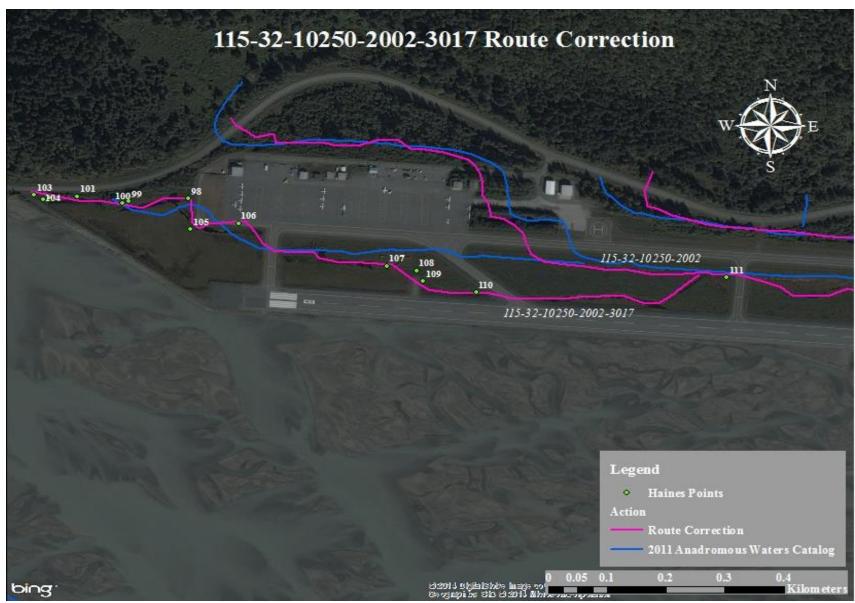


Figure 1.–115-32-10250-2002-3017 route correction map.

115-32-10250-2004

Water body name: Survey date: 7/3/2011 Water body number: 115-32-10250-2004 Species & Lifestage: COpr, DVr

CORRECTION

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C030S059E Quad: Skagway B-2

Findings: We surveyed this cataloged stream using a backpack electrofisher and a GPS (Table 1). We found that the upper and lower limits of Stream No. 115-32-10250-2004 were found to differ from the AWC. The stream takes a more sinuous path before meeting the Chilkat River. The stream's upper extent is below a steep rocky hillside in the parking area of Southeast Roadbuilders. The stream empties into the Chilkat River at a different location than is illustrated in the current AWC.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-557

Table 1.–115-32-10250-2004 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
11	59.2524	-135.5432	The start of creek, flowing into the Chilkat River. Visual		CO
12	59.2525	-135.5432	on some CO. Culvert entering from river left. Handnetted 5 CO about 45mm.	HN	5 CO
13	59.2530	-135.5434	Culvert entering from river left. No water flow coming from the culvert.		
14	59.2547	-135.5451	There is a beaver dam like structure in the stream. Does not appear to be stopping fish, able to see CO above structure.		
15	59.2548	-135.5455	Culvert for stream that goes under the highway.		
16	59.2551	-135.5455	Tributary entering on river right.		
17	59.2556	-135.5449	Tributary entering on river right.		
18	59.2556	-135.5447	Handnetted 4 CO between 30-35mm.	HN	4 CO
19	59.2560	-135.5446	Handnetted 1 CO about 30mm.	HN	1 CO
20	59.2564	-135.5460	Creek goes through culvert.		
21	59.2567	-135.5466	End of the tributary. The water is coming through rock that is part of edge of platform.		

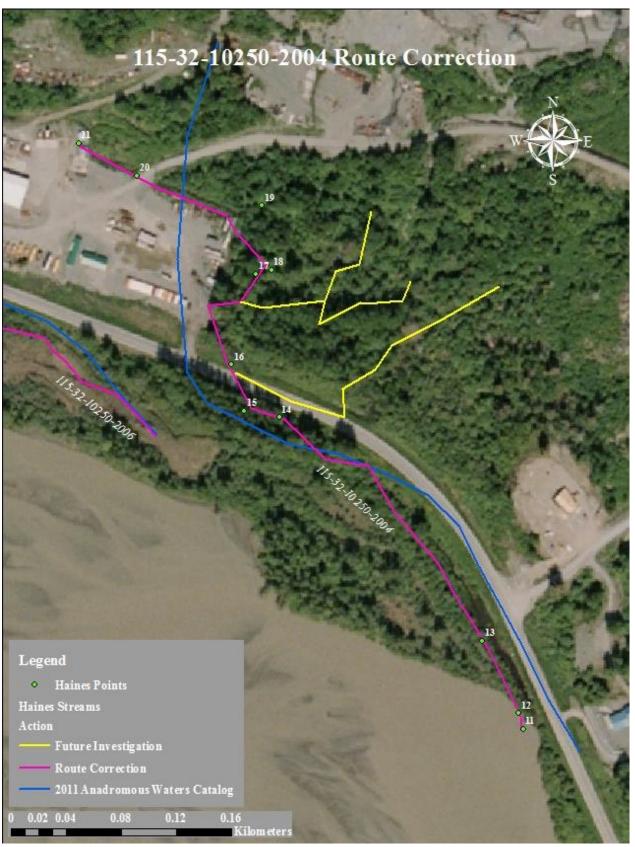


Figure 1.–115-32-10250-2004 route correction map.

Haines

Water body name: Schnabel Creek

Watershed: Chilkat Inlet-Frontal Lynn Canal

Species & Lifestage: COr, CTr, DVr

MTR: C030S059E Quad: Skagway B-2

Findings: We surveyed this waterbody with a minnow traps and a GPS. We captured juvenile coho salmon, cutthroat trout, and three-spined stickleback (Table 1, Figure 1, 2). The ponds were created by Southeast Road Builders and are connected by a small channel (Figure 3).

Recommendations: Add these polygons to the Anadromous Waters Catalog for rearing coho

salmon.

Nomination: 17-607

Table 1.–115-32-10250-2006 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1106	59.2570	-135.5495	Minnow trap set 0930 in	MT	19 CO, 1 CT, 25
			Southeast Pond ~1m deep.		SB
			Pulled at 1648. CO ranged		
			from 45-90 mm.		
1107	59.2572	-135.5494	Minnow trap set 0933 in	MT	7 CO, 40 SB
			Southeast Pond ~0.3m deep.		
			Pulled at 1655. Small stream		
			enters from the north, little fish		
			habitat if any.		
1108	59.2573	-135.5500	Minnow trap set 0935 in	MT	13 CO, 1 CT, 25
			Southeast Pond ~1m deep.		SB
			Pulled at 1700.		
1109	59.2573	-135.5500	Minnow trap set 0936 in	MT	15 CO
			Northwest Pond ~1m deep.		
			Pulled at 1700.		
1110	59.2572	-135.5501	Minnow trap set 0938 in	MT	2 SB
			Northwest Pond ~1m deep.		
			Pulled at 1700.		
1111	59.2571	-135.5500	Minnow trap set 0935 in	MT	6 CO, 1 CT
			Northwest Pond ~0.5m deep.		
			Pulled at 1710.		



Figure 1.–Coho salmon captured at WP 1107.



Figure 2.—Cutthroat trout captured at WP 1108.

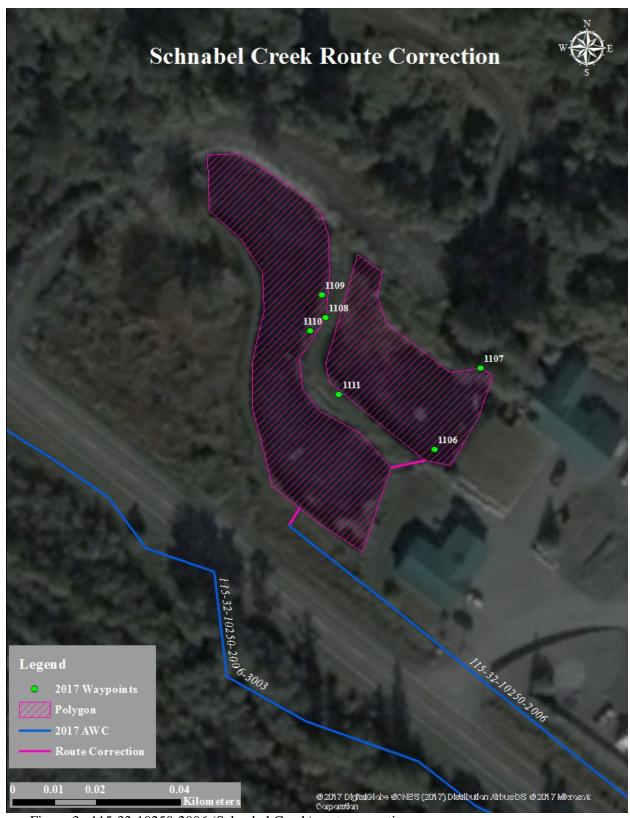


Figure 3.–115-32-10250-2006 (Schnabel Creek) route correction map.



CORRECTION

Water body name: Schnabel Creek
Water body number: 115-32-10250-2006
Watershed: Chilkat Inlet-Frontal Lynn Canal
Species & Lifestage: COr,CTr,DVr
Watershed: Chilkat Inlet-Frontal Lynn Canal
MTR: C030S059E Quad: Skagway B-2

Findings: We conducted a foot survey of this cataloged stream using a GPS (Table 1). We found that this stream splits and flows through a culvert under the Haines Highway near Southeast Roadbuilders. It does not flow through the parking lot and above the constructed ponds. It becomes a roadside ditch that terminates at a small dam at the base of the ponds.

Recommendations: Update the route of this stream to reflect the field verified course (Figure 1).

Nomination: 14-709

Table 1.-115-32-10250-2006 survey data.

_	Tubic 1.	113 32 1023	70 2000 Bui ve j	autu.		
	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	21	59.2559	-135.5484	Found culvert on "Schnabel		
				Creek" near enterance to SE		
				Roadbuilders sign.		
	22	59.2568	-135.5501	Schnabel ponds.		



Figure 1.–115-32-10250-2006 route correction map.

Haines

Water body name: Waterfall Creek

Water body number: 115-32-10250-2008

Species & Lifestage: COsr, DVrp, Krp

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C030S058E **Quad:** Skagway B-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). We found that the upper and lower limits of this stream differ from the AWC. The stream takes a more sinuous path than is documented before emptying into the Chilkat River. This stream originates at a waterfall next to the Haines Highway and flows through a marshland then onto a small road that accesses a gravel pit. It then enters another marshland, flows beneath the Haines Highway, and parallels the road for a while before merging with the Chilkat.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-556

Table 1.-115-32-10250-2008 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
27	59.2571	-135.5537	Mouth of stream entering the		
			Chilkat.		
26	59.2580	-135.5556	Stream crosses under gravel		
			pull out with foot bridge.		
25	59.2587	-135.5572	Found culvert on "Waterfall		
			Creek" crossing the highway.		
24	59.2589	-135.5567	Water flowing from 2	VI	20 CO
			directions here into a low		
			spot. Many CO present.		
23	59.2597	-135.5606	Handnet one CO about 90mm	HN	1 CO
			in stream exiting the roadbed.		
22	59.2598	-135.5606	Second drainage from the		No Fish
			marsh complex into the road.		
7	59.2598	-135.5605	The end of the creek/marsh.		
			Had to side hill along marsh		
			as it becomes too deep and		
			hard to walk through.		
			Everything connected by		
	50.0614	125.5607	marsh.		
6	59.2614	-135.5687	Falls off the mountainside.		
=	59.2614	125 5690	Point near base of the falls.		
5	39.2014	-135.5689	Another creek that flowing		
			parallel to current creek, but opposite direction.		
4	59.2613	-135.5697	Where a small tributary enters		
4	37.2013	-155.5077	the marsh currently being		
			tracked. Coming in from river		
			left, very steep mountainside.		
			icit, very steep insulatiliside.		

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
3	59.2615	-135.5721	Start of creek. The falls come		
			right to road at drinking water		
			spigot.		



Figure 1.–115-32-10250-2008 route correction map.



115-32-10250-2008-0910

CORRECTION

Water body name: Survey date: 5/14/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C030S058E Quad: Skagway B-2

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-524; Figure 1).

Recommendations: Remove king salmon rearing.

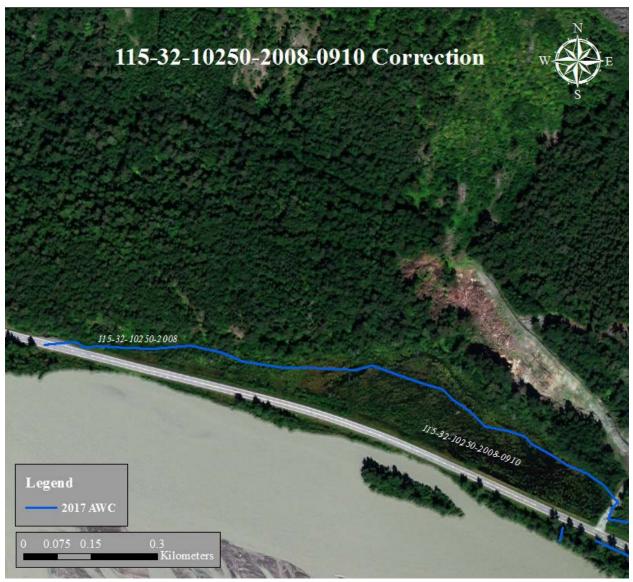


Figure 1.–115-32-10250-2008-0910 correction map.



115-32-10250-2008-3004

CORRECTION

Water body name: Survey date: 5/14/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C030S059E Quad: Skagway B-2

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-523; Figure 1).

Recommendations: Remove king salmon rearing.



Figure 1.–115-32-10250-2008-3004 correction map.



115-32-10250-2008-3005

DELETION

Water body name: Survey date: 6/1/2017 Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COrCTrDVr

MTR: C030S058 Quad: Skagway B-2

Findings: We surveyed the area of the cataloged stream using a GPS and observed organic detritus covered by silt and a few isolated pools generally measuring less than 3 feet diameter, no defined stream channel (Figures 1, 2). Though we searched, we did not visually observe fish in the shallow (< 6 inch) pools.

Recommendations: Delete the stream since water flow is dependent on Chilkat River overflow, not a separate water source (Figure 3).



Figure 1.–115-32-10250-2008-3005 area, no defined stream channel present.



Figure 2.–Chilkat River (right) silt in the forest due to overflow.



Figure 3.–115-32-10250-2008-3005 deletion map.

ADDITION

Water body name: Survey date: 7/4/2011 Water body number: 115-32-10250-2010 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C030S058E **Quad:** Skagway B-2

Findings: This previously undocumented stream was surveyed using a handnet and a GPS (Table 1). We captured rearing coho salmon throughout (Figure 1). This stream originates as a seep next to the Haines Highway and flows parallel to the road before taking a sharp turn and settling into a small beaver pond inundated by the Chilkat River during high flows.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-521

Table 1.–115-32-10250-2010 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
16	59.2594	-135.5618	Isolated pool next to the	VI	2 CO
			Chilkat and roadside stream.		
			Saw a couple CO hanging out.		
			Fresh beaver activity. Water		
			level would have to rise about		
			a foot for connectivity to		
			either water body.		
17	59.2594	-135.5617	Beaver dam. Handnet a skinny	HN	1 CO
			CO about 65mm.		
15	59.2598	-135.5628	Handnet 1 CO about 70mm at	HN	1 CO
			upper limit of roadside ditch.		
			Across from Southeast		
			Roadbuilders.		



Figure 1.—Coho salmon captured in stream number 115-32-10250-2010.

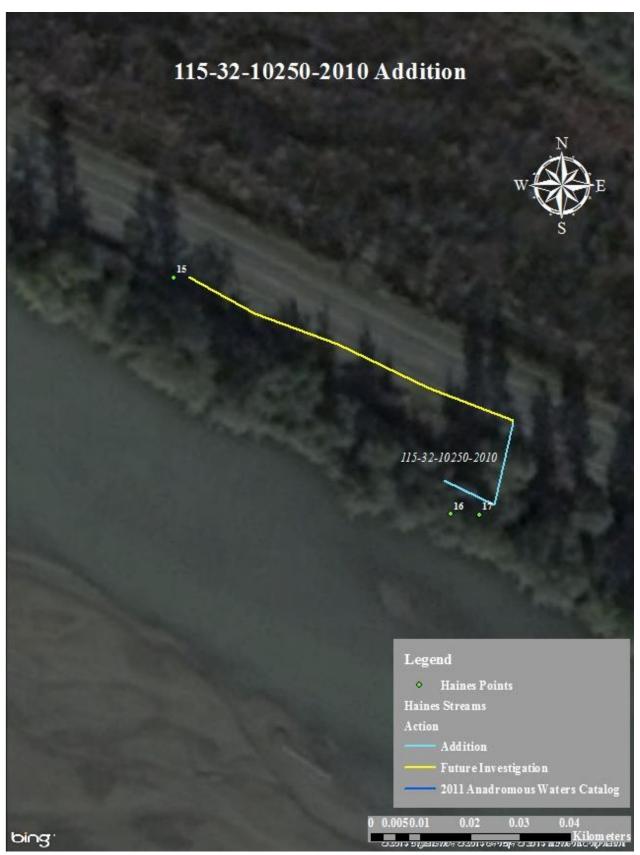


Figure 2.–115-32-10250-2010 addition map.

CORRECTION

Water body name: Survey date: 5/29/2014
Water body number: 115-32-10250-2014 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C030S058E Quad: Skagway B-2

Findings: We conducted a route survey on this stream (Table 1) and found it to be inaccurately

mapped in the AWC.

Recommendations: Correct the stream arc to reflect field-verified route in the Anadromous

Waters Catalog (Figure 1).

Nomination: 14-604

Table 3.–115-32-10250 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
34	59.2623	-135.5796	Mouth of stream entering the Chilkat River.	RS	
35	59.2626	-135.5796	Corrugated metal pipe crossing the Haines Highway.	RS	
36	59.2628	-135.5796	Barrier falls on stream above Haines Highway.	RS	



Figure 1.–115-32-10250-2014 route correction map. Haines

CORRECTION

Water body name: Lily Pad Creek
Water body number: 115-32-10250-2024
Species & Lifestage: COsr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C030S058E Quad: Skagway B-2

Findings: We conducted a foot survey on this stream using a GPS (Table 1). This stream ends in a marsh pond along the Haines Highway (Figure 1). We found that the stream needs to be remapped to reflect the field-verified route.

Recommendations: Correct the current route of this stream in the AWC (Figure 2).

Nomination: 14-602

Table 1.–115-32-10250-2024 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
49	59.2665	-135.6310	Culvert crossing Haines Hwy.	RS	
48	59.2666	-135.6258	Top of stream on uphill side of	RS	
			Haines Hwy.		



Figure 1.-Overlooking 115-32-10250-2024 marshy area.

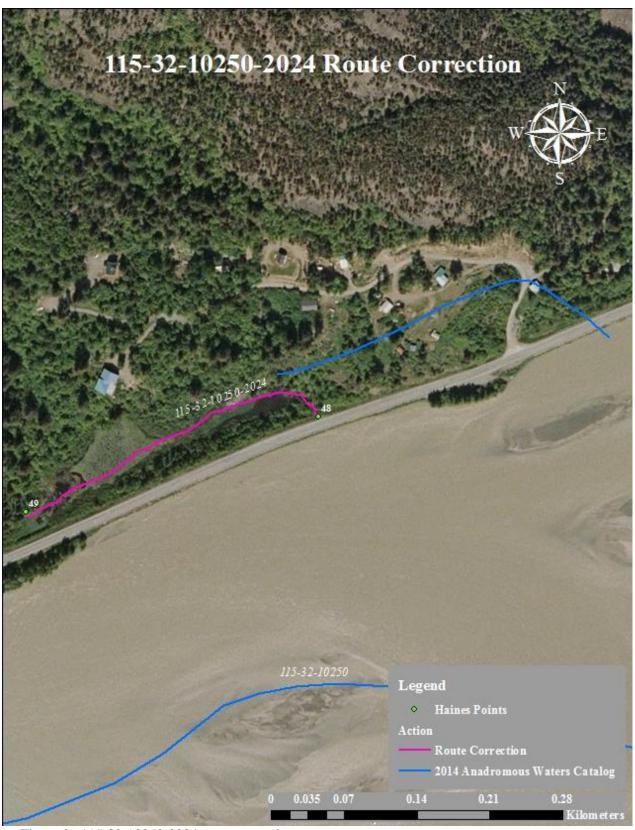


Figure 2.–115-32-10250-2024 route correction map.

CORRECTION

Water body name: Nine ½ Mile Creek

Water body number: 115-32-10250-2028

Watershed: Chilkat Inlet-Frontal Lynn Canal

Survey date: 6/3/2011

Species & Lifestage: COr, DVr

MTR: C030S058E Quad: Skagway B-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). We found coho salmon upstream of cataloged upper extent (Figure 1). The stream closely follows a rocky cliff on river left, and a marshy clearing on river right. The substrate is primarily organics and sand with well vegetated banks. The mouth of the stream and stream route are inaccurate, stream ends at a spring fed mossy seep.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 2).

Nomination: 11-518

Table 1.–115-32-10250-2028 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.2797	-135.6708	Outlet of culvert on Haines	HN	4 CO
			Highway. Huge school of CO.		
			Handnet 4 CO about 45mm		
			each. Big beautiful pool that		
			merges with the Chilkat River.		
2	59.2800	-135.6708	9 1/2 mile creek trackline		
			begin (across highway from		
			pool).		
3	59.2816	-135.6733	Stream branches into mini-		
			marsh.		
12	59.2845	-135.6789	Creek begins to parallel cliff.		
			Here we find a cascade that		
			enters creek on river left.		
13	59.2848	-135.6793	Visual identification of		
			multiple CO.		
14	59.2849	-135.6800	Another visual identification	VI	CO
			of a school of CO that is		
			declared as upper-extent of		
			anadromy. Creek does not		
			continue much further.		



Figure 1.—Coho salmon captured in Nine ½ Mile Creek.

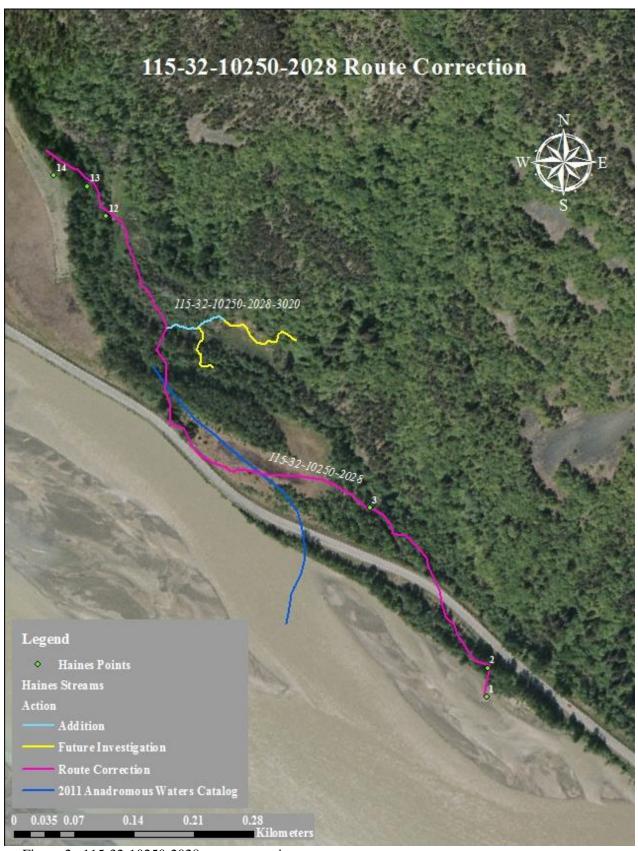


Figure 2.–115-32-10250-2028 route correction map.

Haines

115-32-10250-2028-3020

ADDITION

Water body name: Survey date: 6/3/2011 Water body number: 115-32-10250-2028-3020 Species & Lifestage: COr

Watershed: Chilkat Inlet Frontal Lynn Canal **MTR:** C030S058E **Quad:** Skagway B-2

Findings: We surveyed this stream using a backpack electrofisher, handnet, and a GPS (Table 1). The stream originated on the mountainside and meandered through a series of meadows before entering 9 ½ Mile Creek. The habitat looked suitable for fish use leading up to the gradient barrier; we captured several juvenile coho salmon (Figure 1).

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-544

Table 1.–115-32-10250-2028-3020 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
4	59.2834	-135.6774	Stream branches into active tributary. Taking tributary on river left.		
5	59.2834	-135.6770	Tributary forks into a network of streams hidden beneath abundant snake grass. Taking new river left tributary.		
6	59.2835	-135.6767	Handnet 35mm CO.	HN	1 CO
7	59.2835	-135.6764	Visual identification of 3 CO. Handnet 2 CO between 30- 40mm.	HN	5 CO
8	59.2833	-135.6749	Top of barrier.		
9	59.2834	-135.6752	Bottom of barrier. Barrier determined at the bottom of a steepened channel of 31% over 98 ft.	EF	No Fish
10	59.2835	-135.6764	Determined upper extend of anadromy. Electrofished 1 CO about 60mm.	EF	1 CO
11	59.2830	-135.6766	Back down to marshland where tributary forks. Took river right tributary this time to undefined pool of water.		



Figure 1.–Rearing coho salmon captured in Nine ½ Mile Creek tributary.

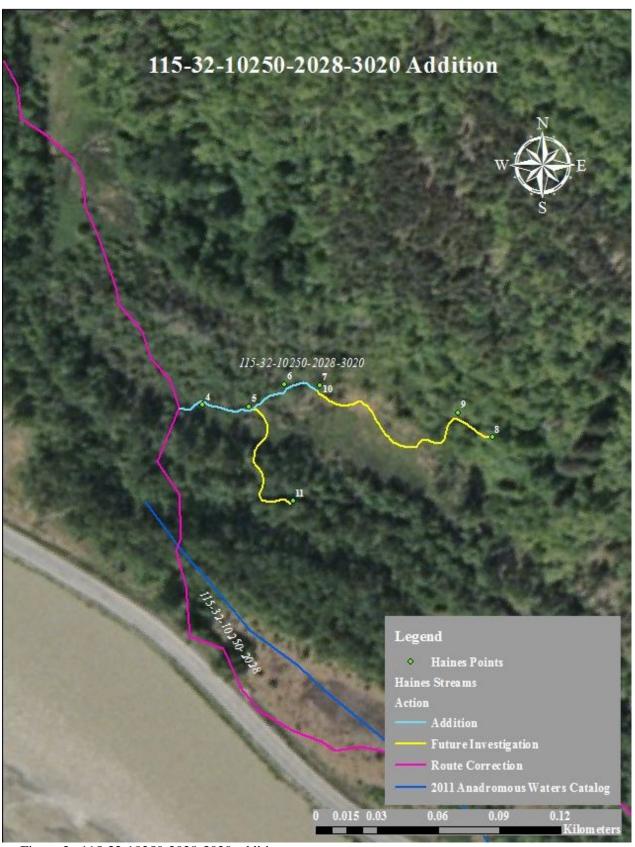


Figure 2.–115-32-10250-2028-3020 addition map.

Water body name: Ten Mile Slough
Watershed: Chilkat Inlet-Frontal Lynn Canal
Species & Lifestage: CHs, COr, Ps, DVr, SHr

MTR: C030S058E Quad: Skagway B-2

Findings: We surveyed this waterbody with a minnow traps and a GPS. We captured juvenile coho salmon a large ponded area (Table 1, Figure 1). We discovered that the pond is fed from a waterfall on eastern side of the Haines Highway at WP 1199 (Figure 2). We revealed that the pond is connected to the cataloged channel of ten mile slough through a seasonally inundated wetland. During this survey, we traversed the western extent of the pond looking for a connection to the Chilkat River and did not find any such connection. But, we found a channel south of the pond that appears to be the main channel of the ten mile slough (Figure 3-4). We visually observed fish but were unable to determine species.

Recommendations: Add this polygon and stream course to the Anadromous Waters Catalog for rearing coho salmon.

Table 1.–115-32-10250-2030 Tributary survey data.

_				tary survey data.		
_	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	1112	59.2985	-135.7041	Minnow trap set 1038, pulled at	MT	30 CO, 66 SB
				1620. Coho salmon ranged		
				from 35-85 mm.		
	1113	59.2984	-135.7038	Minnow trap set 1040, pulled at	MT	19 CO, 47 SB
				1625. Coho salmon ranged		
				from 35-85 mm.		
	1114	59.2991	-135.7045	Minnow trap set 1042 upstream	MT	36 CO, 82 SB
				of Haines Highway on the edge		
				of the culvert, forgot to pull trap		
				that day, pulled on 8/17/2017		
				1143. Coho salmon ranged		
				from 30-85 mm.		
	1115	59.2998	-135.7055	Minnow trap set 1048 in marsh	MT	14 SB
				with dense aquatic sedges and		
				few patches of open water.		
				Pulled 1633.		
	1188	59.2977	-135.7030	Wetland area shows evidence		
				of surface water at higher water.		
	1189	59.2973	-135.7034	Old, dry channel appears to		
				flow north to south.		
	1190	59.2967	-135.7038	Stream 10-15cm deep, organic	VI	Unknown
				matter, LWD, and sedges.		salmonids
	1191	59.2968	-135.7054	Stream has areas of intermittent		
				flow, indicated by vegetation		
				and rust deposits.		
	1192	59.2968	-135.7057	Large ponded area.		

Table 1.—Continued.

Waypoint Latitude Longitude Notes Sample Effort Sample Results 1193 59.2970 -135.7070 Another ponded section. 1194 59.2972 -135.7075 End of stream abruptly. 1195 59.2971 -135.7073 Photos taken towards barely connected wetland. 1196 59.2972 -135.7070 Possible channel, will follow. VI Unknown salmonids 1197 59.2972 -135.7068 End of channel in upland vegetation. Will follow to river to find connection. 1198 59.2972 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from wetland.	_	Table 1.	-Continucu.				
1194 59.2972 -135.7075 End of stream abruptly. 1195 59.2971 -135.7073 Photos taken towards barely connected wetland. 1196 59.2972 -135.7073 Edge of wetland. 1197 59.2972 -135.7070 Possible channel, will follow. VI Unknown salmonids 1198 59.2972 -135.7068 End of channel in upland vegetation. Will follow to river to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1195 59.2971 -135.7073 Photos taken towards barely connected wetland. 1196 59.2972 -135.7073 Edge of wetland. 1197 59.2972 -135.7070 Possible channel, will follow. VI Unknown salmonids 1198 59.2972 -135.7068 End of channel in upland vegetation. Will follow to river to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		1193	59.2970	-135.7070	Another ponded section.		
connected wetland. 1196		1194	59.2972	-135.7075	End of stream abruptly.		
1196 59.2972 -135.7073 Edge of wetland. 1197 59.2972 -135.7070 Possible channel, will follow. VI Unknown salmonids 1198 59.2972 -135.7068 End of channel in upland vegetation. Will follow to river to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		1195	59.2971	-135.7073	Photos taken towards barely		
1197 59.2972 -135.7070 Possible channel, will follow. VI Unknown salmonids 1198 59.2972 -135.7068 End of channel in upland vegetation. Will follow to river to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from					connected wetland.		
Salmonids Salmonids Salmonids		1196	59.2972	-135.7073	Edge of wetland.		
1198 59.2972 -135.7068 End of channel in upland vegetation. Will follow to river to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		1197	59.2972	-135.7070	Possible channel, will follow.	VI	Unknown
vegetation. Will follow to river to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from							salmonids
to find connection. 1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		1198	59.2972	-135.7068	End of channel in upland		
1199 59.2999 -135.7051 Waterfall. 1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from					vegetation. Will follow to river		
1200 59.2998 -135.7052 Channel connected to wetland area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from					to find connection.		
area. 1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		1199	59.2999	-135.7051	Waterfall.		
1201 59.2997 -135.7053 Water connection heading towards WP 1114. 1202 59.2996 -135.7051 Surface connection from		1200	59.2998	-135.7052	Channel connected to wetland		
towards WP 1114. 1202 59.2996 -135.7051 Surface connection from					area.		
1202 59.2996 -135.7051 Surface connection from		1201	59.2997	-135.7053	Water connection heading		
					towards WP 1114.		
wetland.		1202	59.2996	-135.7051	Surface connection from		
					wetland.		



Figure 1.–Juvenile coho salmon.



Figure 2.–Waterfall at WP 1199.



Figure 3.-Ponded area near WP 1193.



Figure 4.–115-32-10250-2030 addition map.

115-32-10250-2030-3008

ADDITION

Water body name: 10.5 Mile Creek
Water body number: 115-32-10250-2030-3008
Species & Lifestage: COrp

Watershed: Chilkat Inlet–Frontal Lynn Canal MTR: C030S058E Quad: Skagway B-2

Findings: We surveyed this stream using minnow traps and a GPS (Table 1). We captured rearing coho salmon in 10.5 Mile Pond and below the culvert outlet in 10.5 Mile Creek (Figures 1,2). 10.5 Mile Creek is a slow moving, ponded wetland area with little channel definition (Figure 3).

Recommendations: Adding 10.5 Mile Creek to the AWC to connect 10.5 Mile Pond with 10

Mile Slough (Figure 4). **Nomination:** 14-688

Table 1.–10.5 Mile Creek survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.2896	-135.6897	10.5 Mile Pond. Minnow trap	MT	2 CO
			captured 2 CO between 55-		
			70mm.		
2	59.2887	-135.6885	10.5 Mile Creek culvert outlet	MT	4 CO, 20 TSB
			below highway. Minnow trap		
			captured 4 CO between 45-		
			80mm and 20 TSB.		



Figure 1.–10.5 Mile Pond.

Figure 2.–10.5 Mile Creek downstream of the Haines Highway.



Figure 3.-Vegetated area downstream of pond and above the Haines Highway.



Figure 4.–10.5 Mile Creek addition map.

CORRECTION

Water body name: Eleven ½ Mile Creek
Water body number: 115-32-10250-2032
Species & Lifestage: COpr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C030S058E **Quad:** Skagway B-2

Findings: We surveyed this cataloged stream using a handnet and a GPS (Table 1). This stream parallels the Haines Highway and meanders through skunk cabbage forests and grassy marsh land. Its upper extent is a spring-fed seep.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-520

Table 1.–115-32-10250-2032 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
20	59.3009	-135.7082	Start of 11 1/2 Mile Creek. It		
			empties into the Chilkat River.		
21	59.3020	-135.7088	Visual identification of 1 CO	VI	1 CO
			about 65mm.		
22	59.3043	-135.7105	Handnet 1 CO about 65mm.	HN	1 CO
23	59.3044	-135.7107	Creek branches and goes		
			creek right.		
24	59.3047	-135.7105	End of the mainstem, it just	HN	1 CO
			comes out of the ground at the		
			base of hillside. Handnet 1		
			CO about 50mm.		

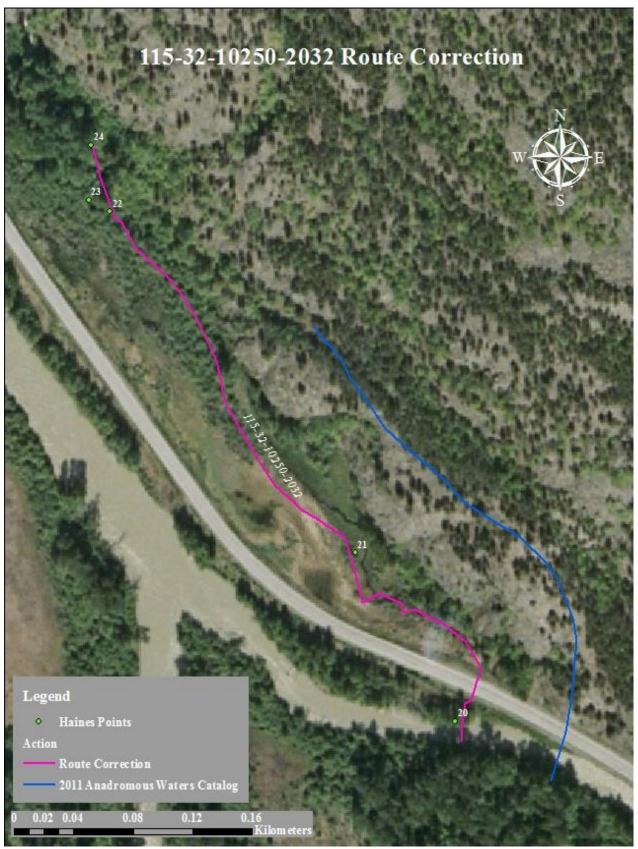


Figure 1.–115-32-10250-2032 route correction map. Haines

115-32-10250-2040 CORRECTION

Water body name: Thirteen Mile Creek

Watershed: Chilkat Inlet Frontal Lynn Canal

Species & Lifestage: COr, Ps

MTR: C029S057E Quad: Skagway B-2

Findings: We surveyed this stream with a GPS (Table 1). We found that stream 115-32-10250-2042 is a distributary of 115-32-10250-2040. Stream 115-32-10250-2040 splits at WP 1088, the majority of the flow goes east while some flows west (Figures 1, 2). During our survey, we observed dozens of adult pink salmon spawning throughout both branches of this stream.

Recommendations: Correct the route of this stream to include this channel in the Anadromous

Waters Catalog. **Nomination:** 17-608

Table 1.–115-32-10250-2040 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1085	59.3137	-135.7245		VI	3 P
1086	59.3138	-135.7249		VI	5 P
1087	59.3138	-135.7267	Spawning behavior observed.	VI	3 P
1088	59.3138	-135.7275	Gradient increases up stream.	VI	20 P
			Channel splits at Haines		
			Highway.		
1089	59.3140	-135.7287	Upstream of culvert. Eggs	VI	10 P
			observed in the stream.		
1090	59.3139	-135.7288	Downstream of culvert. Over	VI	5 P
			50 carcesses observed in short		
			walk. Spawning behavior and		
			eggs present throughout the		
=			survey.		



Figure 1.—Channel splits at WP 1088.

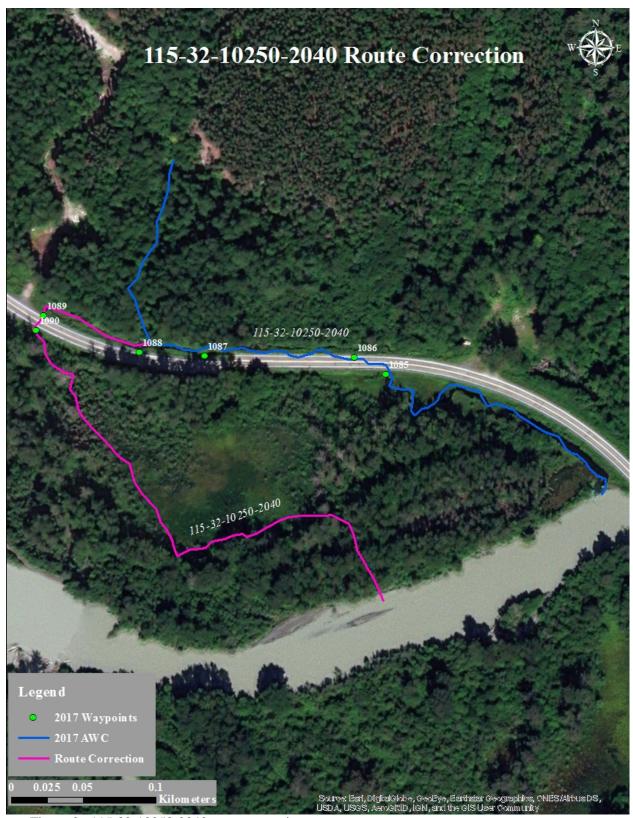


Figure 2.–115-32-10250-2040 route correction map.



115-32-10250-2040 CORRECTION

Water body name: Thirteen Mile Creek

Watershed: Chilkat Inlet-Frontal Lynn Canal

Species & Lifestage: COr, Ps,CTs

MTR: C029S058E Quad: Skagway B-2

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-532; Figure 1).

Recommendations: Remove king salmon rearing.



Figure 1.–115-32-10250-2040 correction map.



Water body name: Thirteen Mile Creek
Water body number: 115-32-10250-2040
Species & Lifestage: CTrs, COpr, Kr, Ps

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C029S057E **Quad:** Skagway B-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). We found that the stream takes a more sinuous path before emptying into the Chilkat River than what is shown in AWC. This stream's upper anadromous extent ends at a waterfall flowing from the mountainside. The stream flows to the highway where it splits, creating two separate streams; one side flowing along the highway before passing through a culvert and into a side channel of the Chilkat River; the second branch flows through a culvert and widens into a marsh before channelizing again and entering the Chilkat side channel.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-559

Table 1.-115-32-10250-2040 survey data

		50-2040 survey		G 1 77.00	
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.3130	-135.7219	Where left branch of mainstem		
			goes into the Chilkat River.		
			Water is back-up because the		
			river is moving swiftly which		
			is not allowing river to empty.		
			Making a nice pond/marsh		
			area.		
2	59.3132	-135.7221	Culvert comes in from river		
			left. The culvert is completely		
			under water.		
3	59.3137	-135.7244	One culvert that crosses the		
			highway. This one is half way		
			under water.		
4	59.3137	-135.7245	Second culvert that crosses		
			the highway. Completely		
			under water and has major		
			flow.		
5	59.3138	-135.7246	A back water area that has		
			fish, will track. Turned out to		
			be a tributary and is on river		
			left.		
13	59.3139	-135.7258	Tributary entering from river		
-			left. Some possible redds		
			here.		
19	59.3139	-135.7259	Handnet 2 CO about 30mm.	HN	2 CO
20	59.3138	-135.7275	Where main creek meets the	:	
	27.020	100.,270	highway and branches.		

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
23	59.3141	-135.7275	Handnet 3 CO about 30mm.	HN	3 CO
22	59.3141	-135.7276	Handnet 3 CT between 25-	HN	3 CT
			30mm.		
21	59.3150	-135.7272	Found a barrier. Distance:		
			17m and gradient: 36%.		



Figure 1.–115-32-10250-2040 route correction map.



115-32-10250-2042

ADDITION

Water body name: Survey date: 6/30/2011 Water body number: 115-32-10250-2042 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C029S057E Quad: Skagway B-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). We caught rearing coho salmon throughout this tributary. This stream's upper anadromous extent ends at a waterfall flowing from the mountainside. The stream flows through a culvert and widens into a marsh before channelizing again and entering the Chilkat River side channel.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-560

Table 1.–115-32-10250-2042 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
26	59.3123	-135.7245	The end of the creek branch,		
			because it dumps into the		
			Chilkat River. On the way		
			creek became a marsh, but		
			were able to follow to where		
			it emptied out of marsh.		
25	59.3141	-135.7287	Handnet 2 CO about 45mm at	HN	2 CO
			inlet of culvert that goes under		
			the highway.		
24	59.3139	-135.7278	Handnet 1 CO about 30 mm	HN	1 CO, 1 CT
			and 1 CT about 25 mm.		
20	59.3138	-135.7275	Where main creek meets the		
			highway and branches.		

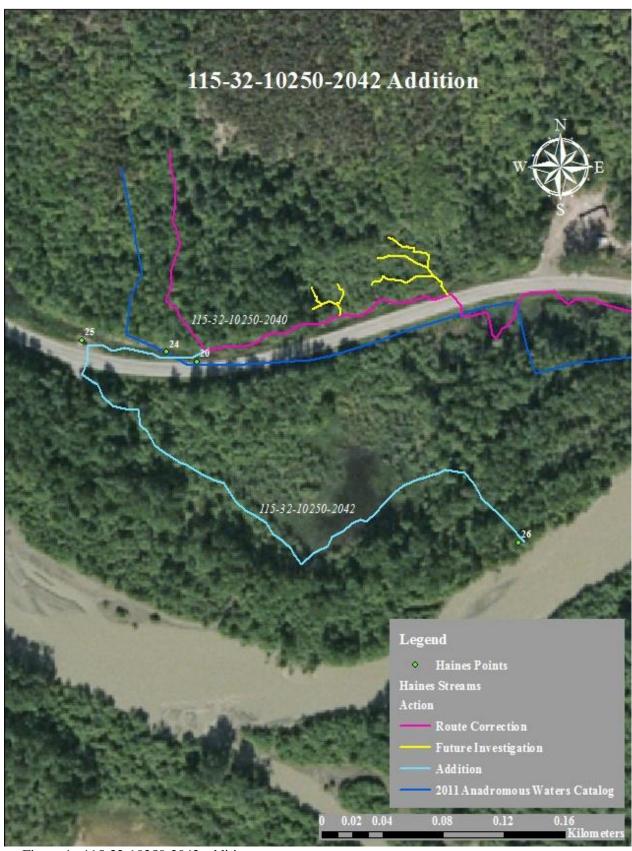


Figure 1.–115-32-10250-2042 addition map.

115-32-10250-2044

CORRECTION

Water body name: Fourteen Mile Creek
Water body number: 115-32-10250-2044
Watershed: Chilkat Inlet-Frontal Lynn Canal
Species & Lifestage: COr, DVr, Kr

MTR: C029S057E Quad: Skagway B-2

Findings: We surveyed 14 Mile Creek using a handnet and a GPS (Table 1). Upstream of the Haines Highway this stream is a mix between a pond and marsh (Figure 1). We found that the stream route differs from what is shown in the AWC.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 2).

Nomination: 12-554

Table 1.-115-32-10250-2044 survey data.

Table 1	<u>-115-32-102:</u>	50-2044 survey	data.		
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
189	59.3268	-135.7412	Start of 14 Mile Creek		
			empting into Chilkat River.		
190	59.3272	-135.7412	This is were 14 Mile Creek	HN	5 CO
			crosses the Haines Hwy		
			through two culverts that are		
			completely under water. Was		
			able to handnet 5 CO about		
			20mm.		
191	59.3290	-135.7425	Branch in flow, the breach		
			goes river left and appears to		
100	50.0000	105 5 100	be getting most of the flow.		
193	59.3288	-135.7420	Where branch reconnects with		
			other branch that went river		
100	50.2200	125 7446	right in WPT#191.		
198	59.3299	-135.7446	This where water is flowing		
			through forest area. This area		
			shows high evidence of creek		
			changing channel direction and width a lot.		
199	59.3310	-135.7447	Calling this the top of 14 Mile		
199	39.3310	-133.7447	Creek. The water is very		
			channelized and raging with		
			minimal spots for fish to rest.		
			Electrofished in pockets we		
			could find, but got nothing.		
			could find, but got nouning.		



Figure 1.-Looking upstream on 14 Mile Creek above the Haines Highway culvert.

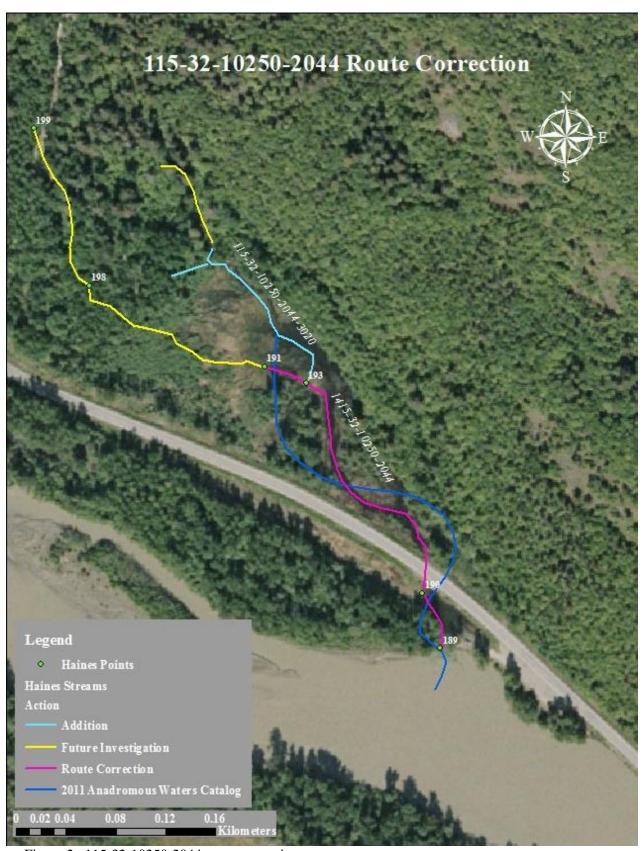


Figure 2.–115-32-10250-2044 route correction map.

Haines

115-32-10250-2044-3020

ADDITION

Water body name: Survey date: 7/19/2012 Water body number: 115-32-10250-2044-3020 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C029S057E **Quad:** Skagway B-2

Findings: We surveyed this stream using a backpack electrofisher, handnet, and a GPS (Table 1). We were able to capture rearing coho salmon midway up. This stream provides good rearing habitat and scenic view (Figure 1).

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 12-565

Table 1.-115-32-10250-2044-3020 survey data.

_	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	193	59.3288	-135.7420	Where branch reconnects with		
				other branch that went river		
				right in WPT#191.		
	192	59.3291	-135.7422	Branch mentioned in		
				WPT#191 connects with		
				another branch.		
	194	59.3298	-135.7429	Tributary entering river left.		
	195	59.3298	-135.7428	Handnetted 3 CO about 25mm.	HN	3 CO
	196	59.3305	-135.7432	Calling this the top of this	EF	No Fish
				tributary. We have		
				electrofished up to this point,		
				but have not gotten anything.		



Figure 1.—Stream number 115-32-10250-2044-3020 in the foreground.

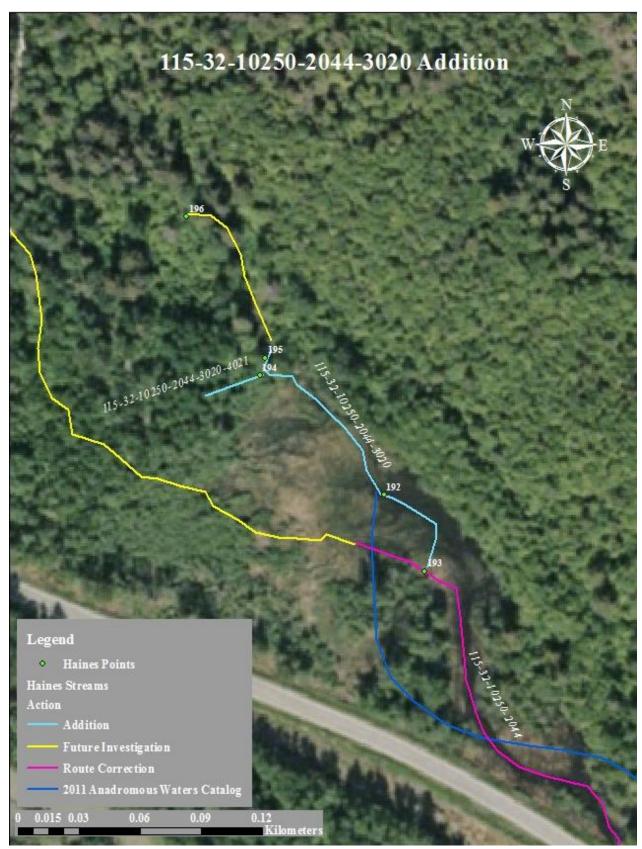


Figure 2.–115-32-10250-2044-3020 addition map.

115-32-10250-2044-3020-4021

ADDITION

Water body name: Survey date: 7/19/2012 Water body number: 115-32-10250-2044-3020-4021 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C029S057E **Quad:** Skagway B-2

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). The stream originates from a small seep; we were able to capture rearing coho salmon at the

headwaters.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-567

Table 1.–115-32-10250-2044-3020-4021 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
194	59.3298	-135.7429	Tributary entering river left.		
197	59.3298	-135.7434	Top of this branch. The water	EF	4 CO
			is just seeping out of the		
			ground here. Matt did a walk		
			around and did not find		
			anymore stream. Electrofished		
			and got 4 CO about 30mm.		



Figure 1.–115-32-10250-2044-3020-4021 addition map.

115-32-10250-2046 CORRECTION

Water body name: Survey date: 8/12/2017
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C029S057E Quad: Skagway B-2

Findings: We surveyed this stream with a GPS. We found the current stream course in the catalog to be inaccurate. We followed the stream from the confluence with the Chilkat River up to the anadromous fish barrier upstream of the Haines Highway (Table 1, Figures 1-3).

Recommendations: Correct the stream course in the Anadromous Waters Catalog.

Table 1.–115-32-10250-2046 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1102	59.3332	-135.7480	Culvert downstream of Haines		
			Highway.		
1103	59.3333	-135.7477	Culvert upstream of Haines		
			Highway.		
1104	59.3334	-135.7477	Stream bed.		
1105	59.3334	-135.7477	Steep cascade, over 25%		
			gradient for over 25 m. Definite		
			fish barrier.		



Figure 1.—Channel downstream of Haines Highway culvert.



Figure 2.—Cascade at WP 1105.



Figure 1.–115-32-10250-2046 route correction map.



Water body name: Survey date: 5/11/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C029S057E Quad: Skagway B-2

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-534; Figure 1).

Recommendations: Remove king salmon rearing.

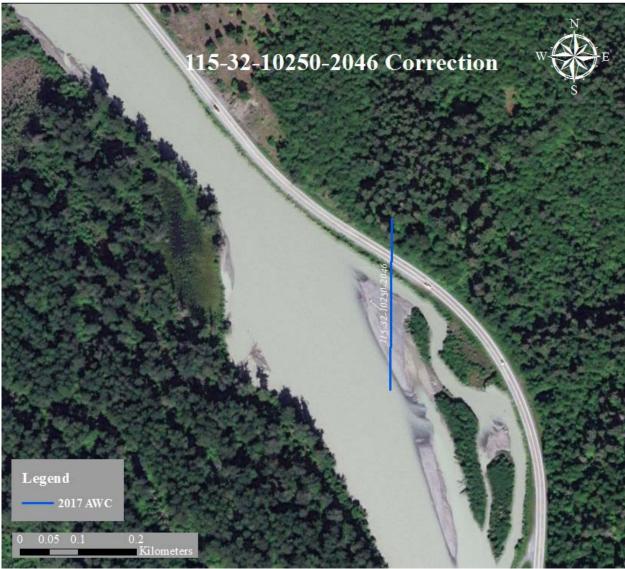


Figure 1.–115-32-10250-2046 correction map.



Water body name: Survey date: 5/12/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C029S057E Quad: Skagway B-3

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-535; Figure 1).

Recommendations: Remove king salmon rearing. Add coho salmon rearing as supporting data exists with nomination #06-535, #11-524, and #14-598.



Figure 1.–115-32-10250-2050 correction map.



115-32-10250-2050

CORRECTION

Water body name: Survey date: 5/29/2014 Water body number: 115-32-10250-2050 Species & Lifestage: COr, Kr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C029S057E **Quad:** Skagway B-3

Findings: We conducted a foot survey of this stream using a GPS (Table 1). This is a small stream that's substrate is small gravel and fine material (Figure 1). The stream ends at a bedrock cascade falls off mountainside (Figure 2). This stream should be labeled 115-32-10250-2050 and the stream currently with this number should be re-labeled with a new number.

Recommendations: Re-assign the appropriate streams per above (Figure 3).

Table 1.-115-32-10250-2050 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
44	59.3396	-135.7578	Outlet of culvert crossing	RS	
			Haines Highway.		
45	59.3397	-135.7575	Confluence of tributary with	RS	
			mainstem.		
47	59.3399	-135.7574	Top of tributary. Needs	RS	
			additional investigation.		
46	59.3395	-135.7573	Stream originates on	RS	
			mountainside.		



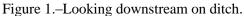




Figure 2.—Barrier falls on ditch at WPT 46.

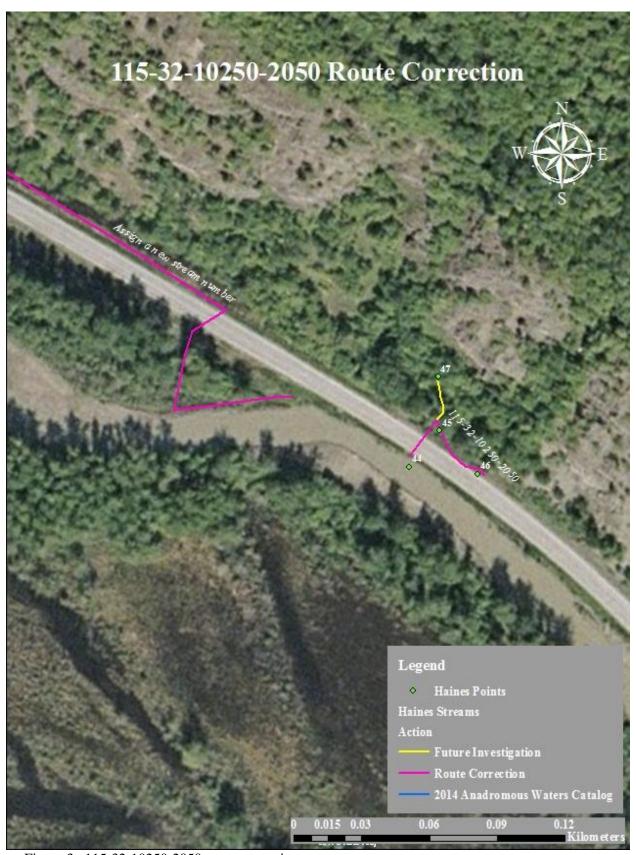


Figure 3.–115-32-10250-2050 route correction map.

Haines

ADDITION

Water body name: Survey date: 6/4/2011 Water body number: 115-32-10250-2060-3008 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C029S057E Quad: Skagway B-3

Findings: We surveyed this stream using a handnet and a GPS (Table 1, Figure 1). The springfed stream emerges from an upwelling in the forest and contained rearing coho salmon all the way to the headwaters.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 12-505

Table 1.-115-32-10250-2060-3008 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
50	59.3619	-135.8105	Tributary enter river right.		
51	59.3618	-135.8105	Pocket dial.		
52	59.3615	-135.8108	Handnet 3 CO about 40mm.	HN	3 CO
53	59.3603	-135.8151	Starts to become ponds that have little connection. Were	HN	CO
			able to identify CO up to WPT.	_	



Figure 1.—Tess Quinn and Rick Hoffman surveying 18 Mile slough tributary.



Figure 2.–115-32-10250-2060-3008 addition map.

CORRECTION

Water body name: Horse Farm Creek

Watershed: Chilkat Inlet-Frontal Lynn Canal

Species & Lifestage: COpPs

MTR: C029S057E Quad: Skagway B-3

Findings: We sampled fish in Horse Farm Creek on three occasions in 2016 and 2017 using minnow traps and a GPS, and documented cutthroat trout and Dolly Varden char; we also visually observed adult pink salmon twice in August 2017 (Table 1; Figures 1–2).

Recommendations: Reduce the upper extent of the stream to waypoint 104, the upper pond, and

remove the coho salmon listing between Haines Highway and the upper extent.

Table 1.–115-32-10250-2060-3011 survey data.

Date	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
6/9/2016	101	59.3666	-135.8008	Lower pond; DV FL 100 mm (15 hr	MT	1-DV
				trap soak)		
5/4/2017	101	59.3666	-135.8008	Lower pond; DV FL 65-80 mm (22 hr	MT	2-DV
				soak for all 5/4/17 traps)		
	102	59.3669	-135.8011	Middle pond	MT	No Fish
	103	59.3672	-135.8014	MT set at base of upper pond	MT	1-DV
	104	59.3673	-135.8015	Upper pond	MT	No Fish
6/9/2017	101	59.3666	-135.8008	Lower pond (23 hr soak for all 6/9/17	MT	2-DV
				traps)		
	102	59.3669	-135.8011	Middle pond; CT FL 70 mm and DV	MT	1-CT, 11-DV
				FL 70-135 mm		
	104	59.3673	-135.8015	Upper pond	MT	1-DV
8/3/2017	26	59.3665	-135.8004	100 ft of mainstem between waypoints	VI	50-P
	25	59.3668	-135.8008	25 and 26, and the lower pond		
8/6/2017	104	59.3673	-135.8015	Upper pond	VI	P



Figure 1.—Pink salmon pair (center) on 8/3/2017 in Stream No. 115-32-10250-2060-3011 at waypoint 25.



Figure 2.–115-32-10250-2060-3011 route correction map.

Water body name: Horse Farm Creek
Water body number: 115-32-10250-2060-3011
Species & Lifestage: COpr

CORRECTION

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C029S057E **Quad:** Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher, handnet, and a GPS (Table 1). This stream enters 18 Mile Slough, follows highway more closely than is shown in AWC.

Stream terminates at a steep channelized waterfall below current cataloged extent.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-713

Table 1.–115-32-10250-2060-3011 survey data

	115-32-1025	50-2060-3011 s	3		
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
37	59.3633	-135.7991	Horse Farm Creek empties	HN	2 CO, 1 LP
			into 18 Mile Slough. 2 CO		
			about 50mm and 1 Lamprey		
			about 140mm captured.		
36	59.3646	-135.7986	Culvert enters from river left.		
35	59.3647	-135.7987	Handnet 5 CO about 40mm.		5 CO
34	59.3657	-135.7998	Handnet 1 CO about 45mm.	HN	1 CO
19	59.3659	-135.8003	Double culvert on the left side		
			of road facing the border.		
20	59.3660	-135.8004	Fork in the stream. Took the		
20	27.2000	133.0001	river right branch.		
21	59.3663	-135.8006	Little creek entering from		
21	37.3003	133.0000	river left.		
30	59.3662	-135.8005	Electrofished still on river	EF	No Fish
30	37.3002	-133.0003	right. Electrofished and	Li	110 1 1311
			captured nothing.		
26	59.3665	-135.8004	Electrofished 2 DV about	EF	2 DV
20	39.3003	-133.6004	45mm.	EF	2 D V
25	59.3668	-135.8008	Electrofished 1 DV about	EF	1 DV
23	39.3008	-133.8008		EF	ΙDV
2.4	50.2671	125 0012	140mm.		
24	59.3671	-135.8012	Start track of river left branch		
22	50.0697	125 0022	or mainstem.	E.F.	N. 171.1
23	59.3677	-135.8023	End of tracking. Measurement	EF	No Fish
			above WPT was 25 meters		
			and a 12% grade. Below the		
			WPT 15 meter and 15%		
			grade. Electrofishing carried		
			out at WPT.		



Figure 1.–115-32-10250-2060-3011 route correction map.

ADDITION

Water body name: 16.9 Mile Creek
Water body number: 115-32-10250-2060-3018
Species & Lifestage: COr

Watershed: Chilkat Inlet–Frontal Lynn Canal **MTR:** C029S057E **Quad:** Skagway B-3

Findings: We surveyed this stream using a minnow trap and a GPS (Table 1). We captured rearing coho salmon at the culvert outlet with about 4 hours of soak time (Figure 1). This stream is sourced from small seeps in the forest which then flow into a small pond on the uphill side of the highway that is often dry. The culvert contains a mound of debris at the inlet that produces a 2ft drop off and blocks upstream fish passage (Figure 2). The stream channel is sometimes backwatered by a Chilkat River side channel.

Recommendations: Adding this stream to the AWC (Figure 3).

Nomination: 14-689

Table 1.–16.9 Mile Creek survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
552	59.3584	-135.7870	16.9 Mile Creek culvert inlet.		
553	59.3583	-135.7872	Set a minnow trap at culvert	MT	2 CO
			outlet and captured 2 CO		
			between 45-80mm.		
554	59.3581	-135.7874	Confluence of 16.9 Mile		
			Creek and Chilkat River.		



Figure 1.–Rearing coho salmon captured below culvert outlet.



Figure 2.–16.9 Mile Creek culvert inlet below the Haines Highway with large debris mound that creates a 2ft drop.

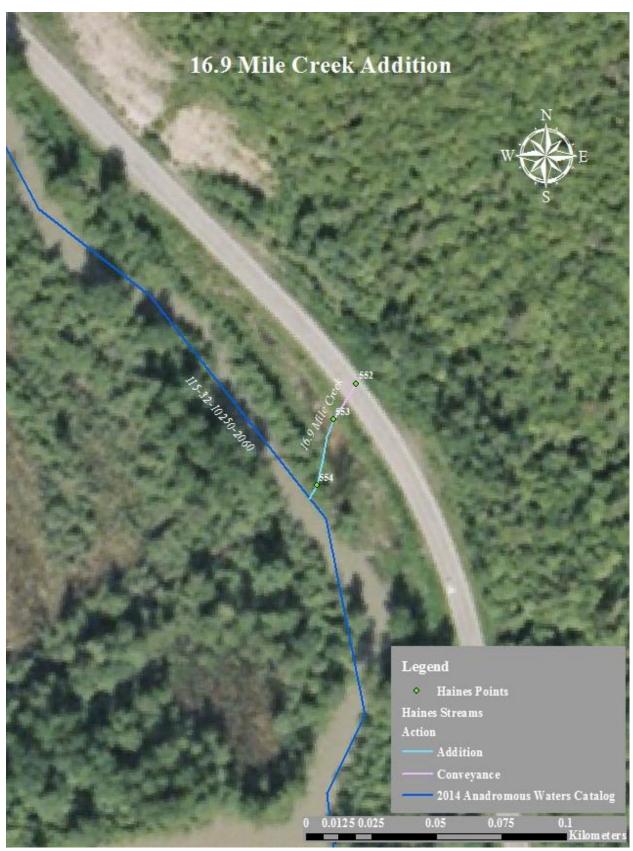


Figure 3.–16.9 Mile Creek addition map.

CORRECTION

Water body name: Survey date: 8/15/2017
Watershed: Tsirku River Species & Lifestage: COsr

MTR: C029S056E Quad: Skagway B-3

Findings: We surveyed this waterbody with minnow traps and a GPS. We captured juvenile coho salmon and Dolly Varden char (Table 1, Figure 1). The stream appears to flow from a large wetland area through four bedded corrugated metal culverts into the Tsirku River (Figures 2, 3).

Recommendations: Correct this stream course in the Anadromous Waters Catalog.

Table 1.–115-32-10250-2067-3000 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1116	59.3755	-135.9391	Downstream of road, 4 culverts.		
1117	59.3756	-135.9393	Upstream of road, sediment built up in 2 river left culverts. Minnow trap set at 1150 in ~0.5 m. Current moved trap mostly out of water when pulled the next day at 0920.	MT	2 DV
1118	59.3759	-135.9395	Minnow trap set at 1157 under over hanging alders. Pulled at 0920 the next day. CO ranged from 55-70 mm.	MT	3 CO, 2 DV



Figure 1.-Juvenile coho salmon captured at WP 1118.



Figure 2.–Upstream of Chilkat Landing road.

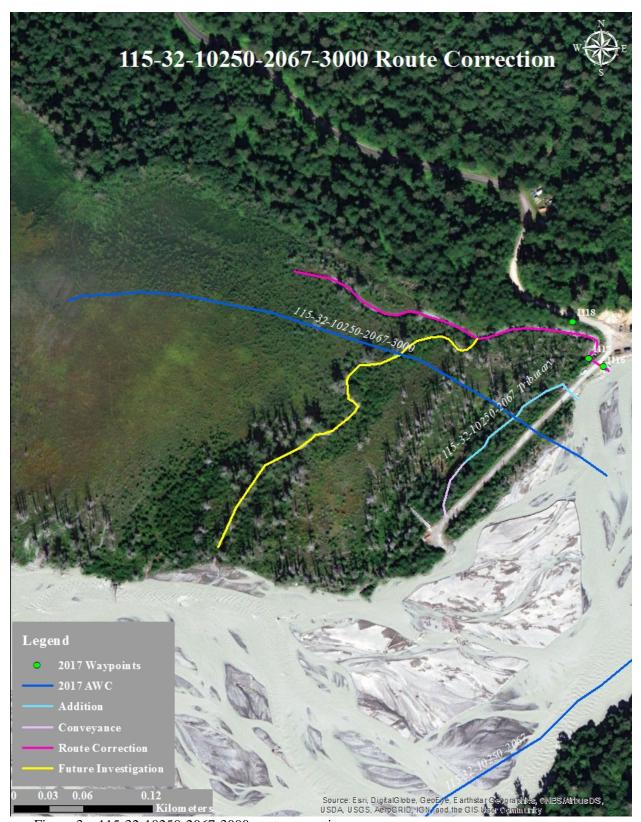


Figure 3.–115-32-10250-2067-3000 route correction map.

ADDITION

Water body name:

Watershed: Tsirku River

Survey date: 8/15/2017

Species & Lifestage: COr

MTR: C029S056E Quad: Skagway B-3

Findings: We surveyed this waterbody with a backpack electrofisher, minnow traps, and a GPS. We captured juvenile coho salmon, cutthroat trout, and Dolly Varden char (Table 1, Figures 1,2). The stream is shallow throughout with organic substrate (Figure 3). We discovered that this stream is located near stream 115-32-10250-2067-3000, but the current stream course is mapped inaccurately in the catalog and a route correction will be submitted (Figure 4).

Recommendations: Add this waterbody to the Anadromous Waters Catalog for rearing coho salmon.

Table 1.-115-32-10250-2067-3002 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1119	59.3753	-135.9396	Downstream of the road. Three 5' culverts		
1120	59.3754	-135.9397	Most of the flow goes throught the river left culvert, some flow through river right culvert, and the middle culvert is plugged with sediment. Minnow trap set at 1203 in ~0.25 m deep water. Pulled on 8/15/2017 0936. CO ranged from 40-70mm and DV ranged from 70-120 mm.	MT	7 CO, 1 CT, 5 DV, 1 SC
1121	59.3753	-135.9399	Minnow trap set at 1206 in ~0.3m deep water. Organic fine substrate with LWD. Pulled on 8/15/2017 at 0940. CO ranged from 40-75 mm.	MT	10 CO, 2 DV
1134	59.3753	-135.9399	Beginning survey above last minnow trap at WP 1121. Silty substrate with LWD and algae.	EF	2 CO, 1 DV
1135	59.3752	-135.9403	Lots of algae in stream. Channel begins to slow, gradient has been nearly flat. DV ranged from 30-110 mm.	EF	5 DV
1136	59.3751	-135.9405	Small Tributary on river left, following up.	EF	2 CO
1137	59.3751	-135.9407	End of tributary in pool that looks to be a man made side channel from the same water source as the main channel.	EF	2 CO, 1 DV

Table 1.-Continued.

Table 1.	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1138	59.3750	-135.9408	Back on main channel, leaving		
			channel to move around dead		
			fall.		
1139	59.3749	-135.9408	Back on main channel.	EF	2 CO
1140	59.3748	-135.9411	Stream is ~1m wide, flow is	EF, VI	2 CO, 20 CO
			faster.		
1141	59.3743	-135.9414	Narrow ponded area above last	EF	No Fish
			WP, became narrow <1m		
			wide, shallow with leaf litter.		
			Ends at the road.		



Figure 1.—Juvenile coho salmon captured at WP 1120.



Figure 2.– Juvenile coho salmon captured at WP 1137.



Figure 3.–Representative reach of this stream at WP 1136. Side channel enters from river left.



Figure 4.– 115-32-10250-2067-3002 (tributary) addition map.

115-32-10250-2067-3008 (Old AWC # -3002)

Correction

Water body name: Little Salmon River Survey date: 8/25/2012

Water body number: 115-32-10250-2067-3008

Watershed: Tsirku River Species and Lifestage: COsr, CTsr, CHp, DVp, Sp

MTR: C029S056E Quad: Skagway B-3

Findings: Over the course of six days we surveyed the upper portion of the Little Salmon River and its tributaries (Table 1, Figure 1). This area has many beaver dams. Rearing coho salmon were found throughout the entire beaver complex. We also tracked a side channel with rearing coho salmon.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 2).

Nomination: 12-609

Table 1.–115-32-10250-2067-3008 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
50	59.3957	-136.0443	Calling it a day. Can come		
			back and continue downstream		
			or look for the other side		
			channel.		
49	59.3959	-136.0511	Main flow from beaver pond		
			by road. Nice step pool with		
			majority of water flow into		
			deep pool. Making for easy		
			fish passage.		
46	59.3921	-136.0587	Branch of Little Salmon River		
			river left.		
48	59.3921	-136.0584	On mainstem of Little Salmon.		
45	59.3916	-136.0598	This is where WPT 38 meets		
			WPT 44.		
44	59.3916	-136.0598	One outlet from complex.		
43	59.3916	-136.0571	Water leaving beaver complex		
			into Little Salmon.		
42	59.3910	-136.0574	Electrofished 3 CO and 1 SC.	EF	3 CO, 1 SC
41	59.3909	-136.0582	Electrofished 4 CO about	EF	4 CO
			45mm.		
40	59.3903	-136.0591	Electrofished 2 CO on edge of	EF	2 CO
			beaver complex.		
39	59.3909	-136.0594	Beaver pond, we are making a		
			polygon around the complex.		
38	59.3914	-136.0601	Start of beaver complex.	EF	6 DV
			Electrofished and got 6 DV		
			about 50mm.		
37	59.3906	-136.0604	River spreads out into		
			channels.		
32	59.3884	-136.0638	Tributary entering river right.		

Table 1.–Continued.

Table 1.–Continued.								
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results			
31	59.3885	-136.0640	Continuing tracking down the					
			Little Salmon River					
26	59.3915	-136.0607	Confluence with Little Salmon					
			River. Tributary had spots					
			with no water, but there were					
			CO in every pool.					
25	59.3901	-136.0644	Tributary hits a barrier. No					
			way through, but flow on the					
			the other side.					
95	59.3895	-136.0650	3rd beaver dam installment.					
			Tons of fish stuck in pool					
0.4	50.2002	126.0651	below dam.	DD.	2.00			
94	59.3893	-136.0651	Shocked 3 CO between 65-	EF	3 CO			
02	50.2002	126.0652	80mm.					
93	59.3892	-136.0652	Schooling coho	IINI	2.00			
92	59.3887	-136.0659	3 CO captured in the beaver	HN	3 CO			
80	59.3872	-136.0666	pond. Back on main stream, headed					
80	37.3672	-130.0000	down to see where it					
			connects.					
79	59.3881	-136.0663	Main beaver dam about 3'	EF	3 CO, 1 DV			
,,	27.2001	150.0005	high. Will track down to	2.1	3 00, 1 2 ,			
			where it connects with WPT's					
			75, 74 to make main flow that					
			connects with Little Salmon					
			River. Electrofished at base of					
			dam and got 1 DV about					
			45mm and 3 CO about 40mm.					
78	59.3880	-136.0658	A disconnected pool from	EF	5 CO			
			water. Saw CO and					
			electrofished and got 5 CO					
			about 45mm.					
77	59.3880	-136.0659	Beaver dam, one of many.					
			Currently not much flow from					
			dam.					
76	59.3885	-136.0655	Top of small back load of	EF	3 CO			
			water. Electrofished and got 3					
7.5	50.200 6	126.0640	CO about 50mm.	DD.	CDU			
75	59.3886	-136.0649	Start of beaver complex.	EF	6 DV			
			Electrofished and got 6 DV about 50mm.					
74	59.3885	-136.0641	Tributary entering river left.					
74 72	59.3855	-136.0641	Tributary entering river left. Tributary entering river left.					
12	37.3033	-130.0001	THOUGHTY CHICKING HVCF Tell.					

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
71	59.3836	-136.0683	Electrofished and got 11 DV	EF	2 CO, 11 DV, 1
			between 30-85mm, 1 SC and		SC
			2 CO about 45mm.		
70	59.3841	-136.0751	This is where bridge crosses		
			the Little Salmon River.		
21	59.3835	-136.0934	At steep, incised portion.		
			Have to be close to the		
			cataloged upper. Calling it		
			good. Sketchy walking,		
			rapids, slick rocks, increasing		
			gradient. Might be good to		
			return after fall foliage dies		
			off.		
19	59.3847	-136.0817	Back on Little Salmon		
			mainstem.		
11	59.3848	-136.0813	Tributary entering river left.		
			Just small clear stream		
			compared to Little Salmon		
			River.		



Figure 1.—Nicole Legere surveying the Little Salmon River.

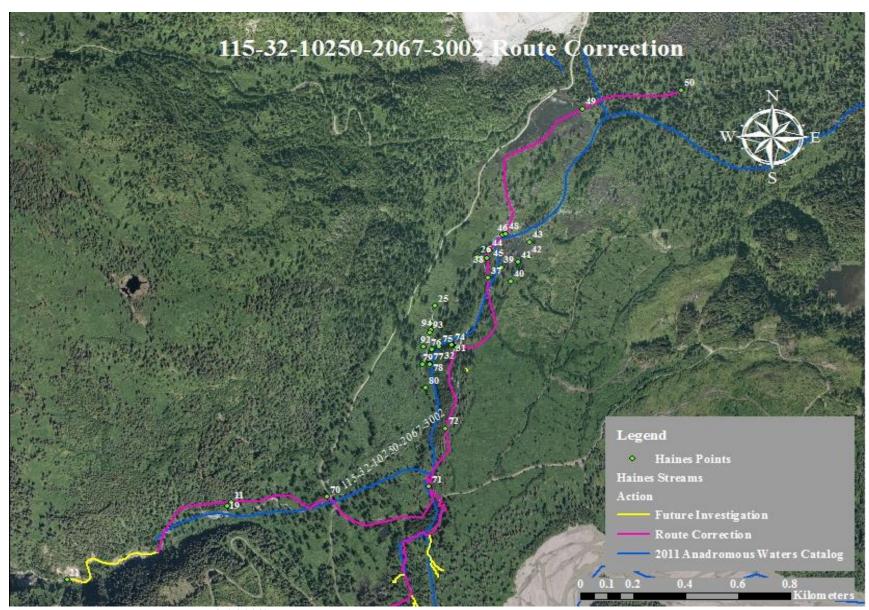


Figure 2.–115-32-10250-2067-3008 (-3002) route correction map.

115-32-10250-2067-3008-4005 (Old AWC # -3002-4005) ADDITION

Water body name: Survey date: 8/24/2012 Water body number: 115-32-10250-2067-3008-4005 Species & Lifestage: COr

Watershed: Tsirku River

MTR: C029S055E Quad: Skagway B-3

Findings: We surveyed this tributary to the Little Salmon River using a backpack electrofisher and a GPS (Table 1). We found rearing coho salmon in the upper portion of this stream. The

headwater of this stream is a small upwelling.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-608

Table 1.–115-32-10250-2067-3008-4005 survey data.

	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	32	59.3884	-136.0638	Tributary entering on river		
				right.		
	33	59.3878	-136.0635	Electrofished 1 DV about	EF	1 DV
				60mm.		
	34	59.3877	-136.0636	Electrofished 6 DV between	EF	6 DV
				35-60mm.		
	35	59.3876	-136.0637	Electrofished 2 CO about	EF	2 CO
				35mm.		
	36	59.3874	-136.0636	Top of tributary, headwaters		
_				is an upwelling.		



Figure 1.–115-32-10250-2067-3008-4005 (-3002-4005) addition map.

Haines

115-32-10250-2067-3008-4006 (Old AWC# -3002-4006)

ADDITION

Water body name: Survey date: 8/13/2012 Water body number: 115-32-10250-2067-3008-4006 Species & Lifestage: COr

Watershed: Tsirku River

MTR: C029S055E Quad: Skagway B-2

Findings: We surveyed this short tributary to Little Salmon River using a backpack electrofisher and a GPS (Table 1). We caught rearing coho salmon in the small headwater pool of this stream.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-607

Table 1.–115-32-10250-2067-3008-4006 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
72	59.3855	-136.0661	Tributary entering on river left.		
73	59.3856	-136.0666	Top of tributary, just water coming up out of the ground. Electrofished 2 CO about 40mm and 7 DV between 20-120mm.	EF	2 CO, 7 DV

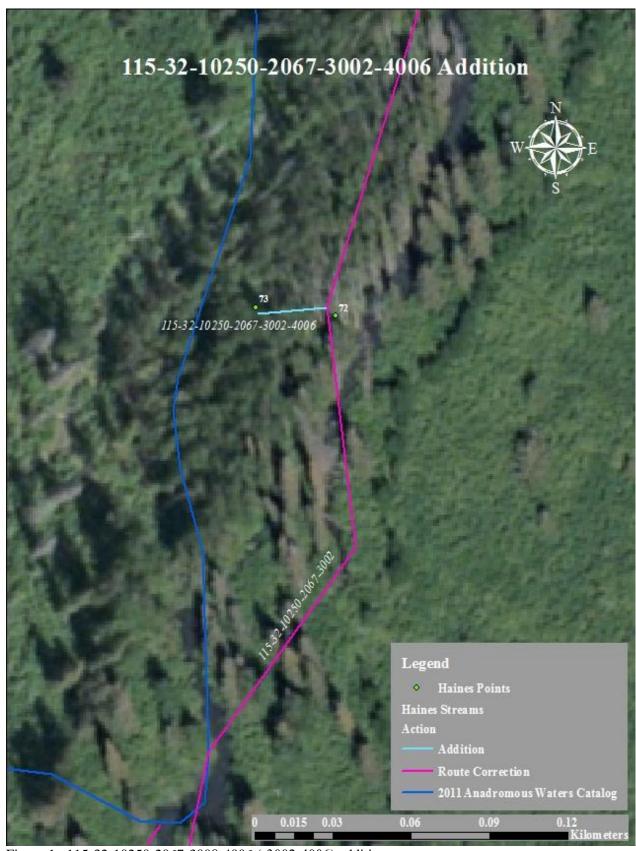


Figure 1.–115-32-10250-2067-3008-4006 (-3002-4006) addition map.

115-32-10250-2067-3008-4007 (Old AWC# -3002-4007) CORRECTION

Water body name: Clear Creek
Survey date: 8/26/2011
Water body number: 115-32-10250-2067-3008-4007
Species & Lifestage: COpr

Watershed: Tsirku River

MTR: C029S055E Quad: Skagway B-3

Findings: We surveyed this network of streams over the course of several days and found many of the tributaries to be sourced from small upwellings in the forest (Table 1). Although we were unable to capture coho salmon in many of the associated tributaries, no obvious barriers were encountered and the habitat seemed good. Through future investigation it is possible that these tributaries could be nominated with additional field work.

Recommendations: Correct the current course in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-562

Table 1.–115-32-10250-2067-3008-4007 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.3830	-136.0680	Bridge that loggers use to cross Clear Creek. There are adult S salmon present that are swimming around.		
2	59.3818	-136.0693	Tributary enters from river right.		
7	59.3819	-136.0707	Beaver Dam. Has a good size hole in it on the creek right of the dam. Fish are able to pass, because there were 5 S present above the dam.	EF	5 S
8	59.3817	-136.0708	Handnet 2 CO between 30-35mm.	HN	2 CO
9	59.3814	-136.0713	Tributary entering from river left.		
11	59.3806	-136.0719	Tributary entering from river left.		
13	59.3798	-136.0716	Tributary entering from river right.		
20	59.3793	-136.0734	Tributary entering from creek left. Also have a backwater area right next to the tributary mouth.		
21	59.3792	-136.0741	Crossed the creek and went up a slight embankment and there was a large beaver pond present.		

Table 1.–	Table 1.—Continued.								
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results				
22	59.3780	-136.0745	Stopped tracking this						
			tributary. The tributary runs						
			along the beaver pond and						
			connects with pond in several						
			places. But really connects at						
			WPT, which is basically the						
			top of the beaver pond. The						
			area is very flooded and dead						
			trees making it hard to travel.						
			The tributary appears to be						
	50.05 0.4	10.50=05	somewhat new.						
1	59.3794	-136.0735	Confluence before beaver						
2	50.0561	1260722	pond.						
2	59.3761	-136.0732	Spot where we started						
			tracking downstream						
4	50.2722	126.0712	yesterday.	IINI	1 CO 1 DV				
4	59.3732	-136.0713	Handnet 1 CO about 35mm	HN	1 CO, 1 DV				
E	50 2719	126,0600	and 1 DV about 30mm.						
5	59.3718	-136.0699	Side channel enters on river						
6	59.3704	-136.0711	right. 1 DV about 30mm.	HN	1 DV				
7	59.3704	-136.0711	Possible tributary enters river	HN	2 DV				
,	39.3701	-130.0710	left. Handnetted 2 DV	1111	2 D V				
			between 30-35mm.						
8	59.3691	-136.0711	Handnetted 1 CO about 35mm.	HN	1 CO				
9	59.3683	-136.0713	Tributary enters river right.	HN	1 CO				
			Handnetted 1 CO.						
10	59.3683	-136.0718	Handnetted 1 CO about 45mm.	HN	1 CO				
11	59.3673	-136.0731	Handnetted 1 CO about 55mm.	HN	1 CO				
12	59.3671	-136.0732	Tributary enters river right.						
13	59.3670	-136.0732	Side channel, pours off from						
			here. Possible tributary comes						
			in on river left.						
14	59.3668	-136.0732	Small tributary enters on river						
			right.						
15	59.3665	-136.0735	Handnetted 1 CT about 60mm.	HN	1 CT				
16	59.3664	-136.0737	Handnetted 2 CO about 40mm,	HN	2 CO				
			stream becomes mossy,						
			steeper, rocky, piddling out.						
17	59.3664	-136.0739	End of water and channel,						
			stream comes out of large						
			rocky substrate, would require						
			very high flow to contain fish						
			or water.						

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
19	59.3668	-136.0732	Handnetted 1 DV about 25mm.	HN	1 DV
20	59.3666	-136.0728	Top of watered habitat,		
			channel continues but very		
			vegetated, likely no fish		
			habitat.		

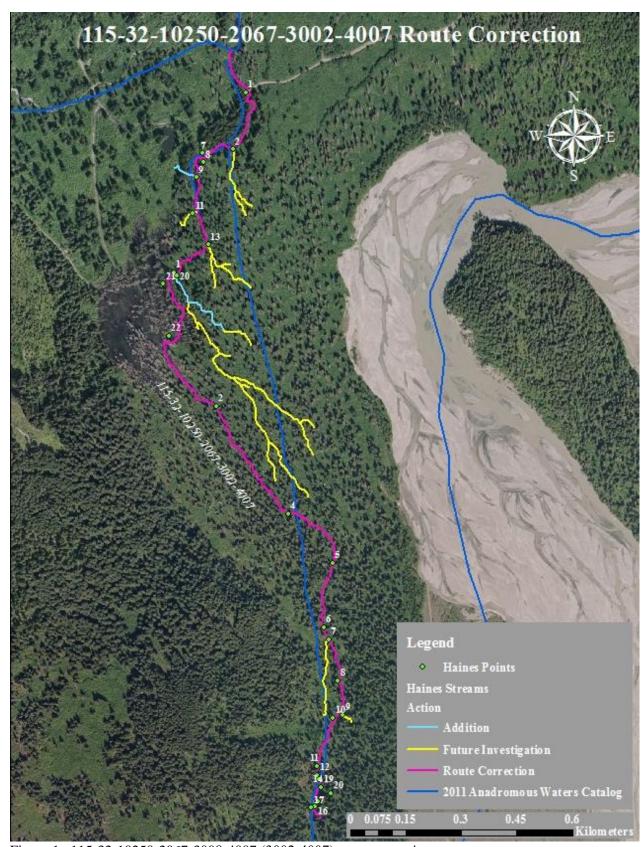


Figure 1.–115-32-10250-2067-3008-4007 (3002-4007) route correction map.

115-32-10250-2067-3008-4007-5004 (Old #-3002-4007-5004) ADDITION

Water body name: Survey date: 7/19/2011 **Water body number:** 115-32-10250-2067-3008-4007-5004 **Species & Lifestage:** COr

Watershed: Tsirku River

MTR: C029S055E Quad: Skagway B-3

Findings: We surveyed this tributary to Clear Creek using a handnet and a GPS (Table 1).

Tributary headwater is a spring seep.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-531

Table 1.–115-32-10250-2067-3008-4007-5004 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
9	59.3814	-136.0710	Possible tributary entering from river left. Will come back to since on opposite side of creek. To deep to cross.		
10	59.3818	-136.0720	Top of the tributary/ditch that was mentioned in WPT#9. The water is just coming out of the ground. Handnetted 11 CO that were between 35-45mm.	HN	11 CO

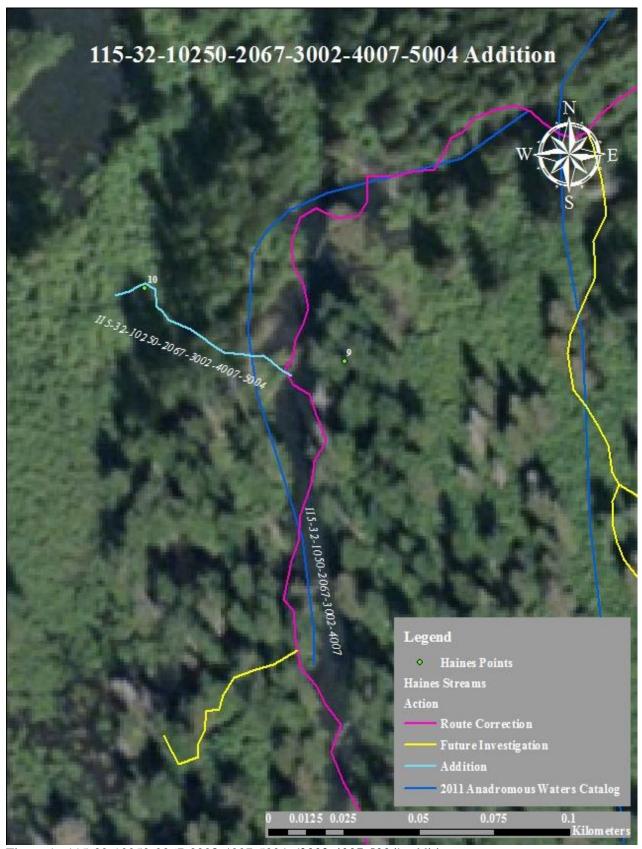


Figure 1.–115-32-10250-2067-3008-4007-5004 (3002-4007-5004) addition map.

115-32-10250-2067-3008-4007-5015 (Old # -3002-4007-5015) ADDITION

Water body name: Survey date: 7/20/2011 **Water body number:** 115-32-10250-2067-3008-4007-5015 **Species & Lifestage:** COr

Watershed: Tsirku River

MTR: C029S055E Quad: Skagway B-3

Findings: We surveyed this tributary to Clear Creek using a backpack electrofisher, handnet,

and a GPS (Table 1). We found that tributary's headwater was a spring seep. **Recommendations:** Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-529

Table 1.–115-32-10250-2067-3008-4007-5015 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.3794	-136.0734	Triple confluence we stopped at yesterday (7/19/2011). Walking and tracking up river		
			right (mainstem).		
2	59.3786	-136.0732	Tributary enters on river right.		
3	59.3783	-136.0723	Tributary enters on river right. Electrofished 3 CO between 35-40mm.	EF	3 CO
4	59.3781	-136.0724	Small tributary enters on river left. Only about 20 feet long.		
5	59.3779	-136.0720	Electrofished 1 CO about 35mm.	EF	1 CO
6	59.3778	-136.0720	Handnet 2 CO about 35mm.	HN	2 CO
7	59.3775	-136.0710	Attempted electrofishing in large deep pool, no fish caught.	EF	No Fish
8	59.3773	-136.0709	End of connected, watered, habitat. Continues in series of pools, but no fish currently present.		



Figure 1.–115-32-10250-2067-3008-4007-5015 (-3002-4007-5015) addition map. Haines

115-32-10250-2070

CORRECTION

Water body name: 21.5 Mile Creek
Water body number: 115-32-10250-2070
Watershed: Chilkat Inlet-Frontal Lynn Canal
Survey date: 7/22/2014
Species & Lifestage: CHsr,COsr

MTR: C028S056E Quad: Skagway B-3

Findings: We conducted a foot survey of this stream using a GPS (Table 1). The stream comes off a steep hillside and parallels the Haines Highway for about 450ft and before crossing under the Haines Highway through a 3ft culvert (Figures 1, 2). Above the Haines Highway the stream width is 2-3ft, the depth is 1-4 inches. Anadromous fish have not been documented above the Haines Highway culvert.

Recommendations: Shortening the cataloged portion to the downstream end of the Haines

Highway culvert (Figure 3).

Nomination: 14-686

Table 1.–115-32-10250-2070 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
562	59.3998	-135.8784	Culvert outlet.		
563	59.4000	-135.8783	Culvert inlet, not embedded, moderate gradient, slight inlet perch.		



Figure 1.–21.5 Mile Creek looking upstream from the culvert inlet.



Figure 2.–21.5 Mile Creek looking downstream.

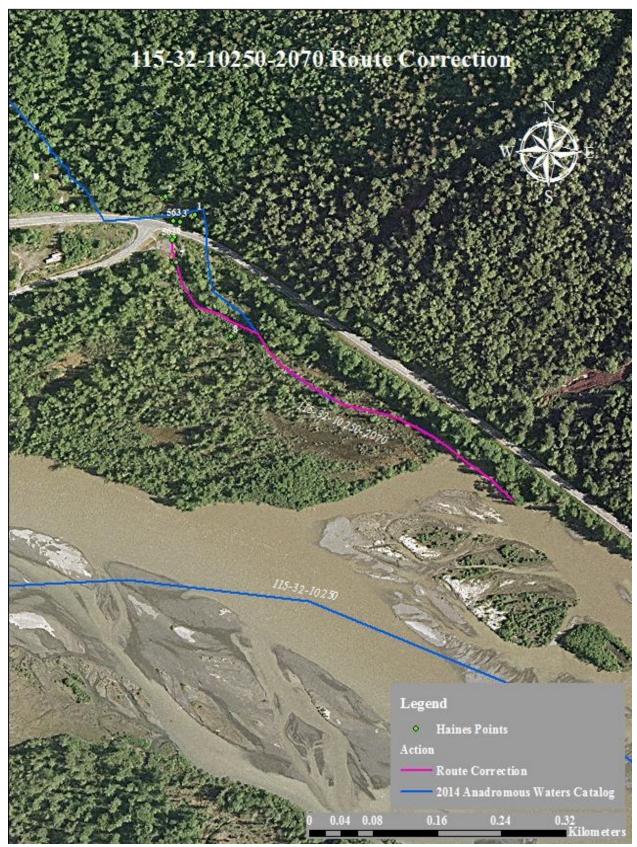


Figure 3.–115-32-10250-2070 route correction map.

115-32-10250-2077-3061-4002

CORRECTION

Water body name: Herman Creek Spawning Channel #3

Watershed: Klehini River

Species & Lifestage: CHsp, COr

MTR: C028S055E Quad: Skagway B-3

Findings: We surveyed this created spawning channel with a backpack electrofisher, and a GPS (Figure 1). We captured juvenile Dolly Varden char, cutthroat trout, chum and coho salmon (Table 1, Figure 2-4). The juvenile chum salmon were trapped in an isolated pool within the spawning channel due to a breach during high flows. Under normal circumstances, juvenile chum salmon would migrate to the ocean instead of rearing in fresh water, therefore it I do not recommend that chum salmon rearing be included in this nomination.

Recommendations: Add rearing coho salmon to this stream in the Anadromous Waters Catalog.

Nomination: 17-595

Table 1.–115-32-10250-2077-3061-4002 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1228	59.4156	-136.0669	Middle of the created spawning channel. Electrofished a small isolated pool caused by breach of channel during high flows. All	EF	159 CH, 4 CO, 3 CT, 12 DV
			fish caught ranged from 35-65 mm.		



Figure 1.—Downstream portion of Herman Creek Spawning Channel #3.

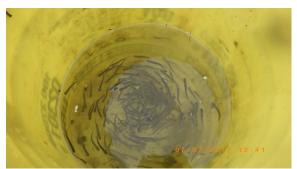


Figure 2.–Juvenile salmonids captured.



Figure 3.–Juvenile coho salmon captured.



Figure 4.–115-32-10250-2077-3061-4002 correction map.



115-32-10250-2077-3061-4008

ADDITION

Water body name: Survey date: 7/16/2011 Water body number: 115-32-10250-2077-3061-4008 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S055E Quad: Skagway B-3

Findings: We surveyed this tributary to Herman Creek using a backpack electrofisher, handnet and a GPS (Table 1, Figure 1). Coho salmon were caught in the upper extent of this tributary.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-543

Table 1.–115-32-10250-2077-3061-4008 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
22	59.4135	-136.0682	Tributary enters on river left.		
18	59.4136	-136.0683	Handnetted 1 CO about 45mm	HN	1 DV, 1 CO
			and 1 DV about 35mm.		
23	59.4140	-136.0689	Electrofished upper extent of	EF	2 CO
			watered habitat and captured		
			2 CO between 35-50mm.		



Figure 1.–Rick Hoffman electrofishing Herman Creek tributary.

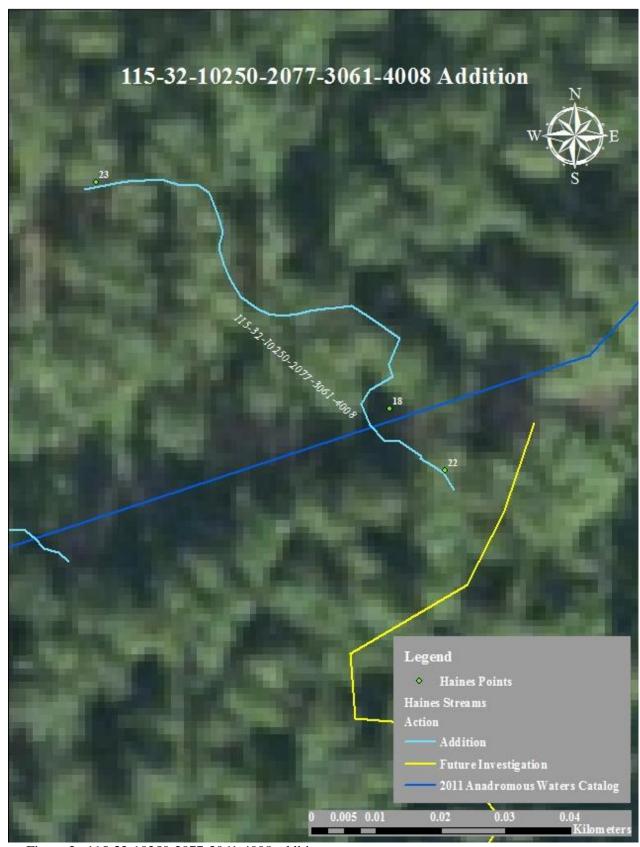


Figure 2.–115-32-10250-2077-3061-4008 addition map.

115-32-10250-2077-3061-4012

ADDITION

Water body name: Survey date: 7/16/2011 Water body number: 115-32-10250-2077-3061-4012 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S055E Quad: Skagway A-3

Findings: We surveyed this tributary to Herman Creek using a handnet and a GPS (Table 1). We captured rearing coho salmon that were abundant in this small spring fed stream (Figure 1).

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-534

Table 1.–115-32-10250-2077-3061-4012 survey data.

	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	36	59.4128	-136.0741	Tributary enters on river right.		
	37	59.4128	-136.0744	Handnetted 1 CO about 40mm.	HN	1 CO
	40	59.4125	-136.0748	Tributary enters on river right.		
	39	59.4128	-136.0754	Upper extent of watered		
				habitat, creek disappears into		
				devil's club.		
	38	59.4124	-136.0749	Handnetted 1 CO about 35mm	HN	1 CO, 1 DV
				and 1 DV about 30mm.		
	41	59.4126	-136.0751	Top of watered habitat.	HN	2 CO, 1 DV
				Handnetted 2 CO between 35-		
_				45mm and 1 DV about 30mm.		



Figure 1.-Coho salmon netted in 115-32-10250-2077-3061-4012.

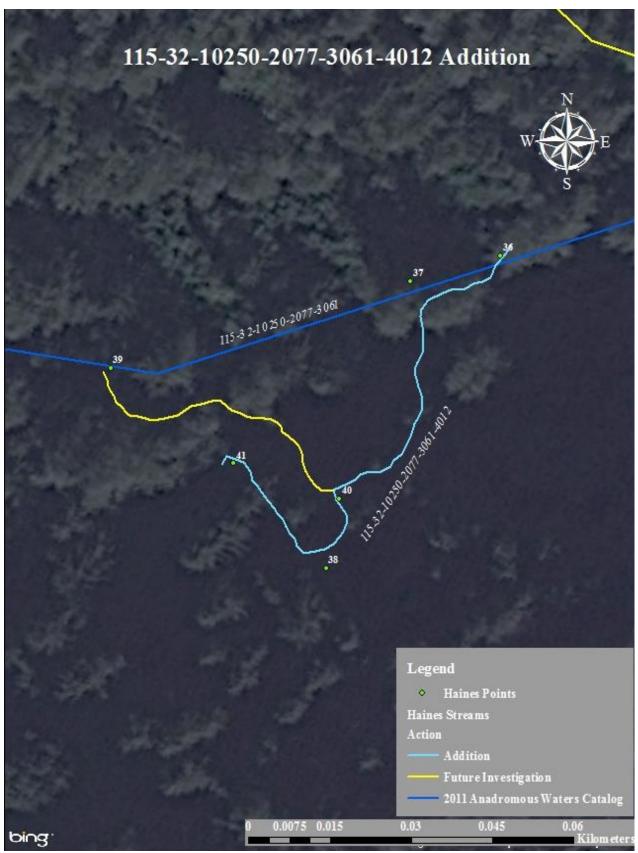


Figure 2.–115-32-10250-2077-3061-4012 addition map. Haines

115-32-10250-2077-3082

Water body name: 33 Mile Creek
Water body number: 115-32-10250-2077-3082
Species & Lifestage: COsr

CORRECTION

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We surveyed this stream using a handnet and a GPS (Table 1). We found that this stream is highly influenced by beaver activity, with many fresh dams present throughout the stream. Rearing Dolly Varden char and coho salmon were abundant throughout stream. The route of 33 Mile Creek mainstem differs from that illustrated in the AWC. The headwaters are in a different location than is currently cataloged, and the mouth enters the Chilkat River in a different area.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 11-528

Table 1.-115-32-10250-2077-3082 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
10	59.4259	-136.1371	Mouth of 33 Mile Creek		
			confluence with Klehini		
			River.		
9	59.4262	-136.1379	Tributary enters on river right.		
8	59.4268	-136.1387	Small tributary enters on river		
			right.		
7	59.4280	-136.1402	Big beaver dam not a barrier,		
_			side flow provides fish pass.		
6	59.4282	-136.1409	Possible tributary or		
			backwater enters on river left,		
			has many small visible mud		
~	50.4001	106 1417	dams.		
5	59.4281	-136.1417	Channels enter on each side of		
			the creek, possible tributaries or backwaters.		
4	50 4292	126 1405			
4	59.4283	-136.1425	Another possible tributary or backwater on each side of the		
			creek.		
3	59.4286	-136.1424	Possible tributary or		
3	39.4280	-130.1424	backwater behind beaver dam.		
2	59.4293	-136.1464		VI	1 CO
2	39.4293	-130.1404	Tributary enters on river left, visual identification on 1 CO	VI	100
			at mouth.		
1	59.4301	-136.1508	Tracking downstream just off		
1	JJ. 4 J01	-130.1300	roadway.		
1	59.4300	-136.1614	Place where tributary we		
•	57.1500	130.1014	tracked earlier enters.		
2	59.4299	-136.1617	Tributary entering from creek		
_	C	100.1017	right.		
			rigii.		<u>.</u>

Table 1.-Continued.

Table 1.—Continued.							
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results		
10	59.4300	-136.1646	Tributary entering from river				
			left.				
11	59.4263	-136.1382	Handnet 3 CO between 35-	HN	3 CO		
			45mm.				
12	59.4265	-136.1389	Handnet 1 CO about 45mm.	HN	1 CO		
16	59.4298	-136.1676	Handnet 1 CO about 50mm.	HN	1 CO		
17	59.4298	-136.1681	Side channel entering from				
			river left. Half of the flow that				
			is in creek is coming from the				
			channel. The water channel				
			appears to be new, no defined				
			channel, just flowing over the				
			forest floor.				
18	59.4298	-136.1703	Beaver dam. The water that				
			comes out at WPT #17 is				
			water from 33 Mile Creek that				
			is over flowing the banks				
			where dam is at and flowing				
			through woods to reconnect				
			with 33 Mile mainstem.				
19	59.4298	-136.1724	Another beaver dam, has				
			pretty good flow over the				
			banks that make up side.				
20	59.4297	-136.1727	Possible tributary entering				
			from river left.				
21	59.4297	-136.1733	Beaver dam with pretty good				
			flow through it.				
22	59.4292	-136.1760	Have come to point where				
			there is flow coming in from				
			all directions. Basically a				
			beaver complex that is spread				
			out over a large area. With				
			very thick willows making				
			tracking hard. Going to call				
			this top for now.				

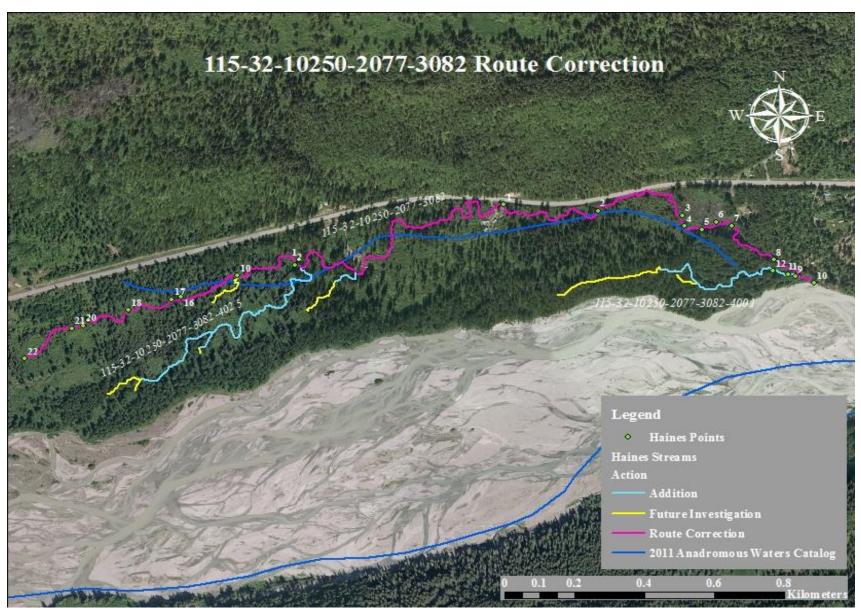


Figure 1.–115-32-10250-2077-3082 route correction.



115-32-10250-2077-3082-4001

ADDITION

Water body name: Survey date: 8/15/2011 Water body number: 115-32-10250-2077-3082-4001 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We surveyed this tributary to 33 Mile Creek using a handnet and a GPS (Table 1). This stream contained adequate flows for rearing fish and is spring fed. It is fed through groundwater seeps originating in the Klehini River flood plain. We found seven dead rearing coho salmon in a dried pool near the stream's source.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-526

Table 1.–115-32-10250-2077-3082-4001 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
9	59.4262	-136.1379	Tributary enters on river right.		
11	59.4263	-136.1382	Handnet 3 CO between 35-45mm.	HN	3 CO
12	59.4265	-136.1389	Handnet 1 CO about 45mm.	HN	1 CO
13	59.4264	-136.1418	Handnet 1 CO about 40mm.	HN	1 CO
14	59.4266	-136.1426	Handnet 3 CO in small side	HN	3 CO
			pool.		
15	59.4267	-136.1427	Tributary enters on river right.		
16	59.4268	-136.1430	Handnet 1 CO about 38mm.	HN	1 CO
17	59.4271	-136.1436	Tributary ends in small pool.		
			Semi-disconnected from the		
			rest of the stream. Dry channel extends beyond.		
18	59.4272	-136.1429	Handnet 2 CO between 40-45mm.	HN	2 CO
19	59.4271	-136.1437	Handnet 1 CO- 45 mm - continue upstream.	HN	1 CO
20	59.4274	-136.1443	Upper extent of connected	HN	7 CO
			watered habitat. 7 Dead CO		
			between 30-60mm in tiny		
			pool. Must have been trapped		
			and dried out.		

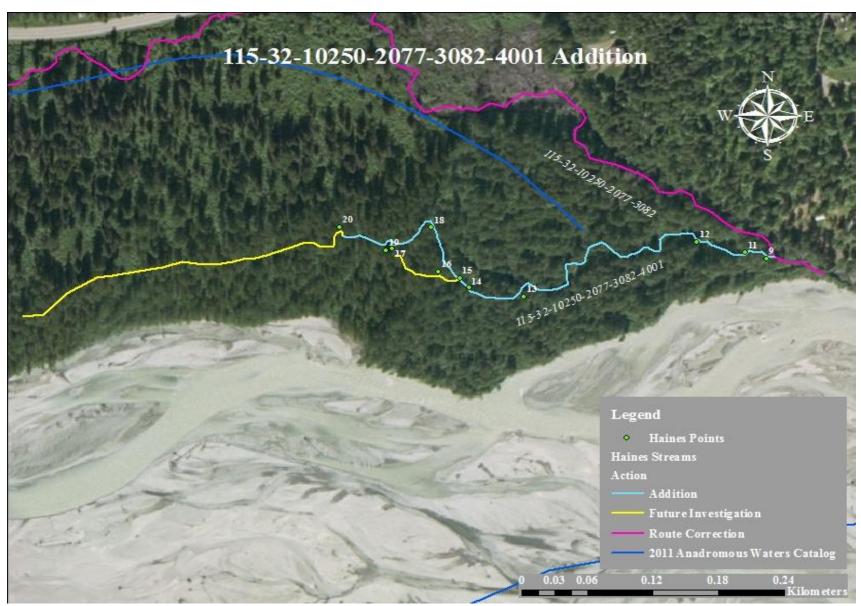


Figure 1.–115-32-10250-2077-3082-4001 addition map.

115-32-10250-2077-3082 TRIBUTARY 3

ADDITION

Water body name: Survey date: 9/23/2011 Water body number: 115-32-10250-2077-3082 Tributary 3 Species & Lifestage: COrp

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: This is a small tributary to 33 Mile Creek (Table 1). There was not much flow in this

tributary, but found anadromous and resident fish.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 16-534

Table 1.–115-32-10250-2077-3082 tributary 3 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
15	59.4293	-136.1589	Confluence of tributary with		
			33 Mile Creek.		
2	59.4291	-136.1591	Tributary enter on river right.		
3	59.4292	-136.1600	Handnetted 2 CO between 35-	HN	2 CO
			50mm among woody debris.		
8	59.4290	-136.1604	Back on orginal tributary.		
4	59.4289	-136.1605	Confluence of two tributaries.		
9	59.4289	-136.1611	Shocking confluence of a	EF	2 DV
			tributary. Captured 2 DV		
			about 75mm.		
11	59.4287	-136.1615	Shocking calm shallow pool.	EF	No Fish
12	59.4286	-136.1617	End of tributary, becomes a		
			mossy seep.		

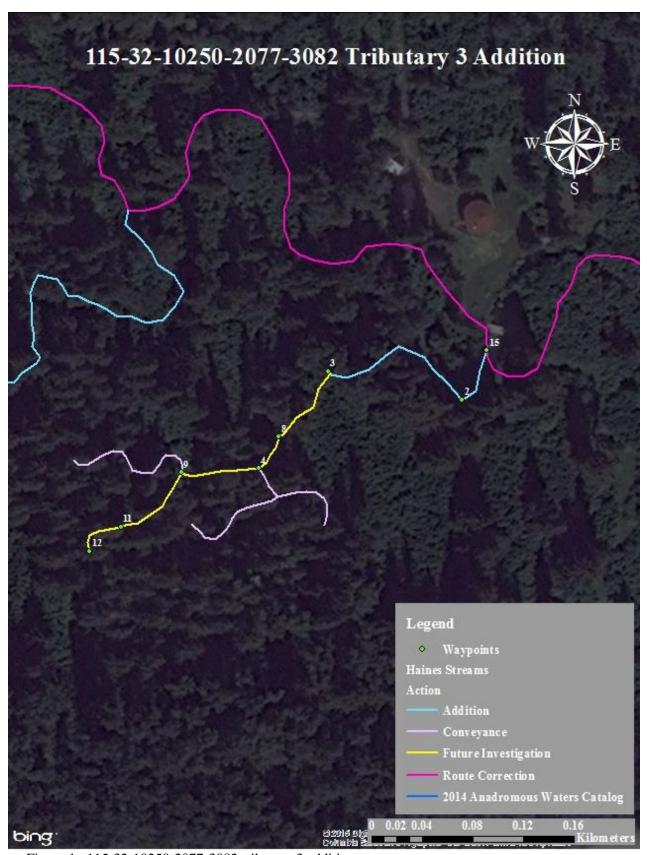


Figure 1.–115-32-10250-2077-3082 tributary 3 addition map.

115-32-10250-2077-3082-4025

ADDITION

Water body name: Survey date: 6/30/2011 Water body number: 115-32-10250-2077-3082-4025 Species & Lifestage: COpr

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We surveyed this spring fed tributary to 33 Mile Creek using a backpack electrofisher and a GPS (Table 1). The tributary contained good consistent flow and abundant rearing coho

salmon.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-545

Table 1.-115-32-10250-2077-3082-4025 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.4300	-136.1614	Begin tracking upstream river right fork.		
2	59.4293	-136.1621	Visual identification of 3 CO about 35mm.	VI	3 CO
3	59.4284	-136.1654	Tributary enters on river right.		
4	59.4283	-136.1654	Tributary branches into 3 forks, one is a small upwelling on tributary left that is only 10 feet long.		
5	59.4282	-136.1656	Tributary forks into 2.		
6	59.4282	-136.1658	Upper extent of tributary, attempted electrofishing.	EF	No Fish
7	59.4281	-136.1653	Upper extent of small tributary, no indication of anadromous fish presence.		
8	59.4288	-136.1660	Electrofished 1 DV about 25mm.	EF	1 DV
9	59.4287	-136.1663	Electrofished 1 CO about 30mm. Just below beaver dam. CO also visible in shallow pond above the dam.	EF	1 CO
10	59.4287	-136.1665	Tributary or backwater enters river right.		
11	59.4283	-136.1672	Attempted electrofished large pool with many CO visible. Caught 2 CO about 40mm.	EF	2 CO
12	59.4283	-136.1674	Handnet 1 CO.	HN	1 CO
13	59.4282	-136.1674	Stream dried completely.		
14	59.4282	-136.1684	Handnet 1 CO about 43mm.	HN	1 CO
15	59.4280	-136.1693	Tiny tributary enters river right.		
16	59.4279	-136.1708	Tributary enters on river right. Fish seem to be present.		

Table 1.-Continued.

Table 1	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
17	59.4278	-136.1709	Attempted electrofishing in	EF	No Fish
			pool before small waterfall.		
			No fish seen or captured.		
18	59.4280	-136.1712	Upper extent of watered		
			habitat. No fish seen or		
			captured, stream emerges from		
			dry forest.		
19	59.4279	-136.1709	Electrofished and caught 1 DV	HN/EF	1 DV, 1 CO
			about 30mm and handnetted 1		
			CO about 35mm.		
20	59.4279	-136.1719	Small tributary flows in on		
			river left.		
21	59.4277	-136.1722	River forks, follow river left		
			side up.		
22	59.4277	-136.1726	Upper extent of watered	EF	No Fish
			habitat, attempted		
			electrofishing and no fish seen		
			or caught.		
23	59.4276	-136.1723	Upper extent of river right		
			fork. Creek emerges from dry		
			but deep trench.		



Figure 1.–115-32-10250-2077-3082-4025 addition map.



115-32-10250-2077-3082-4025-5019

ADDITION

Water body name: Survey date: 8/2/2011 Water body number: 115-32-10250-2077-3082-4025-5019 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: This is a small and short tributary to a tributary to 33 Mile Creek (Table 1). The

stream ends by becoming a dry stream channel.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-545

Table 1.–115-32-10250-2077-3082-4025-5019 survey data.

W	aypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	10	59.4287	-136.1665	Tributary entering on river		
				right.		
	11	59.4283	-136.1672	Attempting electrofishing a	EF	2 CO
				large pool with many visible		
				CO. Caught 2 CO about		
				40mm.		
	12	59.4283	-136.1674	Handnetted 1 CO.	HN	1 CO
	13	59.4282	-136.1674	Stream dries completely.		

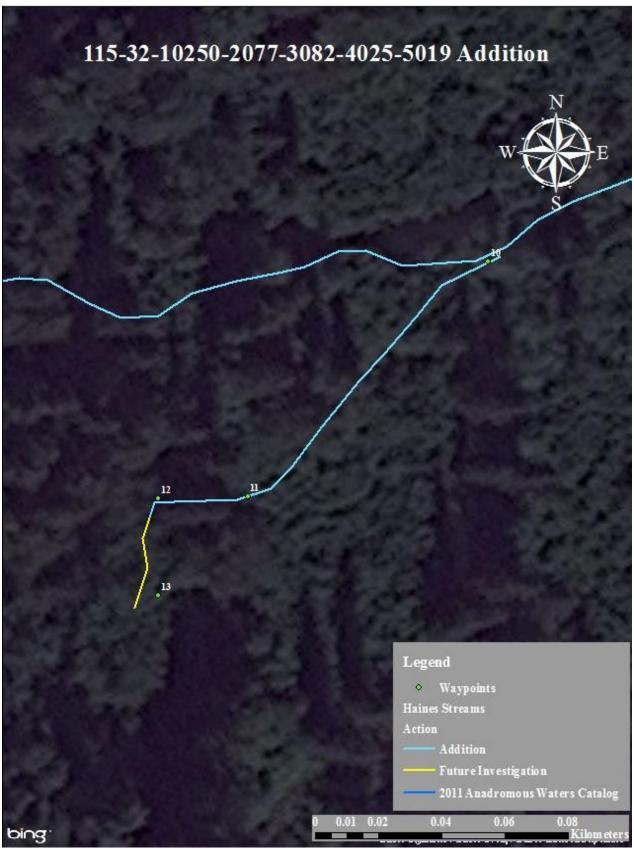


Figure 1.–115-32-10250-2077-3082-4025-5019 addition map. Haines

115-32-10250-2077-3130

ADDITION

Water body name: Survey date: 8/4/2016
Watershed: Klehini River Species & Lifestage: COr

MTR: C028S054E Quad: Skagway B-4

Findings: ADF&G Sport Fish Area Management Biologist Rich Chapell surveyed this stream

(Table 1) and captured coho salmon and Dolly Varden char (Figure 1).

Recommendations: Add stream to the AWC (Figure 2).

Nomination: 16-579

Table 1.–115-32-10250-2077-3130 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.4331	-136.2290	MT set at culvert outlet	MT	14 CO, 10 DV
2	59.4334	-136.2289	MT set near culvert inlet	MT	5 CO, 1 DV
3	59.4334	-136.2295		MT	8 CO
4	59.4335	-136.2295		MT	10 DV
5	59.4338	-136.2292		MT	No fish



Figure 1.–Coho salmon captured at waypoint 3.



Figure 2.–115-32-10250-2077-3130 (Tributary 1) addition map.

DELETION

Water body name: Spur Road Creek
Watershed: Klehini River
Species & Lifestage: COr

MTR: C028S054E Quad: Skagway B-4

Findings: I surveyed the area on 6/8/2016 and did not observe a drainage. Rich Chapell (Haines Sport Fish Area Management Biologist) surveyed the area on 8/4/2016 and did not find a drainage. I reviewed Haines Highway project files and did not find fish use information for the water body, and local ADOT&PF staff is not aware of a culvert or drainage in the area (Matt Boron, Foreman and Airport Manager, ADOT&PF, Haines, personal communication).

Recommendations: Delete the stream from the AWC (Figure 1).

Nomination: 16-578

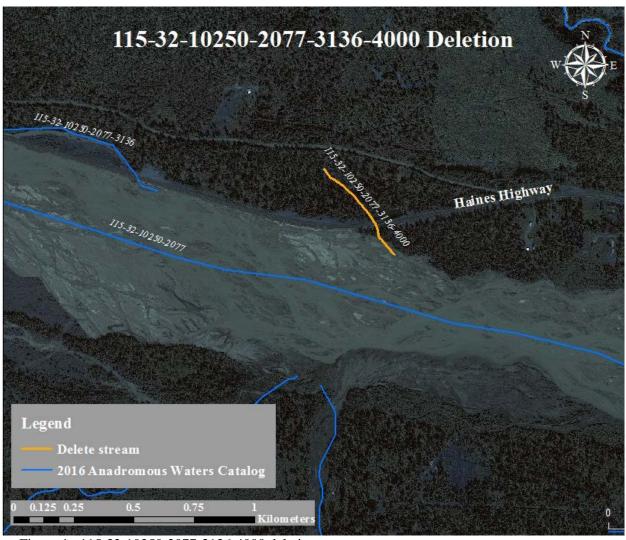


Figure 1.–115-32-10250-2077-3136-4000 deletion map.



CORRECTION

Water body name: McKenzie Creek

Water body number: 115-32-10250-2077-3136-4010

Species & Lifestage: COsr, DVsr

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We captured only rearing Dolly Varden char. We found that the stream route is dramatically

different than what is currently cataloged.

Recommendations: Update this stream to reflect the field verified route (Figure 1).

Nomination: 14-699

Table 1.-115-32-10250-2077-3136-4010 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
5	59.4398	-136.2801	Tributary entering on river left		
			at milepost 37.		
6	59.4401	-136.2823	Tributary entering on river		
			right.		
7	59.4401	-136.2827	Tributary entering on river		
			right.		
8	59.4401	-136.2831	Tributary entering on river		
			right. Vegatation is becomes		
			very thick and hard to move		
			through.		
9	59.4401	-136.2834	Tribuary is actually a side		
			channel of main tributary.		
10	59.4404	-136.2847	Culvert on someones property.		
11	59.4407	-136.2850	Two old culverts coming out		
			of hillside. 3' drop from the		
			outlets. Above culvert there is		
			a mid-sized pond.		
12	59.4405	-136.2871	Electrofished 2 DV between	EF	2 DV
10	5 0.440 5	10 - 00 - 1	40-45mm.		
13	59.4405	-136.2874	Tributary entering on river		
1.4	50 4405	1040074	right.		
14	59.4407	-136.2876	Tributary entering on river		
1.7	50.4400	126 2002	left.		
15	59.4408	-136.2882	Tributary entering on river		
			right, turned out to be a side		
1.6	50 4410	126 2000	channel.		
16	59.4410	-136.2890	Top of tributary.		
17	59.4400	-136.2890	Top of tributary.		

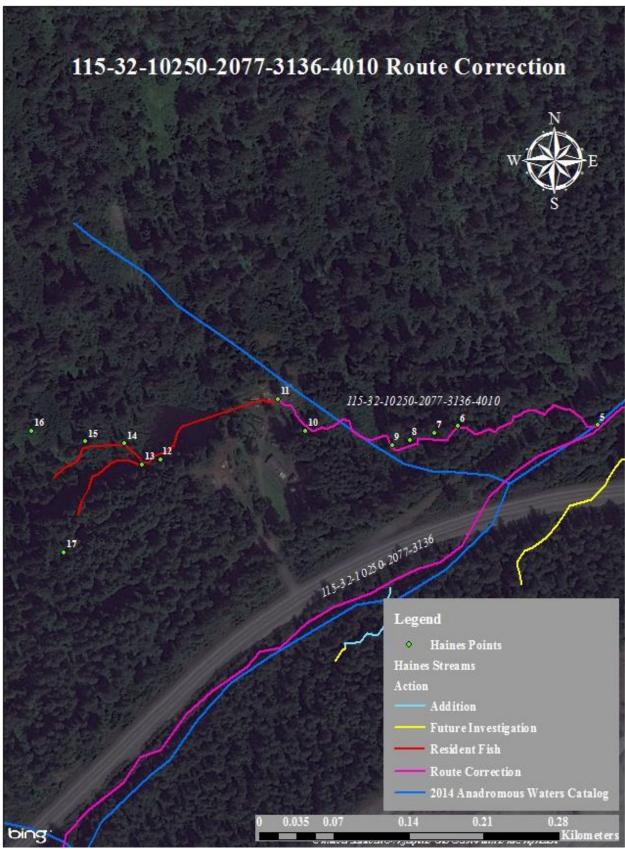


Figure 1.–115-32-10250-2077-3136-4010 route correction map.

ADDITION

Water body name: Survey date: 6/19/2011 Water body number: 115-32-10250-2077-3136-4013 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We surveyed this tributary to 37 Mile Creek using a backpack electrofisher and a GPS

(Table 1). We visually identified coho salmon throughout this tributary (Figure 1). **Recommendations:** Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-530

Table 1.–115-32-10250-2077-3136-4013 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
19	59.4390	-136.2840	Tributary entering from river right.		
20	59.4389	-136.2841	Handnetted 1 CO about 35mm.	HN	1 CO
22	59.4387	-136.2850	Electrofished 1 CO between 35-40mm.	EF	1 CO
21	59.4386	-136.2852	End of the tributary. Electrofished, but no fish captured.	EF	No Fish



Figure 1.–School of juvenile coho salmon in 37 Mile Creek tributary.

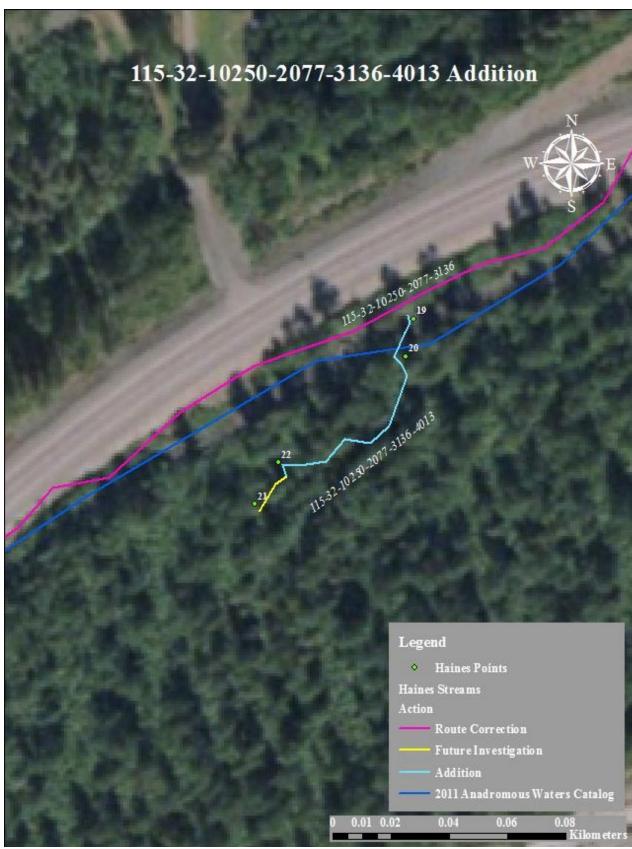


Figure 2.–115-32-10250-2077-3136-4013 addition map.

CORRECTION

Water body name: Survey date: 6/4/2010 Water body number: 115-32-10250-2077-3136-4025 Species & Lifestage: COp, DVp

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We conducted a foot survey of this stream and found that stream originates in a spring

at a location different from what is cataloged (Table 1).

Recommendations: Update this stream to reflect the field verified upper extent (Figure 1).

Nomination: 10-708

Table 1.–115-32-10250-2077-3136-4025 survey data

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
2	59.4359	-135.2983	Stream originates from a		
			spring.		

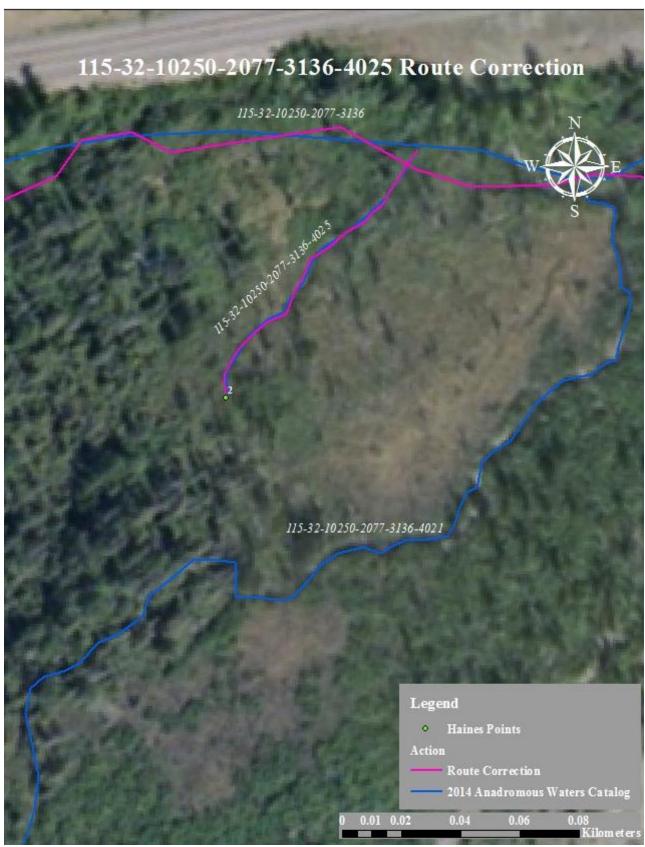


Figure 1.–115-32-10250-2077-3136-4025 correction map.

CORRECTION

Water body name: Survey date: 6/14/2010 Water body number: 115-32-10250-2077-3136-4031 Species & Lifestage: COp, DVp

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We conducted a foot survey of this stream and found that it originates in a spring at a

point different from what is cataloged (Table 1).

Recommendations: Update this stream to reflect the field verified upper extent (Figure 1).

Nomination: 10-707

Table 1.–115-32-10250-2077-3136-4031 Survey Data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
3	59.4350	-136.3047	Stream originates from a		
			spring.		

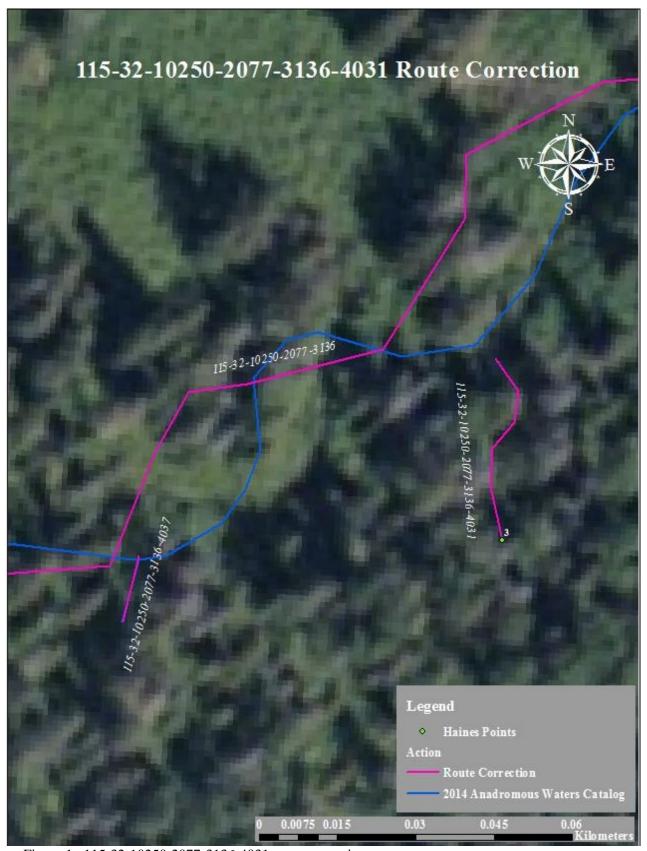


Figure 1.–115-32-10250-2077-3136-4031 route correction map.

CORRECTION

Water body name: Survey date: 6/14/2010

Water body number: 115-32-10250-2077-3136-4037 Species & Lifestage: CHp, COp, DVp

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We conducted a foot survey of this stream and found that it originates in a spring at a

point different from what is cataloged (Table 1).

Recommendations: Update this stream's upper point to reflect the field verified location (Figure

1).

Nomination: 10-706

Table 1.–115-32-10250-2077-3136-4037 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
4	59.4350	-136.6060	Stream originates from a		
			spring.		



Figure 1.–115-32-10250-2077-3136-4037 route correction map.

115-32-10250-2077-3151

ADDITION

Water body name: Glacier Creek Survey date: 5/27/2014 Water body number: 115-32-10250-2077-3151 Species & Lifestage: COp, CTp, DVp

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We survey this stream using a backpack electrofisher, minnow traps, and a GPS (Table 1, Figure 1). We captured only Dolly Varden char in Glacier Creek proper. Since we only captured coho salmon in tributary the anadromous habitat in Glacier Creek extends to that confluence The further upstream you go the bigger the substrate and less anadromous habitat there is (Figures 2, 3).

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 4).

Nomination: 14-683

Table 1.-115-32-10250-3151 survey data

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
2	59.4273	-136.3044	Mouth of Glacier Creek.		
480	59.4191	-136.2997	Confluence of tributary		
			entering on river left.		
417	59.4176	-136.3017	Set a minnow trap, captured 2	MT	2 DV
			DV between 60-80mm.		
416	59.4175	-136.3020	Set a minnow trap, captured 6	MT	6 DV
			DV between 60-80mm.		
415	59.4174	-136.3019	Set a minnow trap, captured 3	MT	3 DV
			DV between 70-85mm.		
464	59.4089	-136.3290	A small falls at base of forest		
			transition.		
462	59.4091	-136.3294	Electrofished 1 DV about	EF	1 DV
			20mm that was freshly		
			emerged, 3 ephemeroptera.		
461	59.4090	-136.3294	Confluence of stream Q,		
			stream P and Glacier Creek.		
			Concerge with braided clear		
			water.		
463	59.4090	-136.3296	Electrofished 1 DV about	EF	1 DV
			60mm.		
450	59.4088	-136.3303	Confluence of stream P and	EF	No Fish
			Glacier Creek.		
451	59.4090	-136.3309	Glacier Creek.	EF	No Fish
429	59.3942	-136.3576	Confluence of stream E and	EF	No Fish
			Glacier Creek. Large alluvial		
			fan, connect in relatively steep		
122	50.2016	126.2662	location with large boulders.	E.E.	N. E. I
423	59.3916	-136.3663	Ended survey here.	EF	No Fish
			Electrofished and got nothing.		



Figure 1.—Setting minnow traps in Glacier Creek near the old bridge.



Figure 2.—Glacier Creek at in area of small cascades near WPT #429.



Figure 3.–Glacier Creek looking downstream.

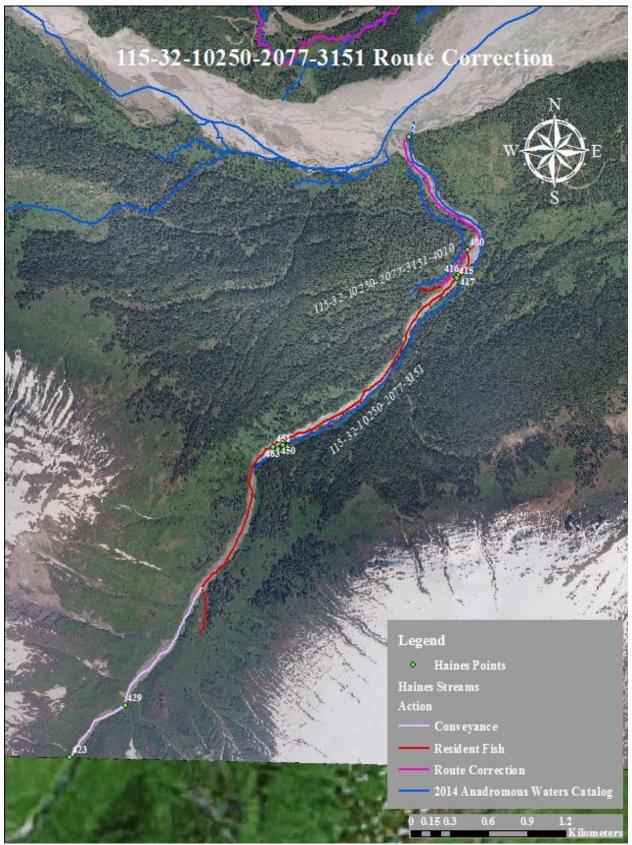


Figure 4.–115-32-10250-3151 route correction map.



115-32-10250-2077-3151-4010

CORRECTION

Water body name: Survey date: 5/30/2014 Water body number: 115-32-10250-2077-3151-4010 Species & Lifestage: COr, CTr, DVr

Watershed: Klehini River

MTR: C028S054E Quad: Skagway B-4

Findings: We surveyed this stream using a backpack electrofisher, minnow traps, and a GPS (Table 1). We captured Dolly Varden char, cutthroat trout, and coho salmon (Figure 1). We observed an old culvert beneath an overgrown road that did not block fish passage (Figure 2).

The stream contains deep pools, and gravel substrates (Figure 3).

Recommendations: Update the Anadromous Waters Catalog (Figure 4).

Nomination: 10-684

Table 1.-115-32-10250-2077-3151-4010 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
477	59.4175	-136.3031	Set a minnow trap. Captured 1	MT	1 CT
			CT about 65mm.		
478	59.4180	-136.3023	Culvert under old road. Set a	MT	3 CT
			minnow trap, captured 3 CT		
470	50 4102	126 2016	between 70-100mm.) ATT	N. E. I
479	59.4183	-136.3016	Tributary entering on river left	MT	No Fish
			with minimal flow. Setting a minnow trap.		
480	59.4191	-136.2997	Confluence of tributary and		
460	39.4191	-130.2997	Glacier Creek.		
481	59.4190	-136.2998	1 DV about 65mm.	EF	1 DV
482	59.4190	-136.2999	3 DV between 45-85mm.	EF	3 DV
483	59.4189	-136.3002	2 CT between 90-100mm and	EF	2 CT, 1 DV
103	57.1107	130.3002	1 DV about 60mm.	2.1	201,12
484	59.4186	-136.3008	1 CT about 80mm.	EF	1 CT
485	59.4183	-136.3014	Visual on 1 CT.	VI	1 CT
486	59.4183	-136.3016	1 DV about 20mm.	EF	1 DV
487	59.4181	-136.3019	2 CT between 50-75mm.	EF	2 CT
489	59.4180	-136.3024	1 CT about 80mm.	EF	1 CT
490	59.4180	-136.3024	1 CT about 70mm.	EF	1 CT
491	59.4177	-136.3026	1 CO about 50mm.	EF	1 CO
492	59.4173	-136.3040	4 CT betweeen 60-100mm.	EF	4 CT
493	59.4172	-136.3042	1 CT about 80mm.	EF	1 CT
495	59.4172	-136.3044	1 CO about 45mm.	EF	1 CO
496	59.4171	-136.3048	1 DV about 95mm.	EF	1 DV
497	59.4171	-136.3049	1 CT about 50mm.	EF	1 CT
499	59.4171	-136.3065	2 CT and 1 DV.	EF	2 CT, 1 DV
500	59.4172	-136.3067	1 CT and 1 DV. Gradient	EF	1 CT, 1 DV
			increasing.		
501	59.4173	-136.3073	Timber harvest boundary,	EF	No Fish
			upstream extent of		
			electrofishing.		-



Figure 1.—Coho salmon captured while electrofishing.



Figure 2.—Culvert under overgrown road.



Figure 3.—Gravel reach of stream number 115-32-10250-2077-3151-4010.

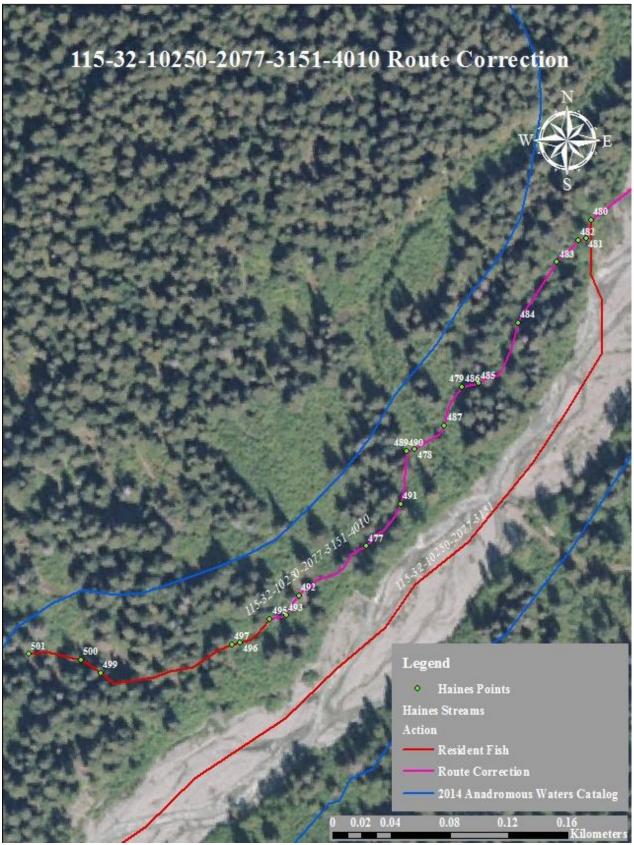


Figure 4.–115-32-10250-3151-4010 route correction map.



115-32-10250-2077-3136-4053-5011

DELETION

Water body name: Survey date: 6/8/2016
Watershed: Klehini River Species & Lifestage: COp

MTR: C028S053E Quad: Skagway B-4

Findings: I surveyed the area on 6/8/2016 and observed a swale backwatered by 39 Mile Pond (Stream No. 115-32-10250-2077-3136-4053-0010) adjacent to Haines Highway. The existing stream arc is about 100 m offset and west of the swale. Rich Chapell (Haines Sport Fish Area Management Biologist) also surveyed the area on 7/7/2016 and did not find a stream. Since backwaters of cataloged streams (39 Mile Pond) are included in the AWC by the regulatory definition of *stream*, the swale is not eligible for listing in the AWC.

Recommendations: Delete stream in the AWC (Figure 1).

Nomination: 16-580

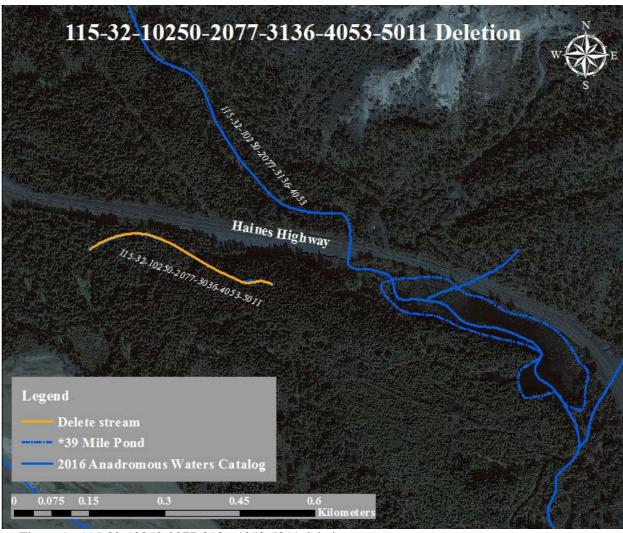


Figure 1.–115-32-10250-2077-3136-4053-5011 deletion map.

115-32-10250-2077-3159

CORRECTION

Water body name: Sarah Creek
Water body number: 115-32-10250-2077-3159
Watershed: Klehini River
Survey date: 4/21/2015
Species & Lifestage: COr, Kp
MTR: C028S053E Quad: Skagway B-4

Findings: We sampled with a backpack electrofisher and GPS (Table 1). We accessed the cataloged upper extent of Sarah Creek via overland snowshoe (Figure 1). The upper reach is cataloged for Chinook salmon presence; however there is no nomination and we not find anadromous fish in this reach. Hiking down the creek, electrofishing along the way, we captured Dolly Varden char. We came upon a barrier which we measured using an inclinometer and rangefinder. The barrier began gradually at a gradient of 15% over 90 feet, followed by subsequently steepening terrain with the majority of the cascade measuring at a 39% gradient over 135 feet with no resting places for fish (Figures 2, 3). A 2014 field report by R2 Resource Consultants, Inc. also confirms this is a barrier to anadromous fish.

Recommendations: Update arc to field-verified route ending at barrier (Figure 4). Remove Chinook salmon presence as no data exists to support that listing. I have attached the 2014 R2 field summary that reports no chinook salmon were observed in the system.

Nomination: 15-631

Table 4.-Sarah Creek survey data

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
202	59.4290	-136.3633	Upper extent of Sarah Creek.		
203	59.4288	-136.3626	2 DV	EF	2 DV
204	59.4288	-136.3625	1 DV	EF	1 DV
205	59.4288	-136.3623	1 DV	EF	1 DV
206	59.4287	-136.3620	Absolutely crazy! 3 ft of snow on banks and LWD. We will find fish when it's safe.		
207	59.4287	-136.3618	1 DV	EF	1 DV
208	59.4286	-136.3592	Pic of crotch-deep snow		
209	59.4286	-136.3592	1 DV	EF	1 DV
210	59.4271	-136.3453	1 DV	EF	1 DV
211	59.4266	-136.3427	2 DV	EF	2 DV
212	59.4264	-136.3406	1 DV; visual, could not capture because it floated under the ice. 15% over 90 yards.		
213	59.4268	-136.3396	Gradient is 22% over 105 feet		
214	59.4270	-136.3390	Gradient increase possible barrier at high flows. 25% at 105 feet.		
215	59.4275	-136.3380	Top of barrier. Gradient is 39% over 135 feet with no resting pools for fish.		



Figure 1.—At the tree fringe on the upper reach of Sarah Creek.



Figure 2.—Looking downstream from the top of the steep channel barrier on Sarah Creek.



Figure 3.–A 5' falls with no jump pool within the steep channel barrier on Sarah Creek.

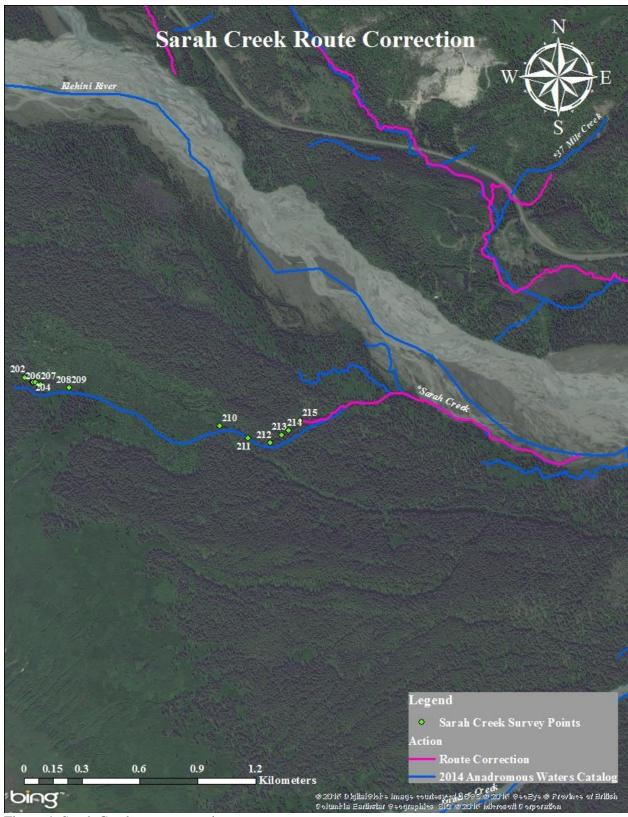


Figure 4: Sarah Creek route correction map.



115-32-10250-2078

ADDITION

Water body name: Survey date: 7/30/2012 Water body number: 115-32-10250-2078 Species & Lifestage: COr, Kr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C028S056E **Quad:** Skagway B-3

Findings: We surveyed this tributary to the Chilkat River using a backpack electrofisher and a GPS (Table 1). We captured rearing coho and Chinook salmon in the lower portion of the stream; however, the upper portion of the stream is channelized with higher velocity and larger substrate and no anadromous fish were captured. There is a jeep road that crosses the stream (Figure 1).

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 12-593

Table 1.–115-32-10250-2078 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
51	59.4069	-135.9262	Where the stream enters the Chilkat River		
52	59.4069	-135.9257	Electrofished 3 K about 45mm.	EF	3 K
53	59.4070	-135.9257	Electrofished 2 CO about 40mm.	EF	2 CO
54	59.4070	-135.9251	Electrofished 1 K about 45mm.	EF	1 K
55	59.4069	-135.9249	Electrofished 1 K about 40mm.	EF	1 K
56	59.4071	-135.9241	Electrofished 3 K about 45mm and 1 DV about 60mm.	EF	3 K, 1 DV
50	59.4073	-135.9238	AVT/vehicle road crosses the stream.		
57	59.4073	-135.9233	Electrofished 1 K about 50mm.	EF	1 K
58	59.4073	-135.9232	Electrofished 2 K about 40mm.	EF	2 K
59	59.4072	-135.9225	Electrofished 1 K about 45mm.	EF	1 K
60	59.4073	-135.9219	Electrofished 1 K about 40mm and 1 DV about 55mm.	EF	1 K, 1 DV
61	59.4073	-135.9216	Electrofished 2 K about 45mm.	EF	2 K
62	59.4073	-135.9213	Electrofished 1 K and 1 DV and both were about 50mm.	EF	1 K, 1 DV
63	59.4075	-135.9201	Electrofished 1 DV about 65mm.	EF	1 DV
64	59.4086	-135.9149	Culvert crosses under Haines Highway		

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
49	59.4091	-135.9149	Above the road at culvert inlet		
			that goes under road.		



Figure 1.–Looking downstream at 115-32-10250-2078 where it crosses a road at WPT #50.

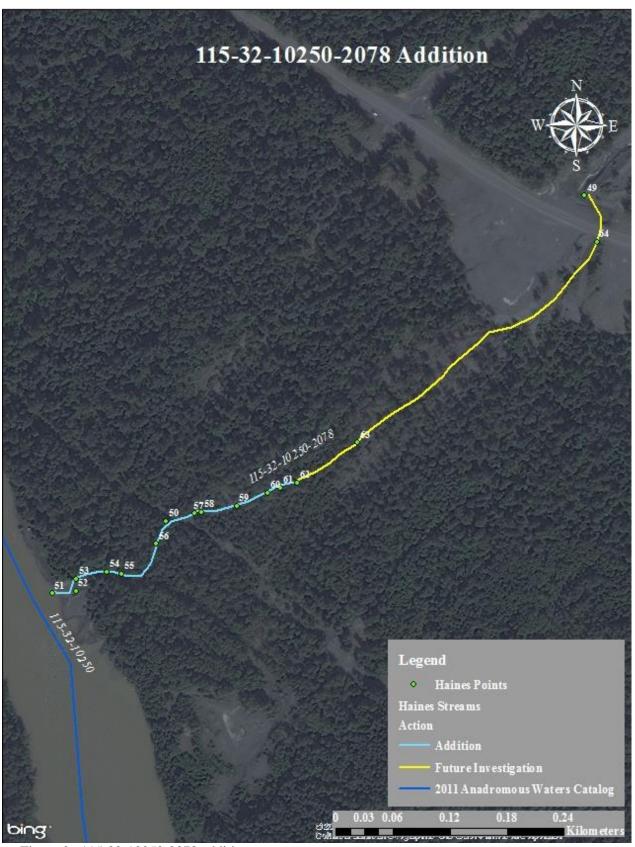


Figure 2.–115-32-10250-2078 addition map.



115-32-10250-2081

CORRECTION

Water body name: Muskrat Creek

Survey date: 8/11/2012

Water body number: 115-32-10250-2081

Species & Lifestage: COsr, Sp

Watershed: Kelsall River-Chilkat River **MTR:** C028S056E **Quad:** Skagway B-3

Findings: Over the course of three days we surveyed Muskrat Creek and its tributaries (Table 1). We had several visual observations of spawning sockeye salmon in the lower-mid portion of the creek and caught rearing coho salmon above the current AWC upper extent. The headwater of Muskrat Creek is a small seep from ground adjacent to the Haines Highway.

Recommendations: Correct the current route in the Anadromous Waters Catalog and add

spawning sockeye (Figure 1).

Nomination: 12-596

Table 1.-115-32-10250-2081 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
5	59.4174	-135.9440	Mouth of Muskrat Creek about 45-50' wide.		
6	59.4137	-135.9475	Tributary enters river right. Electrofished one spot along tributary got no fish.	EF	No Fish
11	59.4135	-135.9488	Visual of 3 (2M, 1 F) adult sockeye.	VI	3 S
12	59.4128	-135.9501	More sockeye and redds.	VI	S
13	59.4128	-135.9515	More sockeye and redds.	VI	S
14	59.4128	-135.9517	Tributary entering river left. Gravel is very iron enriched.		
15	59.4128	-135.9527	Tributary enters river left.		
35	59.4128	-135.9531	Got 2 CO about 35mm about 10' upstream from 1 adult sockeye.	EF/VI	2 CO, 1 S
36	59.4130	-135.9540	Electrofished and got 3 CO about 45mm.	EF	3 CO
37	59.4130	-135.9545	Electrofished and got 2 CO about 40mm and 1 DV about 65mm.	EF	2 CO, 1 DV
38	59.4126	-135.9551	Electrofished 2 CO about 40mm.	EF	2 CO
39	59.4123	-135.9558	Electrofished 2 CO about 35mm.	EF	2 CO
40	59.4122	-135.9564	Electrofished 3 CO about 45mm.	EF	3 CO
41	59.4121	-135.9563	Electrofished 2 CO about 40mm and 2 DV about 35mm.	EF	2 CO, 2 DV
42	59.4119	-135.9564	Electrofished 2 CO about 40mm.	EF	2 CO

	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
43	59.4118	-135.9565	Tributary entering river right.	EF	1 DV
			1 DV about 55mm.		
45	59.4115	-135.9580	Culvert outlet that goes under		
			Duck Mash Road. Wide		
			culvert mouth, very filled with		
			silt and mud.		
46	59.4116	-135.9585	Electrofished 3 CO about	EF	3 CO
	7 0.4445	127.0700	45mm.		
47	59.4116	-135.9589	Possible tributary entering		
40	50 4115	125.0505	river right.	E.E.	1.00
48	59.4117	-135.9595	Electrofished 1 CO about	EF	1 CO
40	50 4116	125.0600	40mm.	FF	2.00
49	59.4116	-135.9600	Electrofished 2 CO about	EF	2 CO
50	59.4113	-135.9606	50mm. Electrofished 3 CO about	DD	3 CO
30	39.4113	-133.9000	45mm.	EF	300
51	59.4109	-135.9615	Electrofished 1 CO about	EF	1 CO
31	39.4109	-133.9013	40mm.	151	1 00
52	59.4107	-135.9622	Tributary entering river right.		
55	59.4105	-135.9625	Split in creek, it is an even		
	671.100	100.7020	split in flow. Will track river		
			left branch first		
56	59.4105	-135.9626	Electrofished 2 CO about	EF	2 CO
			40mm.		
57	59.4107	-135.9640	Electrofished 3 CO about	EF	3 CO
			50mm.		
58	59.4103	-135.9655	Top of river left branch. The		
			water is just seeping up out of		
			the ground. There is channel		
			here but does not appear to		
			flow often.		
59	59.4101	-135.9643	Top of river right branch.		
			Water just seeping up out of		
			the ground. Electrofished to		
			here and got nothing. Super		
			irony.		

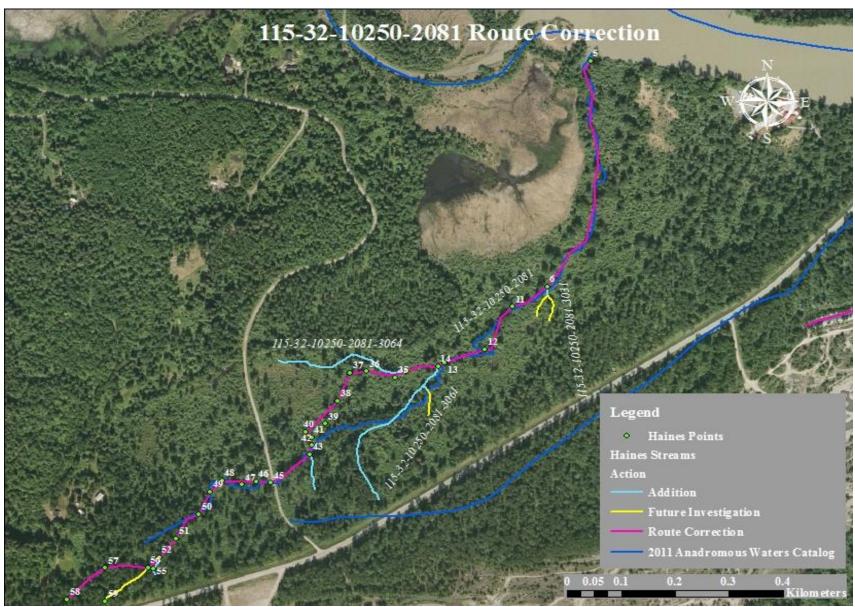


Figure 1.–115-32-10250-2081 route correction map.



ADDITION

Water body name: Survey date: 8/9/2012 Water body number: 115-32-10250-2081-3031 Species & Lifestage: COr

Watershed: Kelsall River-Chilkat River MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We

captured rearing coho salmon mid-way up the stream.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-597

Table 1.–115-32-10250-2081-3031 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
6	59.4137	-135.9475	Tributary enters river right.	EF	No Fish
			Electrofished one spot along		
			tributary and got nothing.		
8	59.4135	-135.9476	Electrofished the lower	EF	2 CO
			portion of tributary from		
			WPT# 6. Caught 2 CO.		
9	59.4135	-135.9476	As we walked down the		
			tributary we found another		
			branch of this tributary.		
7	59.4131	-135.9478	Calling it the top. No defined		
			channel. Spreads out into a		
			wooded wetland.		
10	59.4132	-135.9482	Calling it the top. Wooded,		
			spread out marsh.		

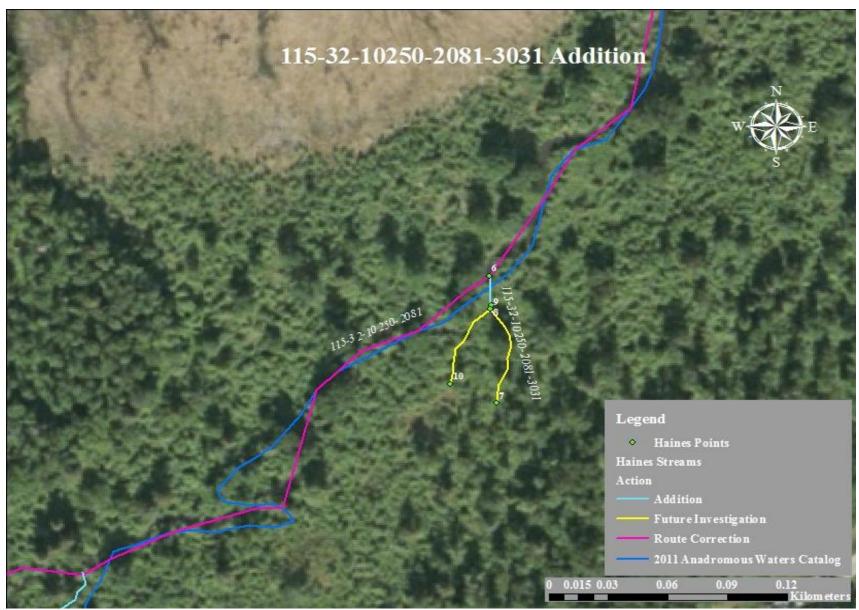


Figure 1.–115-32-10250-2081-3031 addition map.

ADDITION

Water body name: Survey date: 8/10/2012 Water body number: 115-32-10250-2081-3061 Species & Lifestage: COr, Ss

Watershed: Klehini River

MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream Muskrat Creek using a backpack electrofisher and a GPS (Table 1). We found sockeye salmon spawning in the lower portion and rearing coho salmon near the top of this stream that ends adjacent to the Haines Highway.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-600

Table 1.-115-32-10250-2081-3061 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
25	59.4127	-135.9517	Return to Muskrat Creek today to finish where we left off from yesterday. We are going	VI	4 S
			to start at WPT 14. Visual identification of 4 Sockeye at confluence.		
26	59.4125	-135.9523	Tributary enters river right.		
29	59.4125	-135.9524	Sockeye and redds present.	VI	S
30	59.4122	-135.9530	Sockeye and redds present up to this point and below. Great spawning habitat. Gravel and many upwellings	VI	S
31	59.4119	-135.9548	We have not seen a sockeye since WPT 30. We electrofished and got 3 DV.	EF	3 DV
32	59.4117	-135.9550	Electrofished, 2 CO and 13 DV.	EF	2 CO, 13 DV
33	59.4114	-135.9551	Caught 1 CO about 65mm in a giant upwelling.	EF	1 CO
34	59.4107	-135.9548	Top of tributary. Right next to the road. We did not see any other fish past WPT 33.		

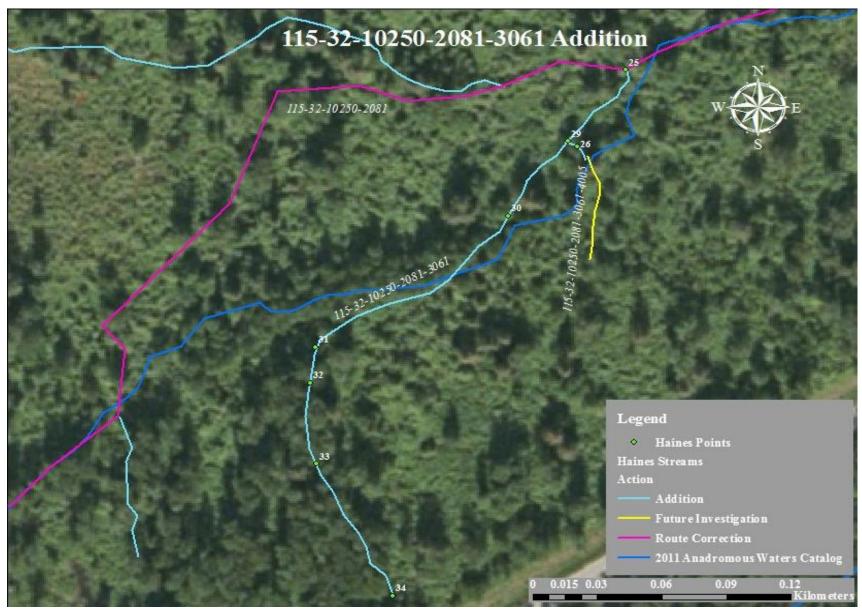


Figure 1.–115-32-10250-2081-3061 addition map.

115-32-10250-2081-3061-4005

ADDITION

Water body name: Survey date: 8/10/2012 Water body number: 115-32-10250-2081-3061-4005 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We captured rearing coho salmon in the lower portion of the stream. The top of this stream spreads

out in the forest.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-599

Table 1.–115-32-10250-2081-3061-4005 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
26	59.4125	-135.9523	Tributary enters river right.		
27	59.4124	-135.9523	Electrofished, 3 CO.	EF	3 CO
28	59.4120	-135.9525	Top of watered area. Spreads		
			out into forest.		

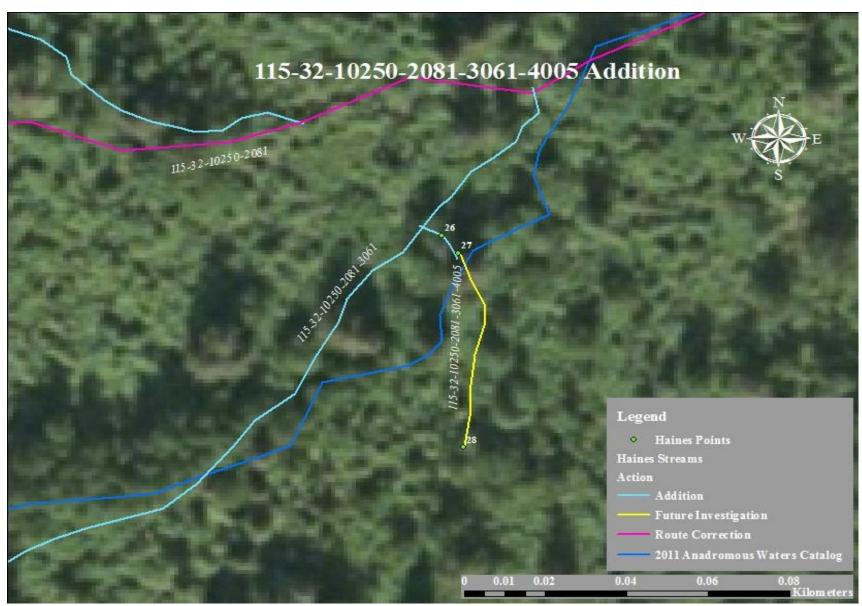


Figure 1.–115-32-10250-2081-3061-4005 addition map.

ADDITION

Water body name: Survey date: 8/9/2012 Water body number: 115-32-10250-2081-3064 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher, handnet and a GPS (Table 1). We captured rearing coho salmon mid-way up the stream. The stream is iron-enriched and originates from a small seep.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-598

Table 1.-115-32-10250-2081-3064 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
15	59.4128	-135.9527	Tributary enters river left.		
16	59.4129	-135.9533	Electrofished and caught 1 CO about 35mm and visual on 1 CO.	EF	2 CO
17	59.4129	-135.9534	Electrofished 2 CO. System is very iron enriched and silty.	EF	2 CO
18	59.4131	-135.9536	Electrofished 2 CO.	EF	2 CO
19	59.4133	-135.9542	Visual identification 1 CO.	VI	1 CO
20	59.4133	-135.9548	Handnetted 3 CO.	HN	3 CO
21	59.4136	-135.9566	Calling it the top, stagnant mud hole.		



Figure 1.–115-32-10250-2081-3064 addition map.

ADDITION

Water body name: Survey date: 8/11/2012 Water body number: 115-32-10250-2081-3067 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We

captured rearing coho salmon in the headwater upwelling hole.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-601

Table 1.–115-32-10250-2081-3067 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
43	59.4118	-135.9565	Tributary entering river right. Electrofished 1 DV about 55mm.	EF	1 DV
44	59.4112	-135.9567	Top of tributary ends in an upwelling hole that had CO in it. Electrofished 6 CO that were about 50mm.	EF	6 CO

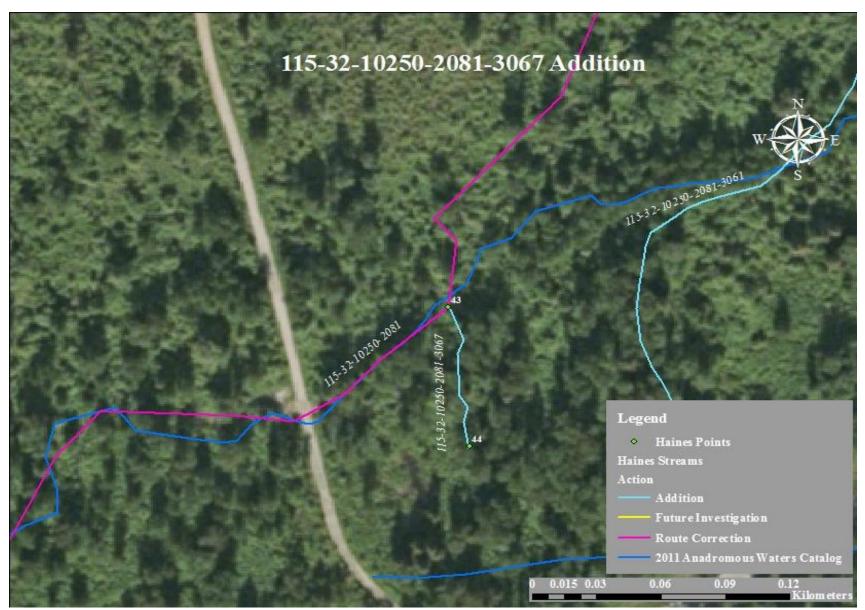


Figure 1.–115-32-10250-2081-3067 addition map.

ADDITION

Water body name: Survey date: 8/11/2012 Water body number: 115-32-10250-2081-3121 Species & Lifestage: COr

Watershed: Klehini River

MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We

captured rearing coho salmon in the headwater upwelling.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 12-602

Table 1.–115-32-10250-2081-3121 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
52	59.4107	-135.9622	Tributary entering river right.		
53	59.4105	-135.9624	Electrofished 4 CO about 50mm.	EF	4 CO
54	59.4104	-135.9625	Top of tributary, just an upwelling. Electrofished pool at head and got 3 CO about 40mm.	EF	3 CO

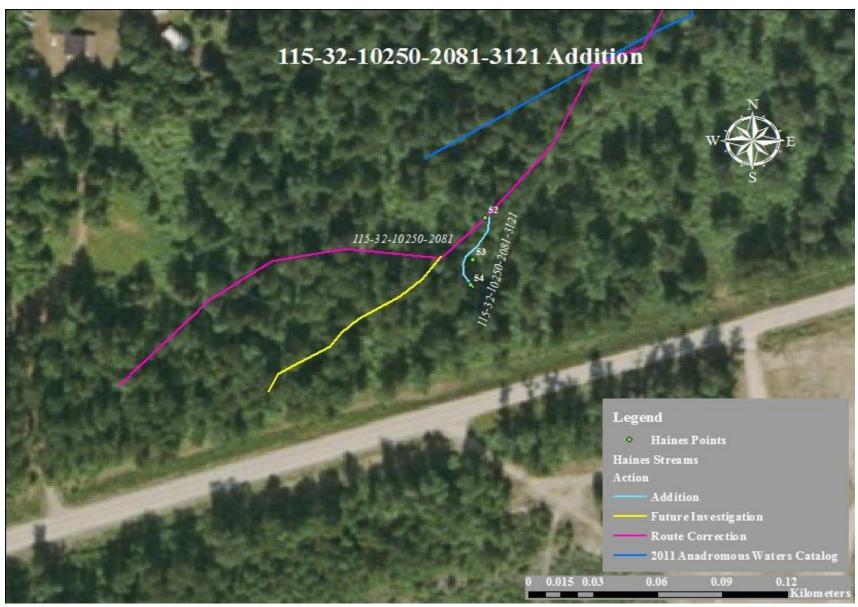


Figure 1.–115-32-10250-2081-3121 addition map.

Haines

115-32-10250-2137-3023

ADDITION

Water body name: Survey date: 7/29/2011 Water body number: 115-32-10250-2137-3023 Species & Lifestage: COr

Watershed: Kelsall River-Chilkat River **MTR:** C027S055E **Quad:** Skagway C-3

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1, Figure 1). This stream flows into a large pond that is connected to stream 115-32-10250-2137. After crossing the Mosquito Lake Spur Road and going through the forest, this stream eventually braids out along the Bear Flats Creek Pond complex and appears to provide great rearing habitat for rearing coho salmon.

Recommendations: Add stream to the Anadromous Waters Catalog. Although we did not track the pond, the arc can be extended through the pond habitat to intersect with Bear Flats Creek 115-32-10250-2137 to remove any confusion (Figure 2).

Nomination: 11-715

Table 1.–115-32-10250-2137-3023 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
3	59.5094	-136.0748	End of Moosetache Creek.	HN	1 CO
			Empties into lake. Handnetted		
			1 CO about 40mm.		
2	59.5092	-136.0821	Electrofished. 1 CO about	EF	1 CO
			40mm.		
1	59.5109	-136.0872	Electrofished.	EF	No Fish
4	59.5080	-136.0803	New braid of Moosetache		
			Creek that was not followed.		



Figure 1.-Stream tracking 115-32-10250-2137-3023.



Figure 2.–115-32-10250-2137-3023 addition map.

115-32-10250-2137-3025

CORRECTION

Water body name: Survey date: 7/22/2011 Water body number: 115-32-10250-2137-3025 Species & Lifestage: COr, Sp, CTr

Watershed: Kelsall River-Chilkat River MTR: C027S055E Quad: Skagway C-3

Findings: We surveyed this stream using a handnet and a GPS (Table 1). We visually observed sockeye salmon and captured coho salmon, Dolly Varden char and cutthroat trout. This stream is much more sinuous than the catalog illustrates and is glacial (Figure 1).

Recommendations: Update this stream's route to reflect the field verified course (Figure 2).

Nomination: 14-703

Table 1.–115-32-10250-2137-3025 survey data

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
13	59.5121	-136.0839	Tributary entering on river left, clear water. Handnetted 1	HN	1 CO, 1 DV
			CO and 1 DV.		
14	59.5121	-136.0841	Handnetted 1 CO and 2 DV.	HN	1 CO, 2 DV
15	59.5122	-136.0842	Set a minnow trap in a log jam.	MT	No Fish
16	59.5121	-136.0831	2 spawning pairs of sockeye below a large root spanning stream.	VI	4 S
17	59.5124	-136.0842	Handnetted 2 CO about 80mm.	HN	2 CO
18	59.5130	-136.0838	Headwaters of tributary. Emerges from a weedy swamp at the base of a wooded hill.	HN	1 CO
19	59.5126	-136.0843	Tributary off of tributary. Very shallow and mossy.		
20	59.5122	-136.0848	End of tributary. Reduced to a mossy seep.		
21	59.5123	-136.0893	Pocket dial.		
22	59.5121	-136.0904	Tributary up to double pipes on Nataga Road.		
1	59.5158	-136.0936	Tracking upstream of Nataga Road.		
2	59.5160	-136.0963	Handnetted 1 DV about 30mm.	HN	1 DV
3	59.5160	-136.0963	Handnetted 1 CT about 40mm.	HN	1 CT
4	59.5159	-136.0965	Visual of an unknown fish.	VI	Unknown
5	59.5158	-136.0966	Short side channel on river right.		
6	59.5161	-136.0969	Handnetted 3 DV between 30-45mm.	HN	3 DV
7	59.5158	-136.0972	Handnetted 2 DV between 20-25mm.	HN	2 DV
8	59.5160	-136.0974	Handnetted 1 DV about 25mm.	HN	1 DV
9	59.5161	-136.0975	Handnetted 1 CT about 95mm.	HN	1 CT
10	59.5161	-136.0979	Handnetted 1 CT about 40mm.	HN	1 CT

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
11	59.5160	-136.0981	Creek flows underground for		
			about 15'. Ground is about 6-		
			8' above creek.		
12	59.5154	-136.0990	Lots of DV and CT to here,		
			but no CO. Ending survey.		



Figure 1.–Looking up towards the glacier that feeds stream number 115-32-10250-2137-3025.

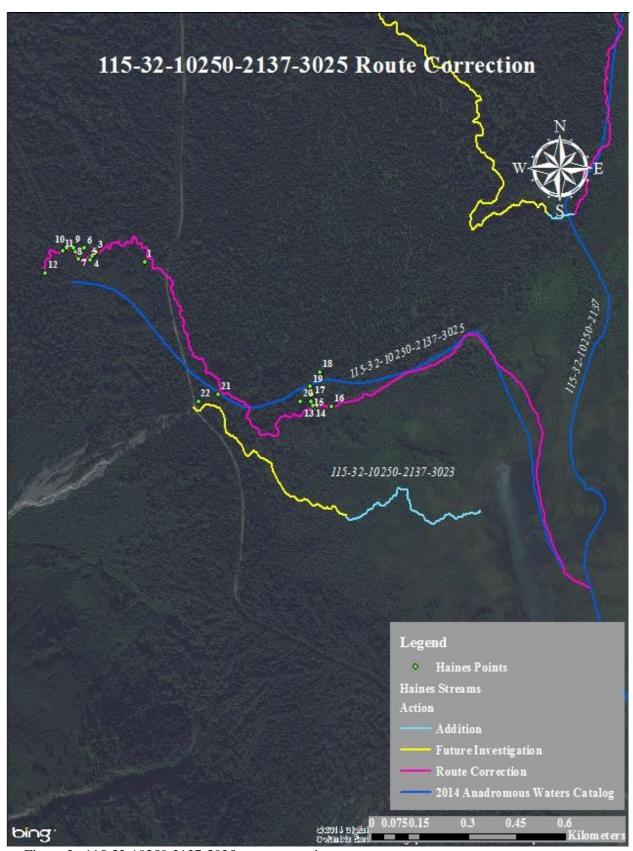


Figure 2.–115-32-10250-2137-3025 route correction map.



115-32-10250-2977

CORRECTION

Water body name: Survey date: 7/30/2012

Water body number: 115-32-10250-2977 Species & Lifestage: CHs, Sp, COr

Watershed: Klehini River

MTR: C028S056E Quad: Skagway B-3

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). We caught rearing coho past the documented upper extent of anadromy. The water quality in this stream may be worth investigating based on a thick, bright green coating of algae on nearly all stream substrate (Figure 1).

Recommendations: Correct the current route and add rearing coho salmon in the Anadromous

Waters Catalog (Figure 2).

Nomination: 12-589

Table 1.-115-32-10250-2977 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
37	59.4125	-135.9314	Where spawning channel enters into the Chilkat River. River backing up a lot of water.		
36	59.4119	-135.9331	This is where spawning channel enters water from Chilkat River and where tributary enters. This back log could also be considered a part of the spawning channel even though silty bottom.		
35	59.4118	-135.9399	Top of spawning channel, almost chest deep at the head here and whole channel covered in algae. Electrofished got 2 CO about 45mm.	EF	2 CO



Figure 1.–Representative reach of spawning channel.

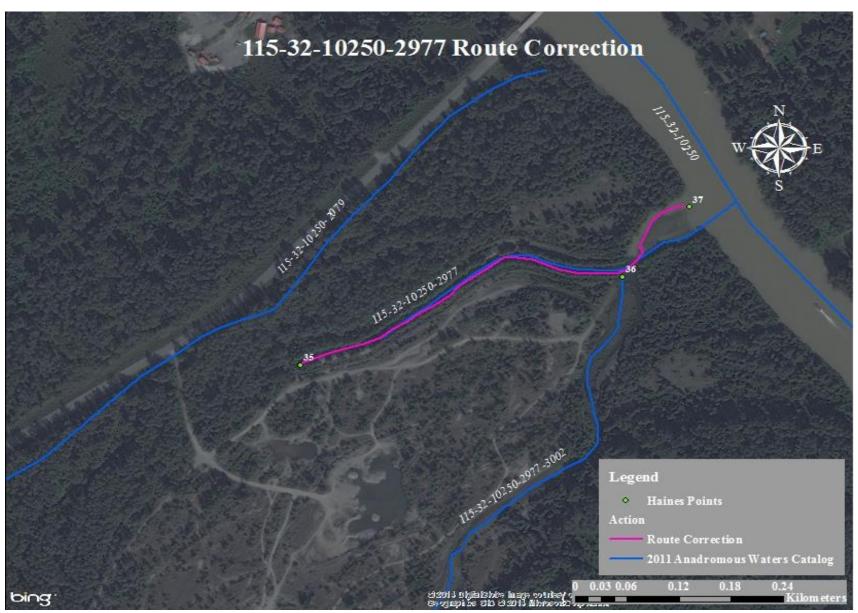


Figure 2.–115-32-10250-2977 route correction map.

115-32-10260 CORRECTION

Water body name: Survey date: 7/21/2012 Water body number: 115-32-10260 Species & Lifestage: COs, Kr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C031S059E **Quad:** Skagway A-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). This stream has an extensive history of modification from nearby landowners and developers. A shrimp cannery once diverted flows and blocked fish passage, but since then, local residents installed a small rock fish ladder to improve fish passage (Figures 1, 2). Small personal bridges were present over the stream where it passes through private property (Figure 3). We caught rearing coho salmon up to our last survey point (Figure 4). One rearing chum salmon was caught at waypoint 246.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 5).

Nomination: 12-584

Table 1.-115-32-10260 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
245	59.2150	-135.4528	Mouth of creek entering near where Chilkat River enters the ocean. There are quite a few SB around, very large and are about 40-45mm.	HN	2 SB
246	59.2152	-135.4504	Handnetted 1 CH about 35mm and 1 CO about 40mm.	HN	1 CO, 1 CH
247	59.2147	-135.4501	Handnetted 3 CO about 35mm and a SC.	HN	3 CO, 1 SC
248	59.2138	-135.4497	Handnetted 7 CO between 30-65mm.	HN	7 CO
249	59.2122	-135.4491	Handnetted 1 CO about 35mm. Also a culvert that crosses Mud Bay road.	HN	1 CO
250	59.2122	-135.4481	There is a small personal bridge here that land owner uses to access the rest of property, also a pipe coming in could be water intake for personal use.		
251	59.2123	-135.4480	Handnetted 2 CO about 40mm.	HN	2 CO
252	59.2113	-135.4473	Another personal bridge that crosses stream to connect property. Start of rock fish ladder.		
253	59.2113	-135.4470	Handnetted 1 CO about 45mm.	HN	1 CO
254	59.2115	-135.4459	Handnetted 2 CO between 25-40mm.	HN	2 CO

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
255	59.2120	-135.4445	Handnetted 1 CO about 30mm.	HN	1 CO
256	59.2120	-135.4434	Culvert under a personal road.	HN	1 CO, 1 DV
			Handnetted 1 DV about 20mm		
			and 1 CO about 30mm.		
257	59.2117	-135.4431	Handnetted 1 CO about 25mm.	HN	1 CO
258	59.2116	-135.4422	Handnetted 1 DV about 25mm	HN	2 CO, 1 DV
			and 2 CO about 30mm.		
259	59.2112	-135.4406	Handnetted 1 CO about 35mm.	HN	1 CO
260	59.2108	-135.4393	Handnetted 1 CO about 35mm.	HN	1 CO
261	59.2107	-135.4385	Water pump goes to a		
			property and there is a		
			electrical cord for pump along		
			with hose to property. There		
			was a juvenile CO swimming		
			in bucket with pump with no		
			screen.		
262	59.2104	-135.4376	Handnetted 1 CO about 35mm.	HN	1 CO
263	59.2106	-135.4374	Culvert that goes under small		
			tracts road. Ending tracking		
			since above this culvert was		
			tracked last summer.		



Figure 1.–Man-made rock fish ladder.



Figure 2.—Culvert beneath Mud Bay Road with fish passage modifications.



Figure 3.–Residential rock revetment to prevent stream bank erosion.

Figure 4.-Captured juvenile coho salmon.



Figure 5.–115-32-10260 route correction map.



115-32-10260-2005

CORRECTION

Water body name: Holgate Creek

Survey date: 6/2/2011

Water body number: 115-32-10260-2005

Species & Lifestage: COr, CTs

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C031S059E Quad: Skagway A-2

Findings: Holgate Creek was surveyed to determine route accuracy and upper extent (Table 1). Fish were observed visually throughout the system, but no trapping events yielded any fish. The habitat was ideal for rearing and substrate varied between muddy organics and large mossy cobbles.

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 12-587

Table 1.–115-32-10260-2005 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
4	59.2112	-135.4355	Stream splits here with equal		
			flows. We are taking the fork		
			on river right.		
5	59.2128	-135.4328	Tiny tributary on riverright.		
6	59.2128	-135.4324	Culvert perched 2 to 4" under		
			grassy road leading to the		
			aircraft control towers.		
_			Redbreasted sapsuckers.		
7	59.2141	-135.4304	Stream forks. Taking the		
_			tributary on river right.		
8	59.2142	-135.4303	Set a minnow trap in small	MT	No Fish
			tributary in a corner pool		
			beneath a partially-submerged		
0	50.01.45	125 4207	log in the stream.) ATT	NI E' 1
9	59.2145	-135.4297	Set trap in organicky pool.	MT	No Fish
			Stream goes subsurface for about 20 to 30 feet		
			downstream of the trap placement.		
10	59.2149	-135.4294	Ended the tributary survey at a		
10	39.2149	-133.4234	2' falls. Stream reduces to a		
			organicky seep above.		
11	59.2140	-135.4304	Beginning trapping on	MT	2 CT, 1 DV
11	37.2170	-133.4304	mainstem after encountering	1411	2 (1, 1)
			no barrier at the cataloged end		
			of anadromy. Set a trap at the		
			confluence of the mainstem		
			and tributary. Captured 2 CT		
			about 75mm and 1 DV about		
			70mm.		
					<u> </u>

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
12	59.2142	-135.4296	Set a trap under a small falls. Substrate is gravels and fines. Great riparian habitat, alders, devils club and skunk cabbage. Captured 2 CT between 75-90mm.	MT	2 CT
13	59.2143	-135.4297	Set trap upstream of a small falls in a corner pool next to a large log in the stream. Substrate is gravels and fines. Captured 2 CT between 60-90mm.	MT	2 CT
14	59.2146	-135.4290	Set a trap in a bouldery pool, still nice habitat, no barrier encountered yet. Gravels, fines, and cobbles. Gradient slightly increasing.	MT	No Fish
15	59.2146	-135.4282	Handnetted a 55mm CT trout. Ending survey above another subsurface flows.	HN	1 CT
16	59.2144	-135.4294	Handnetted 1 DV and visual identification of 2 CT.	HN/VI	1 DV, 2 CT

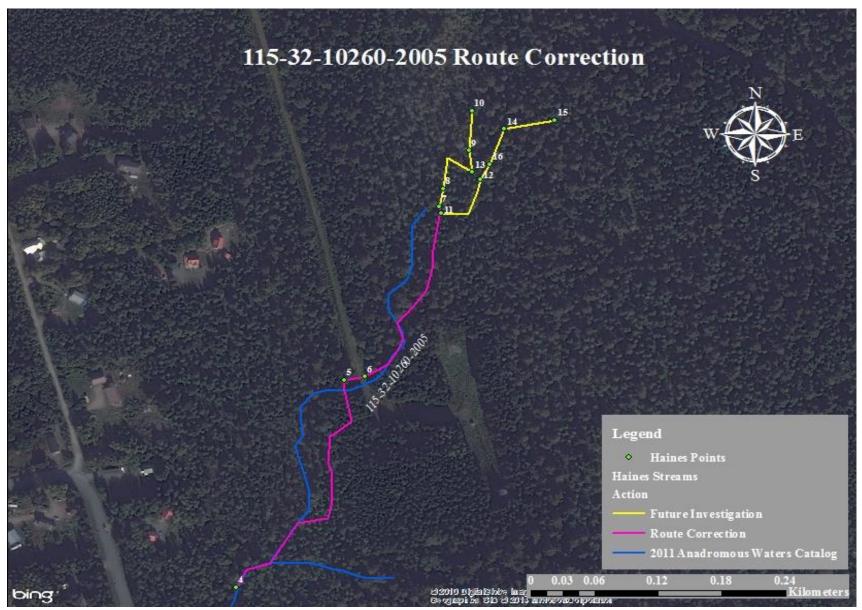


Figure 1.–115-32-10260-2005 route correction.



115-32-10300-2002

CORRECTION

Water body name: Sawmill Creek

Survey date: 7/7/2011

Water body number: 115-32-10300-2002

Species & Lifestage: COr, CTr, DVr

Watershed: Chilkoot Inlet-Frontal Lynn Canal **MTR:** C030S059E **Quad:** Skagway A-2

Findings: We surveyed this stream using a handnet, minnow traps and a GPS (Table 1). The stream course for Sawmill creek is far more sinuous than is currently cataloged. While it does terminate at Mud Bay Road, it does so at a different location.

Recommendations: Update the course of this stream to reflect the field-verified route (Figure

1).

Nomination: 14-714

Table 1.-115-32-10300-2002 survey data.

Table 1.–115-32-10300-2002 survey data.						
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results	
2	59.2342	-135.4850	Mouth of Sawmill Creek, just			
			below the golf course.			
			Beautiful and open wetlands.			
3	59.2345	-135.4842	Tributary on river left, very			
			sludgy, slow moving water,			
			mud substrate. Not a tributary.			
4	59.2348	-135.4836	Another dead-end channel,			
			dries up after 10'. Ephemeral.			
5	59.2350	-135.4820	Side channel of Sawmill			
			Creek.			
6	59.2354	-135.4812	Tributary, looks to be			
			ephemeral and goes for 15'			
			before becoming dry.			
7	59.2355	-135.4807	Another ephemeral tributary			
			on river right. Could be good			
			rearing if a highwater event			
			occurred.			
8	59.2351	-135.4790	Ephemeral tributary.			
9	59.2355	-135.4782	Ephemeral tributary on river			
			right.			
10	59.2360	-135.4748	Tributary on river right,			
			actually flowing.			
7	59.2359	-135.4648	Sawmill Creek crosses dirt			
			road, location of culvert.			
8	59.2352	-135.4647	Sawmill Creek goes under			
			main intersection by Tesoro.			
12	59.2341	-135.4602	This was acutally a tributary.			
11	59.2347	-135.4601	Tributary enters. Sawmill			
			turns because of road.			
10	59.2346	-135.4592	Heading back to mainstem.			
15	59.2342	-135.4579	Handnetted 1 CO about 75mm	HN	1 CO	
			in a skunk cabbage patch.		<u>.</u>	

Tuble 1.	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
14	59.2342	-135.4572	Set a minnow trap at a culvert.	MT	
17	59.2342	-135.4572	Set a minnow trap at culvert,	MT	10 CO
			captured 10 smolty CO.		
16	59.2342	-135.4569	Sawmill Creek does go on.		
18	59.2331	-135.4549	A overlook in marsh/creek		
			area.		
25	59.2324	-135.4542	Tributary enters on river left.		
26	59.2303	-135.4490	Sawmill loses flow as it hits		
			Mud Bay Road. The		
			headwaters is fed by roadside		
			ditch.		

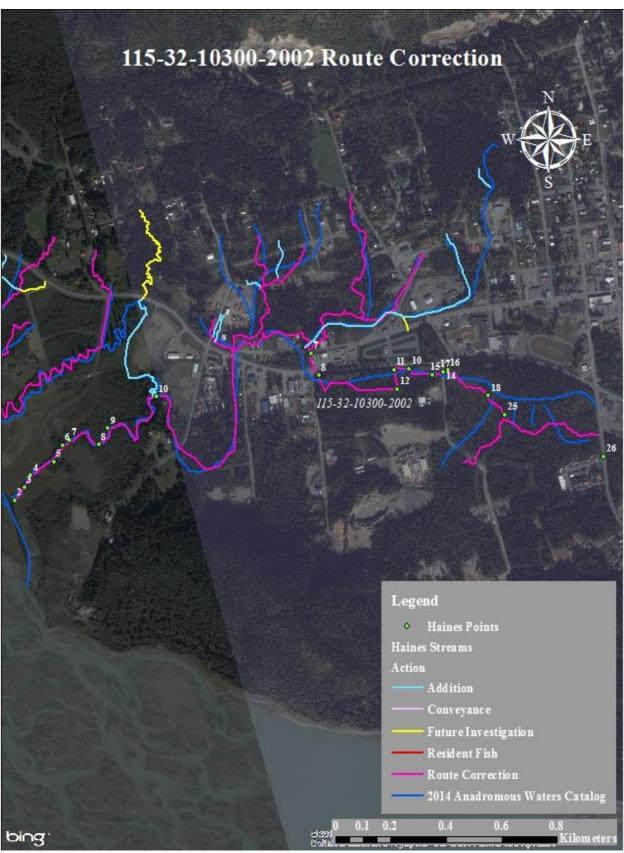


Figure 1.–115-32-10300-2002 route correction map. Haines



115-32-10300-2002-3007

ADDITION

Water body name: Survey date: 6/8/2011 Water body number: 15-32-10300-2002-3007 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C0305S059E Quad: Skagway A-2

Findings: We surveyed this tributary to Sawmill Creek using a handnet and a GPS (Table 1). After meandering through a forested area, the stream crosses the highway and runs along the side of a gravel lot. The area associated with the gravel lot is highly altered by recent development. Numerous coho salmon were found in the area (Figure 1); we also found one large (300+mm) dead cutthroat trout.

Recommendations: Add stream to the Anadromous Waters Catalog. It would be beneficial to collaborate with property owners on adjacent gravel to ensure future protection of this stream (Figure 2).

Nomination: 11-538

Table 1.-115-32-10300-2002-3007 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
31	59.2361	-135.4750	Confluence with tributary on		
			river right.		
32	59.2361	-135.4748	Handnet 1 CO about 35mm,	HN	1 CO
			another visually identified in		
			same location.		
33	59.2362	-135.4751	Handnet 1 CO about 30mm.	HN	1 CO
34	59.2364	-135.4746	Handnet 1 CO, about 30mm	HN	1 CO
			and many more present.		
35	59.2367	-135.4748	Handnet 4 CO between 30-	HN	4 CO
			35mm.		
36	59.2369	-135.4761	Square lot stream.		
37	59.2378	-135.4757	Dead adult CT about 300mm.		
			Don't know if it was resident,		
			transplanted, or just brought		
20	50.2200	105 4554	here.	TD.	1.00
38	59.2380	-135.4754	Handnet 1 juvenile CO 30mm.	HN	1 CO
39	59.2381	-135.4752	Handnet 3 CO 35mm each.	HN	3 CO
40	59.2384	-135.4744	Tiny tributary enters on river		
			right, future investigation		
			possibly if conditions were a		
41	50 2205	125 4741	bit wetter.		
41	59.2385	-135.4741	Another very small tributary		
42	59.2386	-135.4740	enters on river right.		
42	39.2360	-133.4740	Medium sized tributary		
			entering on river right, worth looking into for future		
			· ·		
-			investigation. CO present.		<u>-</u>

Table 1.–	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
43	59.2386	-135.4738	Becomes dry channel at road.		
			May be habitat above culvert		
			during higher flows.		
1	59.2385	-135.4740	Beginning day where we left		
			off. Tributary runs river right		
			off mainstem tributary off		
			upper Sawmill Creek. Lots of		
			CO visible in confluence and		
			downstream.		
2	59.2387	-135.4740	Handnet 1 CO about 30mm.	HN	1 CO
3	59.2390	-135.4740	Handnet 1 CO about 55mm,	HN	1 CO
			right outside culvert on		
			highway. Small pool looks		
			like good habitat.		
4	59.2392	-135.4740	Across highway now in		
			spruce forest. Numerous CT		
			seen.		
5	59.2396	-135.4730	Handnet 1 CT.	HN	1 CT
6	59.2397	-135.4730	Handnet another 2 CT. Habitat	HN	2 CT
			looks undisturbed and great		
7	50 2 102	105 4500	CT habitat.		
7	59.2403	-135.4720	Possible tributary on river		
0	50.2405	105 4500	left.		
8	59.2405	-135.4720	Tributary turns into meadow		
			with lots of downed trees and		
0	50.2416	125 4720	limbs.	3.71	2.07
9	59.2416	-135.4730	Large culvert lies two feet	VI	2 CT
			above creek creating small waterfall. Rocks under culvert		
			look iron rich. Probable		
			barrier at low water. Still no		
			CO. Visual of 2 CT.		
			CO. VISUAL OF Z CT.		



Figure 1.-Coho salmon captured in Sawmill Creek.

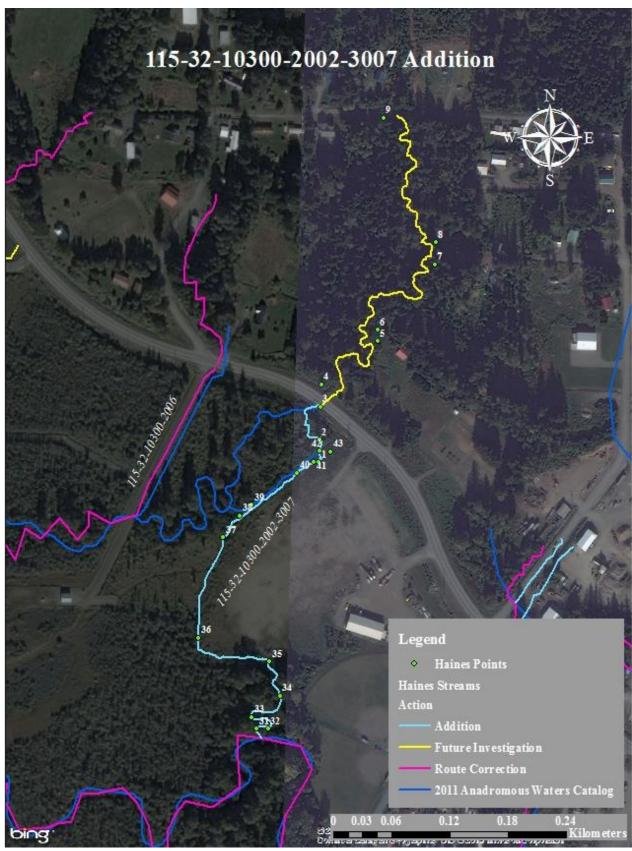


Figure 2.–115-32-10300-2002-3007 addition map.



115-32-10300-2002-3019

ADDITION

Water body name: Survey date: 6/17/2010

Water body number: 115-32-10300-2002-3019 Species & Lifestage: COp, CTp, DVp

Watershed: Chilkoot Inlet-Frontal Lynn Canal **MTR:** C030S059E **Quad:** Skagway A-2

Findings: We sampled this stream with minnow traps and captured Dolly Varden, coho salmon,

and cutthroat trout (Table 1).

Recommendations: Add this stream to the AWC (Figure 1).

Nomination: 10-705

Table 1.–115-32-10300-2002-3019 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1	59.2382	-135.4547	Set a minnow trap, captured 2	MT	2 CO, 4 CT
			CO and 4 CT between 100-120mm.		
2	59.2380	-135.4548	Set a minnow trap, captured 2 DV and 2 CT about 120mm.	МТ	2 DV, 2 CT

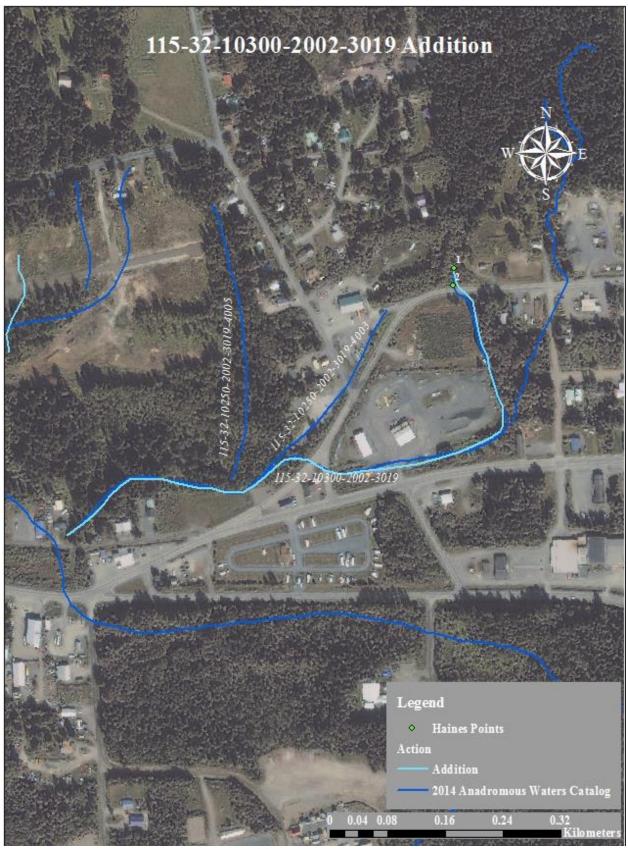


Figure 1.–115-32-10300-2002-3019 addition map.

Haines

115-32-10300-2002-3019-4003

CORRECTION

Water body name: Survey date: 6/6/2011 Water body number: 115-32-10300-2002-3019-4003 Species & Lifestage: COr

Watershed: Chilkoot Inlet-Frontal Lynn Canal

MTR: C030S059E Quad: Skagway A-2

Findings: This stream was surveyed using a backpack electrofisher, handnet, and a GPS (Table

1). This stream's course differs from that illustrated in the AWC.

Recommendations: Update this stream's route to reflect the field verified course (Figure 1).

Nomination: 14-726

Table 1.–115-32-10300-2002-3019-4003 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
12	59.2360	-135.4648	Large culvert with flowing		
			water. Tributary away from		
			culvert toward DOT station.		
			Mainstem crosses road.		
13	59.2360	-135.4648			
14	59.2362	-135.4644	1 SB	EF	1 SB
15	59.2369	-135.4627	Dry, ephemoral channal on		
			river left.		
16	59.2369	-135.4621	Tributary on river left, looks		
			segmented.		
17	59.2368	-135.4621			
18	59.2365	-135.4614	Confluence, taking river right.		
19	59.2378	-135.4605	Visual on unknown salmonid.	VI	Unknown
20	59.2386	-135.4598	Handnetted 1 CO about 55mm.	HN	1 CO
21	59.2390	-135.4594	Small tributary entering on		
			river left.		
22	59.2398	-135.4600	Electrofished 1 DV about	EF	1 DV
			100mm, possibly a spawner.		
23	59.2401	-135.4598	Reached Comstock Drive,		
			increased gradient near DV		
			capture. Culvert under road to		
		_	ditch.		



Figure 1.–115-32-10300-2002-3019-4003 route correction map.

115-32-10300-2002-3019-4008-5021

ADDITION

Water body name: Survey date: 11/4/2010

Water body number: 115-32-10300-2002-3019-4008-5021 **Species & Lifestage:** COs, CTp

Watershed: Chilkoot Inlet-Frontal Lynn Canal MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this stream using visual observations, minnow traps, and a GPS (Table 1). I observed spawning coho salmon displaying redd-building behavior and rearing cutthroat were captured in minnow traps.

Recommendations: Add this stream to the AWC (Figure 1).

Nomination: 11-512

Table 1.–115-32-10300-2002-3019-4008-5021 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
8	59.2393	-135.4513	Set a minnow trap and captured 1 CT about 40mm.	MT	1 CT
9	59.2396	-135.4518	Observed 2 pairs of spawning CO.	VI	4 CO
10	59.2399	-135.4517	Set a minnow trap and captured 4 CT about 150mm.	MT	4 CT

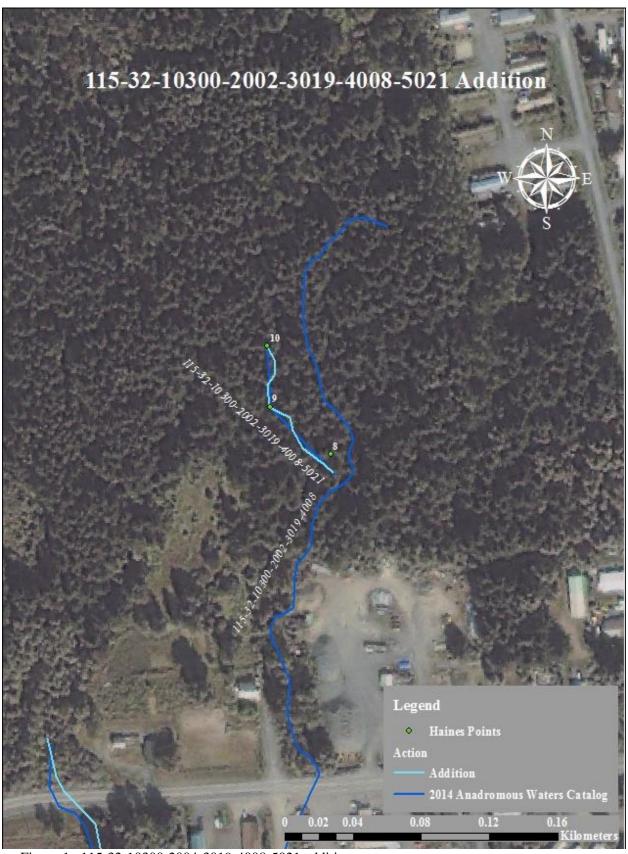


Figure 1.–115-32-10300-2004-3019-4008-5021 addition map. Haines

Water body name: Survey date: 5/15/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C030S059E Quad: Skagway A-2

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-516; Figure 1).

Recommendations: Remove king salmon rearing.

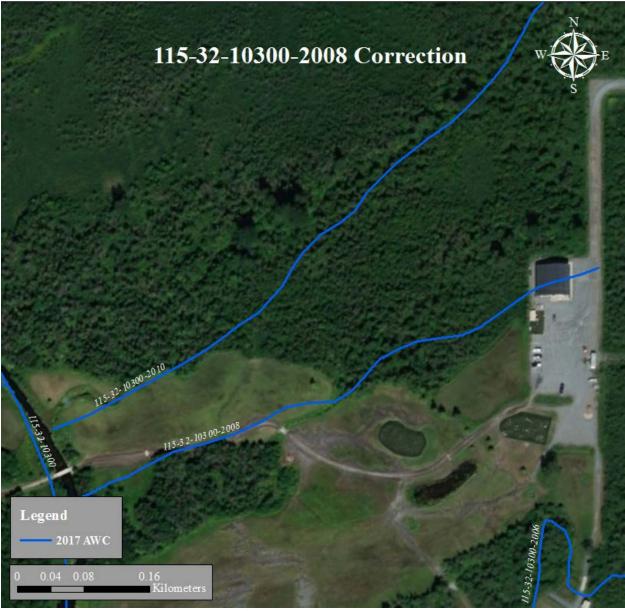


Figure 1.–115-32-10300-2008 correction map.



115-32-10300-2010-3051

ADDITION

Water body name: Survey date: 6/23/2017
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this stream with a minnow traps, hand nets, and a GPS. We captured juvenile coho salmon and observed many others below the perched culvert (Table 1, Figure 1-3). The stream is dominated by fine organic substrate. A route correction for stream 115-32-10300-2010 will be submitted.

Recommendations: Add this stream to the Anadromous Waters Catalog for rearing coho salmon.

Table 1.–115-30-10300-2010-3051 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
364	59.2420	-135.4831	Rusted and perched culvert.	HN	2 CO
			Heavy machinery scrapped out		
			channel below road.		
365	59.2423	-135.4833	Upstream side of culvert. Rock		
			cascade below high cement		
255	50.0404	105 4000	bridge.) (7)	N 771
366	59.2424	-135.4832	MT set at 1000 and pulled on	MT	No Fish
267	50 2425	125 4920	1545 above bridge.	MT	N - E:-1
367	59.2425	-135.4830	MT set at 1000 and pulled on	MT	No Fish
			1545 above bridge and cascade. No fish were		
			observed above the culvert.		
409	59.2417	-135.4823	Very soft bed in creek	VI, HN	30 CO, 4 CO
107	37.2117	133.1023	described at WP 364, iron	VI, III V	30 00, 100
			flock becoming thicker along		
			edges.		
410	59.2413	-135.4820	Channel not well defined. Lots		
			of skunk cabbage by the water.		
411	59.2409	-135.4819	Channel reforms at WP 410,		
			low flow, low graident, alders.		
412	59.2408	-135.4818	Tributary enters on river left.		
413	59.2404	-135.4813	Mouth of tributary into 115-32-		
			10300-2010.		



Figure 1.–Haines Highway culvert.



Figure 2.–Juvenile coho salmon captured at WP 364.

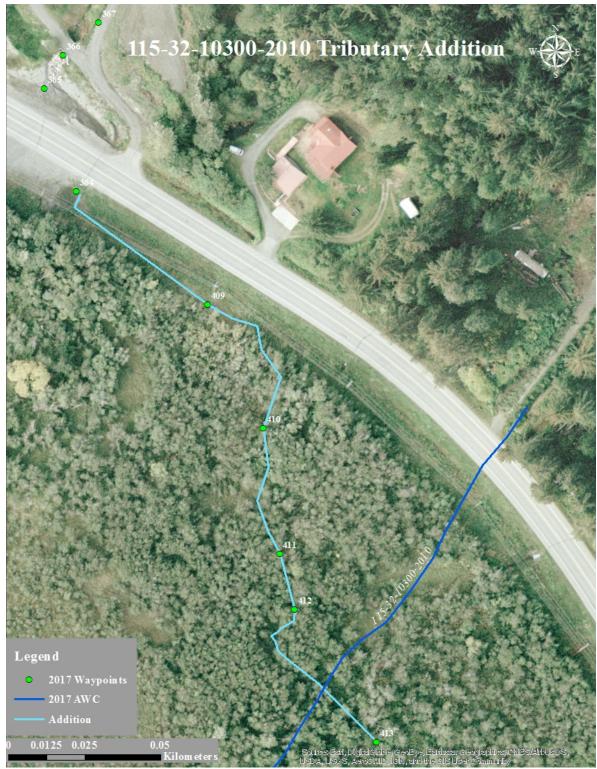


Figure 3.–115-32-10300-2010-3051 (tributary) addition map.



Water body name: Survey date: 6/22/2017 Watershed: Chilkat Inlet-Frontal Canal Species & Lifestage: COr, Kp

MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this waterbody with minnow traps and a GPS. We observed the current Anadromous Waters Catalog stream course to be inaccurate. We followed the short stream from the confluence with 115-32-10300 to the 115-32-10300-2011-0010 (Figure 1). Additionally, we were able to capture three-spined stickleback and coho salmon in the stream (Table 1, Figures 2, 3).

Recommendations: Correct the stream course in the Anadromous Waters Catalog.

Table 1.–115-32-10300-2011 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
344	59.2390	-135.4884	Mouth of 115-32-10300-2011.		
345	59.2387	-135.4889	Small pond created by land owner.	HN	3 CO, 2 S
368	59.2387	-135.4888	Set at 1000 and pulled the following day at 0915	MT	No Fish
369	59.2389	-135.4894	Set at 1003 and pulled the following day at 0915	MT	1 CO, 4 SB
370	59.2389	-135.4885	Set at 1005 and pulled the following day at 0915	MT	6 CO, 40 SB
371	59.2389	-135.4887	Set at 1006 and pulled the following day at 0920	MT	8 CO, 75 SB



Figure 1.—Confluence with 115-32-10300, WP 344.



Figure 2.–Juvenile coho salmon captured at WP 370.



Figure 3.–115-32-10300-2011 route correction map.

115-32-10300-2011 CORRECTION

Water body name: Survey date: 5/15/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COp,Kp

MTR: C030S059E Quad: Skagway A-2

Findings: In my 2006 stream nomination (# 06-514), I did not provide accurate location information for the stream, which drains a manmade pond (115-32-10300-2011-0010). Recent aerial imagery shows the pond drainage and connection to Yindastucki Creek (Figure 1).

Recommendations: Correct the stream course. **Nomination:** 17-598 (Duplicate of 17-613)



Figure 1.–115-32-10300-2011 correction map.



115-32-10300-2011-0010

CORRECTION

Water body name: Survey date: 6/20/2017 Watershed: Chilkat Inlet-Frontal Canal Species & Lifestage: COr, Spr

MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this waterbody with minnow traps, hand nets, and a GPS. We were able to capture three-spined stickleback, coho and sockeye salmon in the pond (Table 1, Figure 1). The pond was created during the construction of the golf course and connected to 115-32-10300 through stream 115-32-10300-2011 (Figure 2).

Recommendations: Add sockeye salmon rearing to this waterbody in the Anadromous Waters

Catalog.

Table 1.–115-32-10300-2011 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
344	59.2390	-135.4884	Mouth of 115-32-10300-2011.		
345	59.2387	-135.4889	Small pond created by land owner.	HN	3 CO, 2 S
368	59.2387	-135.4888	Set at 1000 and pulled the following day at 0915	MT	No Fish
369	59.2389	-135.4894	Set at 1003 and pulled the following day at 0915	MT	1 CO, 4 SB
370	59.2389	-135.4885	Set at 1005 and pulled the following day at 0915	MT	6 CO, 40 SB
371	59.2389	-135.4887	Set at 1006 and pulled the following day at 0920	MT	8 CO, 75 SB



Figure 1.–Juvenile coho and sockeye salmon captured at WP 345.



Figure 2.–115-32-10300-2011-0010 correction map.



115-32-10300-2011-0010

CORRECTION

Water body name: Survey date: 5/15/2006
Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C030S059E Quad: Skagway A-2

Findings: After sampling juvenile salmonids in the Haines area for the last ten years and becoming familiar with the different species phenotypical traits and rearing habitats, I realize I mistakenly identified coho salmon fry and smolts as juvenile king salmon and incorrectly listed king salmon in the water body in 2006 (nomination # 06-514; Figure 1).

Recommendations: Remove king salmon presence.



Figure 1.–115-32-10300-2011-0010 correction map.



115-32-10300-2014-3006-4004

ADDITION

Water body name: Survey date: 6/17/2011 Water body number: 115-32-10300-2014-3006-4004 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal **MTR:** C030S059E **Quad:** Skagway A-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). This stream emerges from a marsh and meanders down to Stream No. 115-32-10300-2014-3006. Coho fry were

abundant all the way to the source of the water (Figure 1). **Recommendations:** Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-539

Table 1.–115-32-10300-2014-3006-4004 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
3	59.2411	-135.4902	Tributary enters from creek		
			left.		
4	59.2413	-135.4896	Handnet 3 CO between 30-	HN	3 CO
			35mm.		
5	59.2416	-135.4894	Handnet 9 CO: all were about	HN	9 CO
			30mm.		
6	59.2416	-135.4891	Handnet 1 CO at 35mm.	HN	CO
7	59.2418	-135.4888	Calling headwater of creek		
			because it ends in a marsh		
			area and spreads out until		
			flow dissipates.		



Figure 1.-Coho salmon captured in Little Coho Creek tributary.

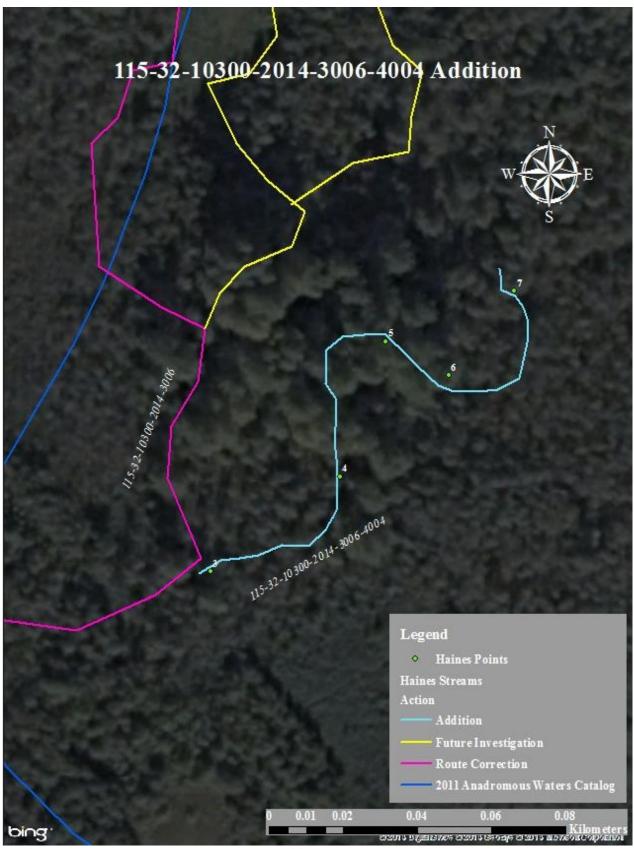


Figure 2.–115-32-10300-2014-3006-4004 addition map.

Haines

115-32-10300-2014-3010

CORRECTION

Water body name: Survey date: 7/8/2011 Water body number: 115-32-10300-2014-3010 Species & Lifestage: COp, CTr, DVr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). This stream's actual

route differs from that illustrated in the AWC.

Recommendations: Update this stream's route to reflect the field verified course (Figure 1).

Nomination: 14-716

Table 1.–115-32-10300-2014-3010 survey data.

_	Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
	10	59.2414	-135.4929	Tributary entering on river		
				left.		
	11	59.2414	-135.4928	Salmoniod spotted, but unable	VI	Unknown
				to capture.		
	12	59.2417	-135.4926	Handnetted 3 CO about 30mm.	HN	3 CO
	13	59.2421	-135.4924	Calling the end of tributary,		
				turning into a marsh with no		
				noticable flow.		
	10	59.2424	-135.4917	End survey in huge marsh, no		
				defined channel.		
	9	59.2428	-135.4917	Starting at culvert outlet on		
				Hwy.		



Figure 1.–115-32-10300-2014-3010 route correction map.

115-32-10300-2020

ADDITION

Water body name: Survey date: 6/16/2011 Water body number: 115-33-10300-2020 Species & Lifestage: COr

Watershed: Chilkat Inlet-Frontal Lynn Canal MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this stream using a handnet and a GPS (Table 1). This stream emerges from a marsh complex and meanders its way down to stream 115-32-10300. Coho fry were abundant all the way to the source of the water.

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 1).

Nomination: 11-542

Table 1.–115-32-10300-2020 survey data.

Latitude	Longitude	Notes	Sample Effort	Sample Results
59.2406	-135.4964	Off to start on new tributary.		
		Very good flow.		
59.2407	-135.4964	Handnetted 1 CO between 55-	HN	2 CO
		60mm.		
59.2408	-135.4965	Handnetted 1 CO.	HN	CO
59.2411	-135.4978	Handnetted 2 CO.	HN	2 CO
59.2411	-135.4981	Tributary confluences with		
		new tributary river left.		
59.2412	-135.4982	Handnetted 1 CO.	HN	1 CO
59.2413	-135.4981	New tributary, same marsh as		
		before.		
59.2413	-135.4985	Large school of TS observed,	HN	7 SB
		netted 7. Tributary river left		
		with maybe some flow.		
59.2414	-135.4986	Handnetted 1 CO about 68mm.	HN	1 CO
59.2414	-135.4979	Handnetted 2 CO between 50-	HN	2 CO
		55mm.		
59.2414	-135.4979	Handnetted 6 CO.	HN	6 CO
59.2415	-135.4979	Enter same marsh as previous		
		two tributaries. Going back to		
		WPT 31 to continue down the		
		original river left tributary.		
59.2416	-135.4981	Waist high grass marsh. Could		
		be difficult to find more		
		defined channels, streams in		
		tall grass.		
	Latitude 59.2406 59.2407 59.2408 59.2411 59.2411 59.2413 59.2413 59.2414 59.2414 59.2414 59.2415	Latitude Longitude 59.2406 -135.4964 59.2407 -135.4964 59.2408 -135.4965 59.2411 -135.4978 59.2411 -135.4981 59.2412 -135.4982 59.2413 -135.4981 59.2413 -135.4985 59.2414 -135.4986 59.2414 -135.4979 59.2414 -135.4979 59.2415 -135.4979	59.2406 -135.4964 Off to start on new tributary. Very good flow. 59.2407 -135.4964 Handnetted 1 CO between 55-60mm. 59.2408 -135.4965 Handnetted 1 CO. 59.2411 -135.4978 Handnetted 2 CO. 59.2411 -135.4981 Tributary confluences with new tributary river left. 59.2412 -135.4982 Handnetted 1 CO. 59.2413 -135.4981 New tributary, same marsh as before. 59.2413 -135.4985 Large school of TS observed, netted 7. Tributary river left with maybe some flow. 59.2414 -135.4986 Handnetted 1 CO about 68mm. 59.2414 -135.4979 Handnetted 2 CO between 50-55mm. 59.2415 -135.4979 Handnetted 6 CO. 59.2415 -135.4979 Enter same marsh as previous two tributaries. Going back to WPT 31 to continue down the original river left tributary. 59.2416 -135.4981 Waist high grass marsh. Could be difficult to find more defined channels, streams in	Latitude Longitude Notes Sample Effort 59.2406 -135.4964 Off to start on new tributary. Very good flow. 59.2407 -135.4964 Handnetted 1 CO between 55- 60mm. 59.2408 -135.4965 Handnetted 1 CO. HN 59.2411 -135.4978 Handnetted 2 CO. HN 59.2411 -135.4981 Tributary confluences with new tributary river left. 59.2412 -135.4982 Handnetted 1 CO. HN 59.2413 -135.4981 New tributary, same marsh as before. 59.2413 -135.4985 Large school of TS observed, netted 7. Tributary river left with maybe some flow. 59.2414 -135.4986 Handnetted 1 CO about 68mm. HN 59.2414 -135.4979 Handnetted 2 CO between 50- HN 59.2415 -135.4979 Handnetted 6 CO. HN 59.2415 -135.4979 Enter same marsh as previous two tributaries. Going back to WPT 31 to continue down the original river left tributary. 59.2416 -135.4981 Waist high grass marsh. Could be difficult to find more defined channels, streams in

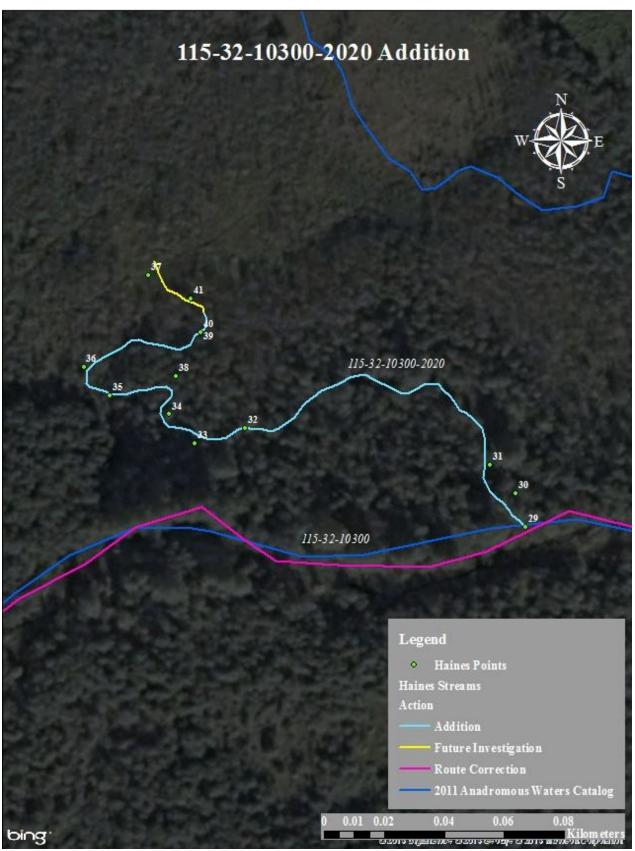


Figure 1.–115-32-10300-2020 addition map.

115-32-10300-2032 CORRECTION

Water body name: Survey date: 6/2/2017 Watershed: Chilkat Inlet-Frontal Lynn Canal Species & Lifestage: COr

MTR: C030S059E Quad: Skagway A-2

Findings: We surveyed this stream using an electrofisher and a GPS. (Table 1). We caught 2 coho salmon and 4 Dolly Varden char in a pool at the base of two 7 ft earthen fish passage barrier waterfalls upstream of the Haines Highway (Figures 1, 2).

Recommendations: Update this stream's course to reflect the field verified route (Figure 3).

Nomination: Pending

Table 1.-115-32-10300-2032 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
1185	59.2448	-135.5162	Inlet of culvert. Vegetated ditch		
			along road.		
1186	59.2449	-135.5182	Two 7 ft earthen waterfalls. Fish	EF	2 CO, 4 DV
			passage barrier.		



Figure 1.—Fish passage barrier on Stream No. 115-32-10300-2032.



Figure 2.—Stream No. 115-32-10300-2032 in the ditch along the Haines highway.

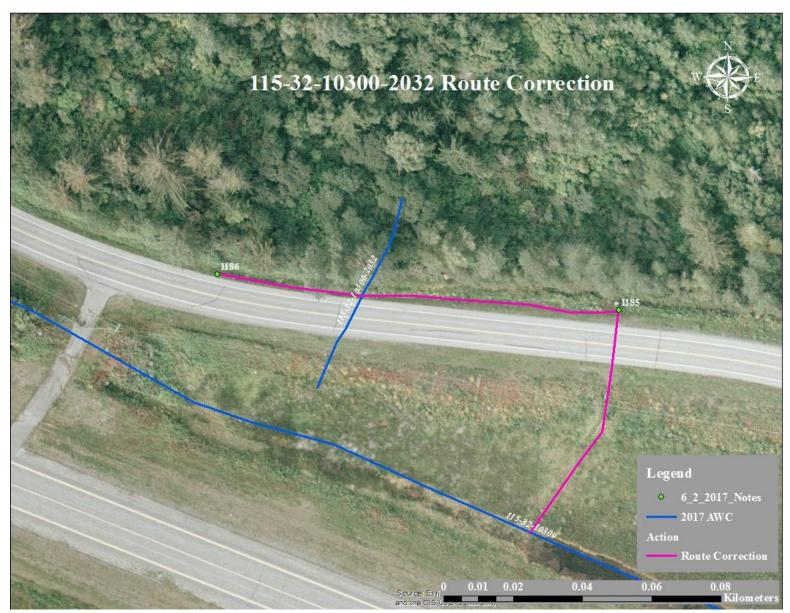


Figure 3.–115-32-10300-2032 route correction map.

115-33-10198 ADDITION

Water body name: Shakuseyi Creek
Watershed: Chilkoot Inlet-Frontal Lynn Canal
Species & Lifestage: Ps

MTR: C029S059E Quad: Skagway B-2

Findings: On August 4, 2017 we surveyed this stream using a backpack electrofisher, hand nets, and a GPS. We observed adult pink salmon in the stream and captured Dolly Varden char. We returned on September 7, 2017 and observed spawning adult pink salmon above where they were seen prior. The stream is in an active slide area and shows evidence of frequently changing course (Table 1, Figures 1-4).

Recommendations: Add this stream to the catalog for spawning pink salmon.

Nomination: 17-585

Table 1.-Shakuseyi Creek survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
710	59.3144	-135.5466	Minnow trap set at 0950 and	MT	No Fish
			pulled at 1614		
711	59.3140	-135.5474	Minnow trap set at 0950 and	MT	No Fish
			pulled at 1618.		
929	59.3144	-135.5461	Began surveying the stream	EF	No Fish
			above the tidal zone. Large		
			cobbles and boulders.		
			Numerous adult salmon in the		
			ocean by the mouth.		
930	59.3142	-135.5467	Two eggs in the stream.	VI	1 DV (180 mm)
931	59.3142	-135.5468	Two adult pink salmon at the	VI	2 P
			downstream end of Lutak road		
			culvert.		
932	59.3141	-135.5471	Observed five adult pink salmon	HN, VI	2 DV, 3 DV 5 P
			upstream of culvert.		
933	59.3140	-135.5472	9% grade over 16 yards	VI	1 P
			downstream, cobble substrate.		
934	59.3141	-135.5472		EF, VI	1 SC, 1P
935	59.3139	-135.5476	Gradient downstream to WP	EF	3 DV
			933 10% over 23 yards.		
936	59.3138	-135.5477	Shocking pool at the base of the	EF	2 DV
			cascade and then moving up a		
			side channel.		
937	59.3138	-135.5480	Top of the side channel. We	EF, VI	1 DV, 5P
			visited site on 9/7/2017 and		
			observed 5 adult pink salmon in		
			main channel near waypoint. No		
			fish were observed above a		
			~1 m cascade water fall.		
938	59.3137	-135.5481	End of survey .Gradient down	EF	2 DV
			to WP 0935 14% over 38		
			yards.		



Figure 1.—Shakuseyi Creek facing downstream at WP 934.



Figure 2.—Spawning pair of pink salmon.



Figure 3.–Shakuseyi Creek facing upstream at WP 934.



Figure 4.-Shakuseyi Creek addition map.



115-33-10200-2001

CORRECTION

Water body name: State Park Slough
Water body number: 115-33-10200-2001
Species & Lifestage: COr

Watershed: Chilkoot River

MTR: C029S058E Quad: Skagway B-2

Findings: We surveyed this stream using a backpack electrofisher and a GPS (Table 1). The upper section of State Park Slough is a high gradient clear water stream comprised of mostly cobble and boulder substrate. Midway down the stream the gradient starts to mellow and eventually levels and spreads out before reaching Chilkoot Lake. According to the AWC there is another anadromous steam that should have intersected with our State Park Slough track. We did not see another stream, however, State Park Slough spreads out and broadens in the lower section of the stream which may have caused us to miss the intersection, or the stream no longer exists.

Recommendations: Correct the current course in the Anadromous Waters Catalog (Figure 1).

Nomination: 12-603

Table 1.–115-33-10200-2001 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
69	59.3311	-135.5769	Electrofished 2 CO beneath	EF	2 CO
			overhanging vegetation.		
68	59.3311	-135.5769	Electrofished 1 DV.	EF	1 DV
67	59.3300	-135.5760	Stream broadens and spreads		
			in low lying open area.		
66	59.3295	-135.5759	Electrofished 1 big DV about	EF	1 DV
			125mm in a pool below		
			cascade.		
65	59.3288	-135.5751	Electrofished 3 DV. Gradient	EF	3 DV
			decreasing.		
64	59.3288	-135.5751	Attempted to electrofish.	EF	No Fish
63	59.3249	-135.5750	Electrofished large pool	EF	No Fish
			above a log jam cascade.		
62	59.3244	-135.5752	Electrofished deep pool at	EF	No Fish
			base of small cascade.		
61	59.3245	-135.5753	At first crossing. Clear water		
			with cobble and boulder		
			substrate. Fairly steep		
			gradient.		

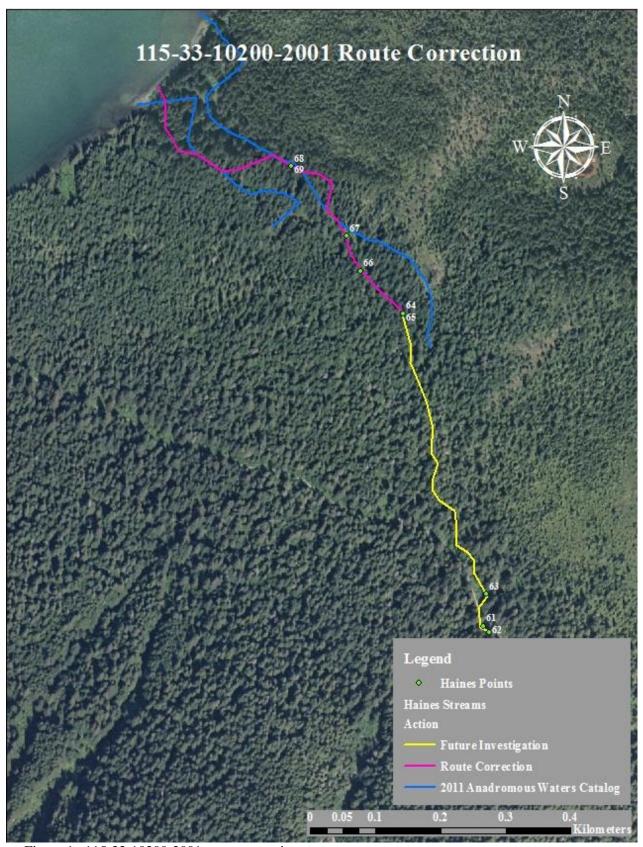


Figure 1.–115-33-10200-2001 route correction.

115-33-10200-2012

ADDITION

Water body name: Survey date: 9/23/2011 Water body number: 115-33-10200-2012 Species & Lifestage: COr

Watershed: Chilkoot River

MTR: C029S058E Quad: Skagway B-2

Findings: We surveyed this stream using minnow traps and a GPS (Table 1). This glacially sourced stream passes through a waterfall barrier and then meanders along the Chilkoot River flood plain. We were able to trap rearing coho salmon part way up the stream, however, the stream seems suitable all the way to the barrier to support anadromous fish (Figure 1).

Recommendations: Add stream to the Anadromous Waters Catalog (Figure 2).

Nomination: 11-716

Table 1.–115-33-10200-2012 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
9	59.3932	-135.6549	Back at main channel. The stream we just tracked has bisected a peninsula. Minnow trap set at confluence of undocumented tributary and Chilkoot River. Captured 7 CO between 50-110mm and 1 DV about 55mm.	MT	7 CO, 1 DV
11	59.3935	-135.6549	Minnow trap set in calm undercut bank. Captured 5 DV between 40-70mm.	MT	5 DV
12	59.3936	-135.6549	Minnow trap set just above incoming tributary/sandbar in calm pool/undercut bank. Captured 5 CO between 50-110mm and 1 DV about 70mm. 1 CO had irregular parrs, tiny clear adipose fin, some parrs not extending below lateral line. Anal fin was sickle shaped with white leading edge followed by black. Very green, mottled back and silvery belly.	MT	5 CO, 1 DV
13	59.3937	-135.6548	Minnow trap set below large nurse log that crosses river. 4 DV between 70-120mm.	MT	4 DV
14	59.3939	-135.6548	Minnow trap set on river right in calm side pool created from a fallen tree. Captured 5 DV between 40-80mm.	MT	5 DV

Table 1.-Continued.

Table 1	Continued.				
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
15	59.3940	-135.6551	Minnow trap set in side pool, captured 25 DV between 60-	MT	25 DV
16	59.3943	-135.6550	100mm. Minnow trap set in undercut	МТ	1 CO, 11 DV
			bank above a couple large tree jam. Captured 1 CO about 110mm and 11 DV between 50-90mm.		
18	59.3946	-135.6553	Minnow trap set located in small side pool associated with large woody debris. Captured 24 DV between 45-100mm.	MT	24 DV
33	59.3966	-135.6566	Minnow trap set along stream below cover of overhanging willows. Captured 1 DV about 80mm.	MT	1 DV
44	59.3976	-135.6544	Approaching large barrier. Visual of an adult, large unknown salmonid.	VI	Unknown
45	59.3976	-135.6545	Minnow trap set. Barrier fall pool. Channel becomes bedrock, multiple tier waterfall with small pinch point where water rockets out. Fish passage impossible, captured 8 DV between 50-90mm.	MT	8 DV



Figure 1.—Coho captured in stream number 115-33-10200-2012.

Haines

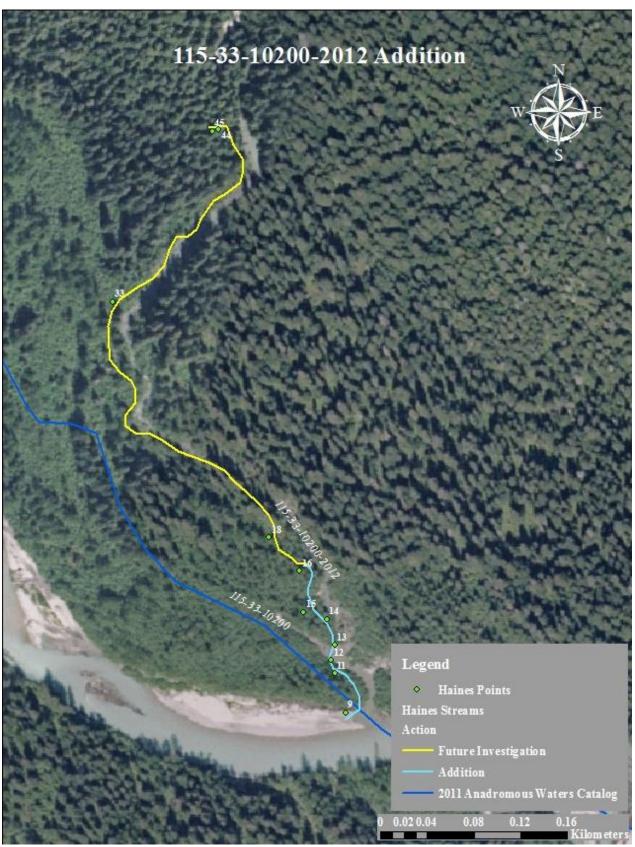


Figure 2.–115-33-10200-2012 addition map.



115-34-10210 CORRECTION

Water body name: Mink Creek

Survey date: 7/20/2012

Water body number: 115-32-10250

Species & Lifestage: COr, DVr, SHr

Watershed: Chilkoot Inlet-Frontal Lynn Canal MTR: C031S060E Quad: Skagway A-1

Findings: We found rearing coho salmon up to a perched culvert that passes below Mud Bay Road (Table 1, Figure 1). Potential rearing habitat continues for at least a quarter mile upstream of the crossing. We ended our survey at private property signs and will request permission from land owner to continue surveying while in Haines conducting work. We also encountered an old culvert under an abandoned, overgrown road downstream. The culvert had some debris accumulating at the inlet but was not blocking fish passage (Figure 2). We captured Dolly Varden char, cutthroat trout, and rainbow trout upstream of the perched culvert (Figure 3).

Recommendations: Updating the stream arc in the Anadromous Waters Catalog (Figure 4).

Nomination: 14-681

Table 1.-115-34-10210 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
221	59.1587	-135.3574	Tributary enters river right.		
222	59.1584	-135.3587	Handnetted 1 CO about 65mm.	HN	1 CO
			Interesting coloration.		
223	59.1575	-135.3587	Electrofished and got 2 CO	EF	2 CO
			about 90mm.		
224	59.1571	-135.3587	Captured 2 DV between 35-	EF	2 DV, 3 CT
			120mm and 3 CT between 40-		
			170mm. Old culvert spans an		
			abandoned road. Does not		
			look to pose difficulty for fish		
225	59.1568	-135.3584	passage. Electrofished and got 1 CO	EF	1 CO, 3 CT, 2 DV
223	37.1300	-133.3364	about 110mm, 3 CT between	121	1 CO, 3 C1, 2 DV
			40-80mm, 2 DV between 40-		
			45mm.		
226	59.1566	-135.3584	Electrofished and got 3 CT	EF	3 CT, 2 DV,
			between 50-120mm, 2 DV		Sculpin
			between 40-110mm, numerous		
			sculpin.		
227	59.1566	-135.3585	Electrofished and got 2 CO	EF	2 CO, 1 CT
			between 65-85mm and 1 CT		
			about 100mm.		
228	59.1567	-135.3591	Electrofished and got 2 CO	EF	2 CO, 1 DV, 1 CT
			between 75-85mm, 1 DV		
			about 45mm and 1 CT about		
			65mm.		1

Table 1.-Continued

Table 1.–Continued.								
Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results			
229	59.1569	-135.3593	Electrofished and got 3 CO about 65-80mm and 1 CT about 60mm.	EF	3 CO, 1 CT			
230	59.1567	-135.3600	Captured 3 CO between 30-105mm, 1 DV about 40mm, some Sculpin.	EF	3 CO, 1 DV, Sculpin			
231	59.1564	-135.3599	Captured with electrofisher 4 CT between 75-150mm at plunge pool of Mud Bay road culvert. Perched culvert about 6-8" perch. Looks like there once was a designed rock- surrounded, jump pool which would have provided fish passage by reducing perch.	EF	4 CT			
232	59.1563	-135.3596	Upstream side of culvert, some blockage. Maybe wise to remove some debris.					
233	59.1564	-135.3599	Captured 5 DV between 35-80mm, 1 CT about 45mm.	EF	5 DV, 1 CT			
234	59.1564	-135.3599	Captured 2 CT between 105-110mm, 1 DV about 40mm.	EF	2 CT, 1 DV			
235	59.1562	-135.3605	Captured 3 CT between 95-110mm and 1 DV about 40mm.	EF	3 CT, 1 DV			
236	59.1561	-135.3605	Small tributary enters on river right. Begin fishing and tracking up.					
237	59.1560	-135.3605	Becomes forest with small stagnant channel. Very marginal fish habitat. Returning to main stem.					
238	59.1562	-135.3611	Electrofished 9 DV between 30-110mm and 3 CT between 45-100mm.	EF	9 DV, 3 CT			
239	59.1560	-135.3613	5 CT between 45-100mm, 5 DV between 40-75mm. Habitat remains excellent with some potential spawning gravels and deep pools.	EF	5 CT, 5 DV			
240	59.1557	-135.3617	Electrofished and got 3 DV about 45-65mm and 1 CT about 80mm.	EF	3 DV, 1 CT			

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
241	59.1557	-135.3623	Electrofished and got 4 DV between 40-80mm and 1 CT about 75mm.	EF	4 DV, 1 CT
242	59.1556	-135.3628	Captured 4 CT between 45-75mm.	EF	4 CT
243	59.1555	-135.3635	Small, steep tributary enters on river left. Will stay on mainstem. Shocked 4 CT between 50-80mm.	EF	4 CT
244	59.1547	-135.3639	Ending survey, channel begins to steepen slightly. Noticed a smell of dead fish so thought maybe other critters would be noticing it as well.		



Figure 1.–Rick Hoffman stands in front of perched culvert below Mud Bay Road.



Figure 2.—Culvert under overgrown road.



Figure 3.–Rainbow trout captured above perched culvert.

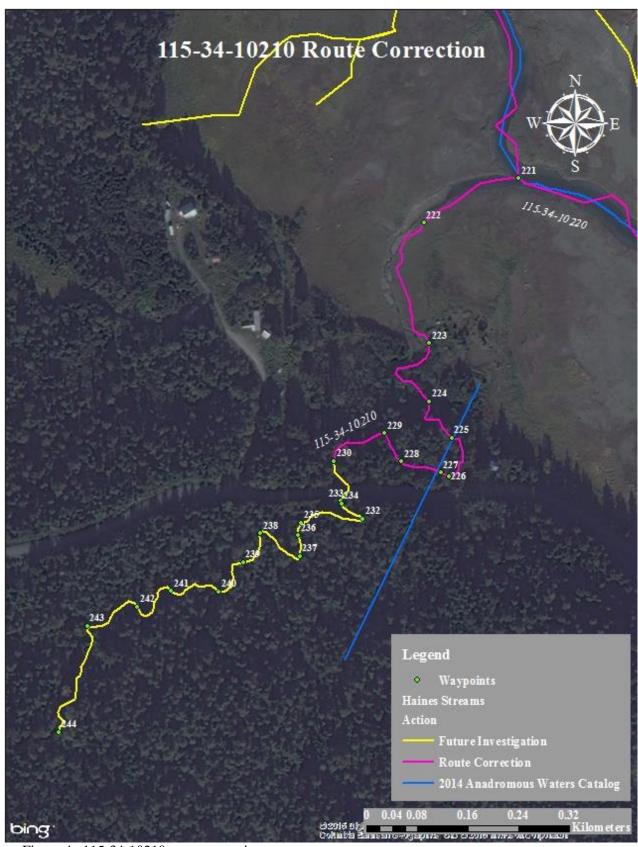


Figure 4.–115-34-10210 route correction map.

115-34-10220 CORRECTION

Water body name: Survey date: 7/26/2012 Water body number: 115-34-10250 Species & Lifestage: COr, CTp, DVp

Watershed: Chilkoot Inlet-Frontal Lynn Canal **MTR:** C031S060E **Quad:** Skagway A-1

Findings: Over the course of three days of surveying we mapped out the mainstem and associated tributaries of stream 115-34-10220, and found the AWC to be incorrect on the upper

section of the stream (Table 1).

Recommendations: Correct the current route in the Anadromous Waters Catalog (Figure 1).

Nomination: 12-581

Table 1.–115-34-10220 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
218	59.1581	-135.3551	Possible tributary enters on		<u>-</u>
			river left.		
221	59.1587	-135.3574	Tributary enters river right.		
1	59.1587	-135.3573	Confluence of tributary to		
			Halibut Cove Creek.		
2	59.1601	-135.3580	Tributary on river right.	HN	SB
			Handnetted some SB.		
9	59.1605	-135.3584	Tributary into main tributary		
	.		on river right. Stinky mud.		
14	59.1606	-135.3584	Back on main tributary.		
			Lovely breeze, sun incredible	·.	
15	59.1610	-135.3581	Tributary entering on river		
			left.		
17	59.1611	-135.3581	Back on mainstem tributary.		
18	59.1624	-135.3583	CO handnetted by Rick	HN	CO
19	59.1635	-135.3587	Fished 2 CT.	EF	2 CT
20	59.1640	-135.3593	Captured 3 CT between 65-	EF	3 CT
			80mm.		
21	59.1644	-135.3594	Captured 1 CO about 95mm.	EF/VI	4 CO
			Positive identification of 3		
			more CO.		
22	59.1646	-135.3602	CO captured about 100mm.	EF	2 CO
			Very smolty.		

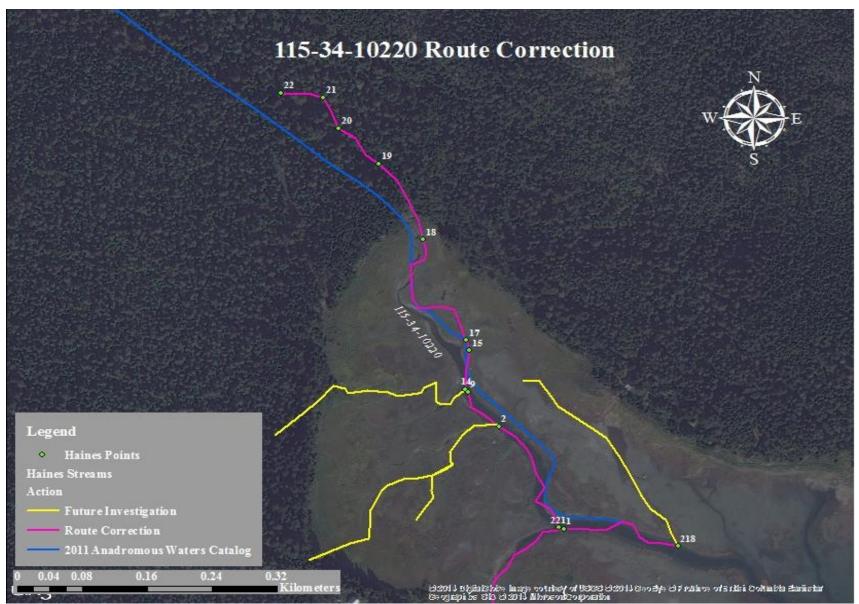


Figure 1.–115-34-10220 route correction map.