

MEMORANDUM

State of Alaska Department of Fish and Game HABITAT SECTION

TO: Kate Kanouse
Southeast Regional Supervisor

DATE: January 10, 2024

THRU: Jesse Lindgren *JL*
Habitat Biologist

FILE: Gastineau Channel Bridge: DOT
Second Crossing

FROM: Flynn Casey *FFC*
Habitat Biologist

SUBJECT: Juneau-Douglas Second Crossing
Fish Stream Surveys
#SFHWY00299

PHONE NO: (907) 465-4287

Between October 19 and October 31, 2023, I surveyed streams near the proposed preliminary alternatives identified in the Alaska Department of Transportation and Public Facilities Juneau-Douglas second crossing planning and environmental linkages study (PEL; Figure 1; State Project #SFHWY00299). I surveyed all streams for fish presence using a backpack electrofisher and baited minnow traps, resulting in 20 nominations to the anadromous waters catalog (AWC; Table 1). Level 1 screening of the PEL study was completed in 2023, advancing the Mendenhall Peninsula, West Sunny Point area, Vanderbilt, Twin Lakes, and Salmon Creek alternatives to level 2 screening. Appendix A.1 (west) and A.2 (east) documents fish presence within the project area, identifying streams specified in the 2023 AWC, additions pending acceptance to the AWC, supporting resident fish, and conveyance with no fish observed. All new additions to the AWC were made based on the finding of rearing juvenile coho salmon.

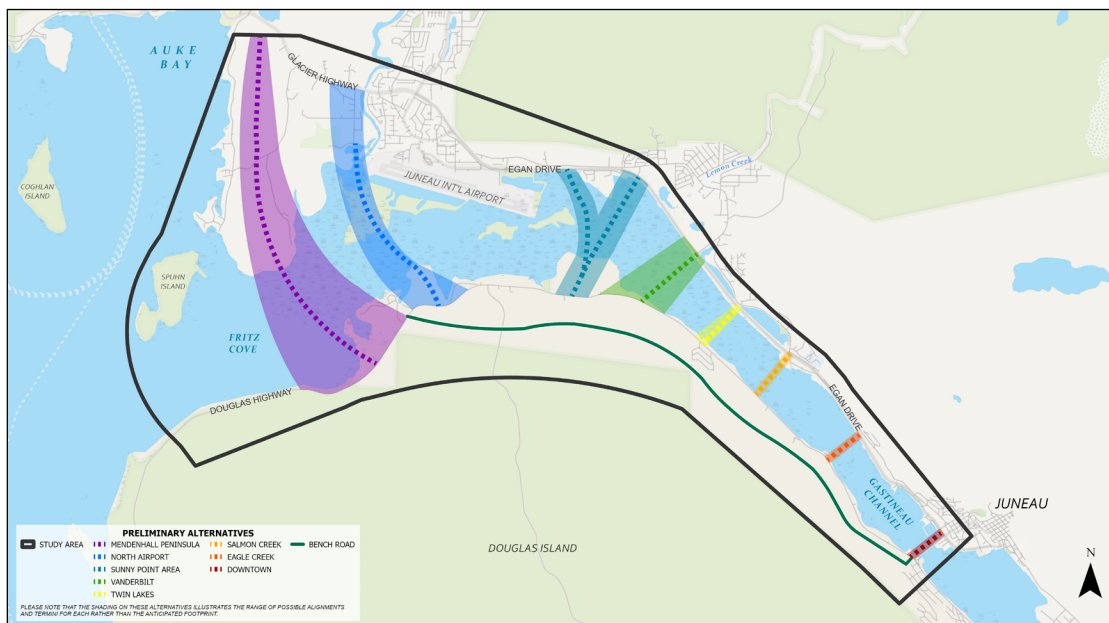


Figure 1.—Preliminary alternatives dated January 03, 2023.

Table 1.–Nominations submitted to the AWC (attached).

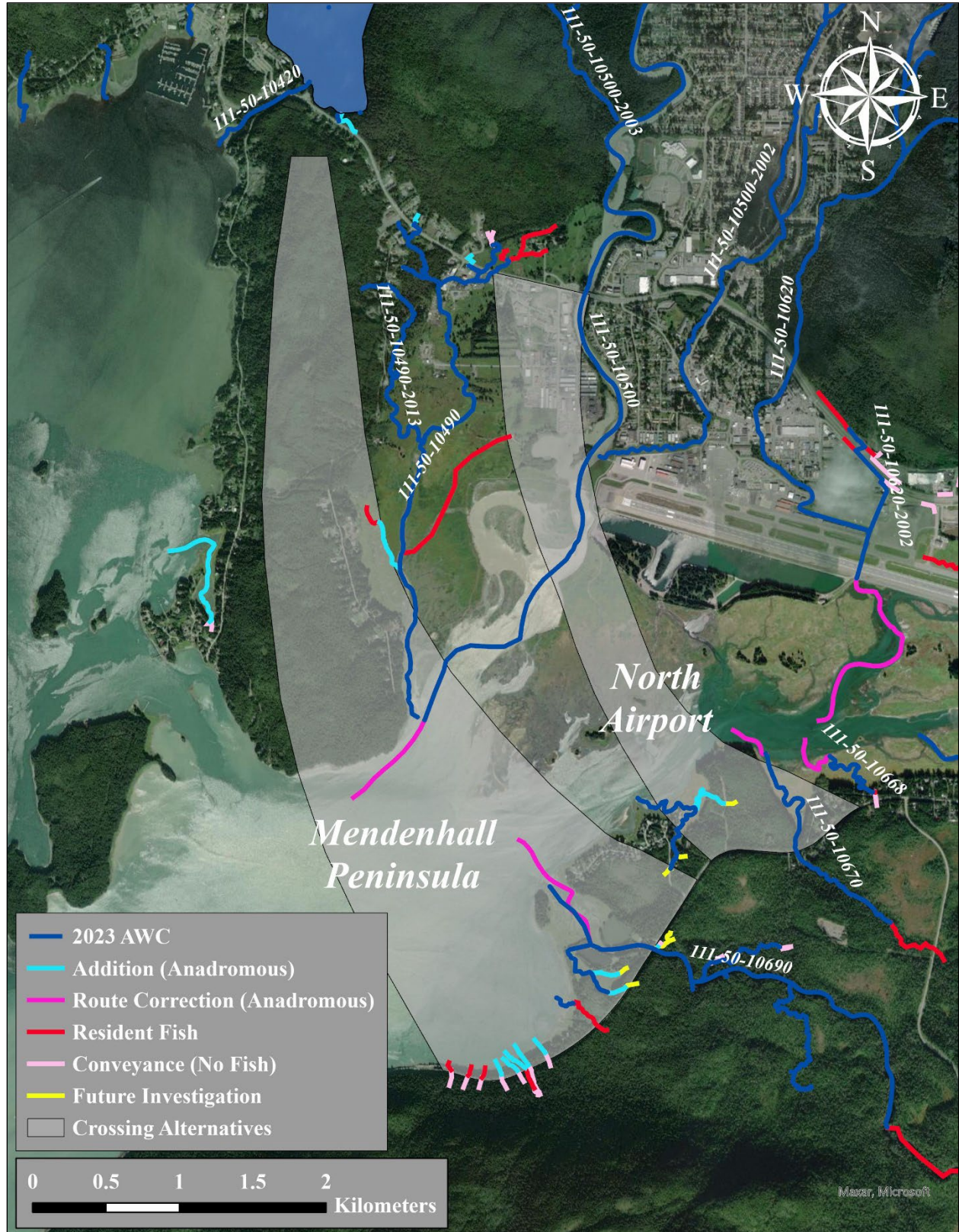
Nomination #	Nomination
24-509	111-50-10490 Tributary 1 Addition
24-510	Fritz Cove Uncataloged Stream Addition
24-511	111-50-10620 Route Correction
24-512	111-40-10100 Route Correction
24-513	111-40-10070 Route Correction
24-514	111-50-10658 Addition
24-515	111-50-10668 Route Correction
24-516	111-50-10680 Tributary 1 Addition
24-517	111-50-10690 Tributary 1 Addition
24-518	111-50-10690-2000 Addition
24-519	111-50-10690-2000 Tributary 1 Addition
24-520	Gastineau Channel Uncataloged Stream Addition 1
24-521	Gastineau Channel Uncataloged Stream Addition 2
24-522	Gastineau Channel Uncataloged Stream Addition 3
24-523	Gastineau Channel Uncataloged Stream Addition 4
24-524	Gastineau Channel Uncataloged Stream Addition 5
24-525	Gastineau Channel Uncataloged Stream Addition 6
24-528	111-50-10690 Route Correction
24-529	111-50-10670 Route Correction
24-530	111-50-10500 Route Correction

Attachments: Appendix A: Second Crossing preliminary alternatives fish use map
AWC Nominations 24-509 through 24-525, and 24-528 through 24-530

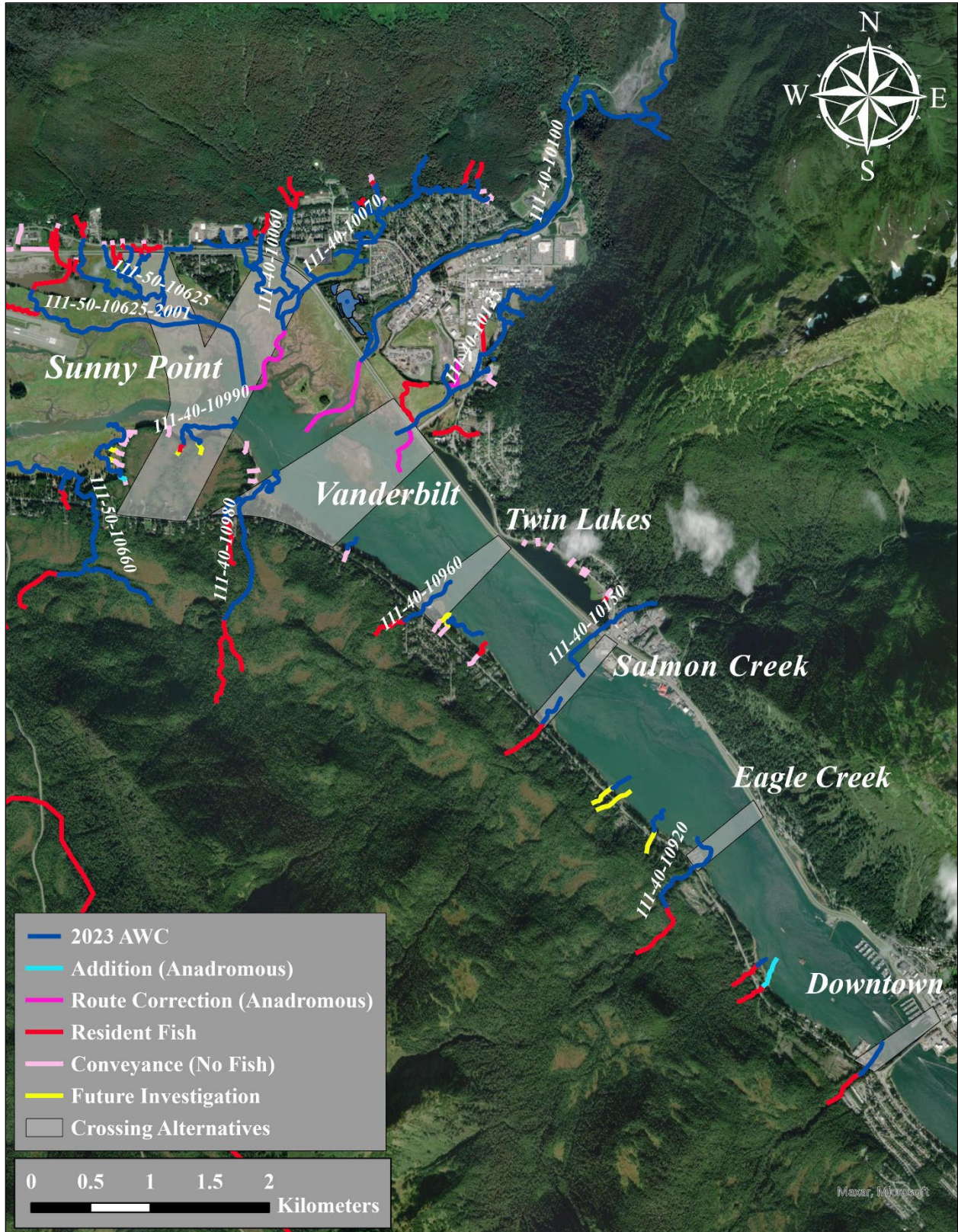
Email cc:

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Roy Churchwell, ADF&G WC, Douglas
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Ben Storey, ADOT&PF, Juneau
Morgan McCammon, DOWL
Margaret Custer, MWSGR AC, Juneau
Teri Camery, CBJ, Juneau
Mike Salyer, USACE, Soldotna
Andy Stevens, USFWS, Anchorage
Habitat Conservation Division, NMFS, Juneau

Appendix A.1.—Second Crossing preliminary alternatives fish use map (West).



Appendix A.2.–Second Crossing preliminary alternatives fish use map (East).



Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10490 Tributary 1

ADDITION

Water body name:

Survey date: 10/26/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.356314 **Longitude:** -134.625316

Survey crew: FC

Lower Reach Latitude: 58.353530 **Longitude:** -134.622851

Findings: We surveyed this uncataloged stream using baited minnow traps and GPS. We captured juvenile coho salmon and sculpin. The stream flows through tidally-influenced wetlands near the mouth of the Mendenhall River (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-509

Table 1.–111-50-10490 tributary 1 survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1077	58.356318	-134.625337	Minnow trap soaked overnight. Some build-up of ice near trap ports, but 2+-yr CO capture.	2-4	Sand Small Gravel		1-2	MT	3 CO
1078	58.356063	-134.624964	Foot-bridge with “no trespassing” sign.						
1079	58.355289	-134.624839	Minnow trap soaked overnight.		Sand Small Gravel		0-1	MT	1 SC



Figure 1.–Downstream view of tributary 1 at waypoint 1079.



Figure 2.—Juvenile coho salmon captured at waypoint 1077.



Figure 3.—Upstream view of tributary 1 at waypoint 1077.

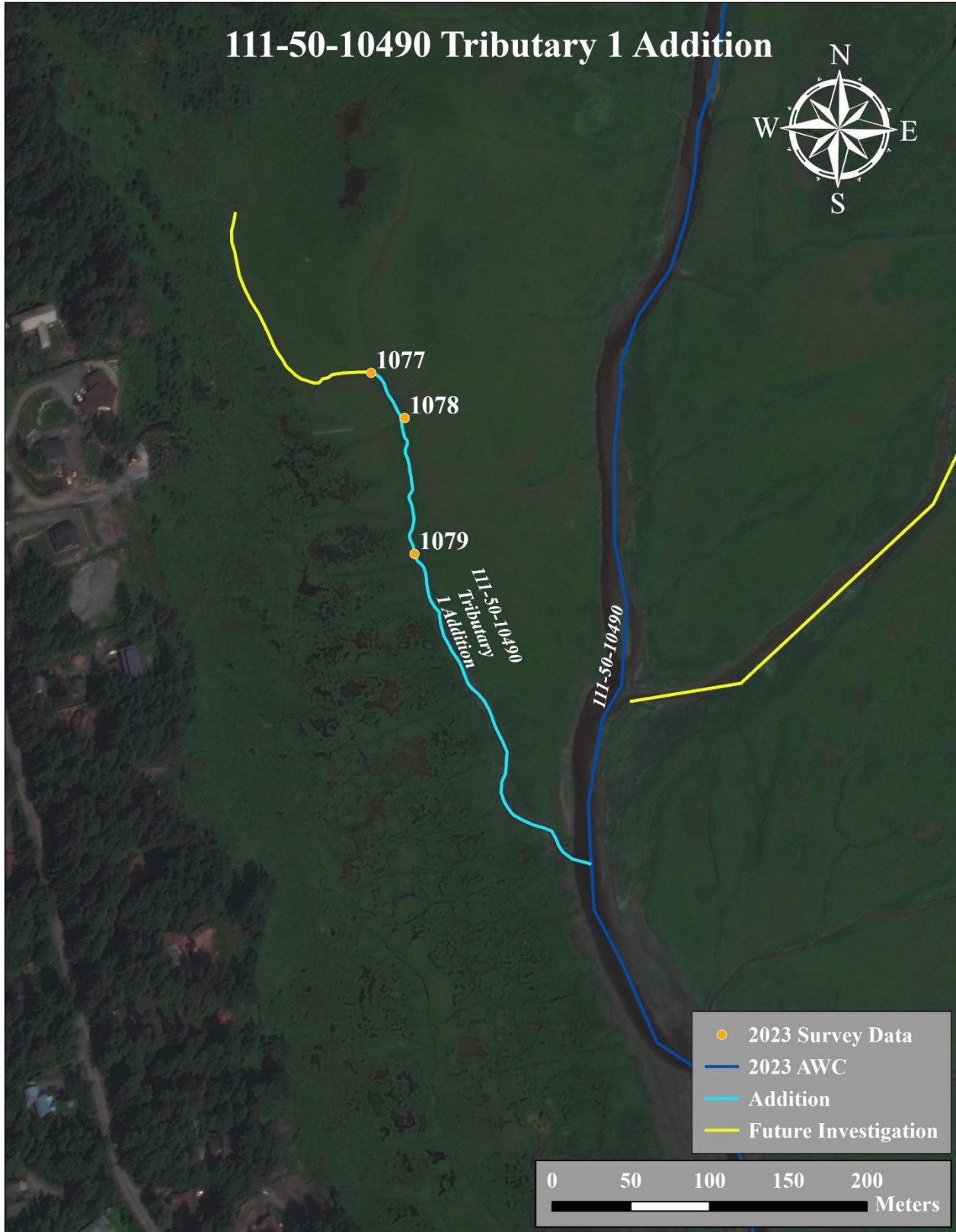


Figure 4.—111-50-10490 tributary 1 addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Fritz Cove Uncataloged Stream

ADDITION

Water body name:

Survey date: 5/17/2022; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.350102 **Longitude:** -134.644896

Survey crew: FC, RR

Lower Reach Latitude: 58.354388 **Longitude:** -134.649671

Findings: We surveyed this cataloged stream using a backpack electrofisher, baited minnow traps, and GPS and captured juvenile coho salmon. The intertidal portion of the stream can have very little water at most flows, but we were able to trap juvenile coho salmon just downstream of a perched culvert outlet (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon. Please extend stream into the intertidal (Figure 4).

Nomination: 24-510

Table 1.–Fritz Cove uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
144	58.351279	-134.645955	Start survey. In tidal flat, stream level low.	1-2	Sand Clay		0-1	EF	No Fish
145	58.350194	-134.644752	Water level extremely low.	4-6	Small Gravel Sand		1-2	EF	No Fish
146	58.350215	-134.644875							
147	58.350187	-134.644750							
148	58.350138	-134.644853	Small stream flowing out of 1' culvert. 1-2' perch into a pool. Culvert shows evidence of rusting and leaking out of the bottom prior to the opening.	2-4	Large Gravel Small Gravel		4-6	EF	No Fish
149	58.349988	-134.645088	Other side of culvert.					EF	No Fish
150	58.350009	-134.644715	Too low to electrofish.	2-4	Small Gravel Fine Organic		2-4	EF	No Fish
151	58.349628	-134.644710	Stream continues going under woody debris and root systems until it reaches a 1-2' culvert under someone's driveway. Very filled with dirt and debris. Stream looks like good habitat for coho but stream levels very low. Could be good for future investigation in a higher-flow season. End of survey.					EF	No Fish

Table 2.–Continued.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1095	58.350106	-134.644917	Minnow trap soaked ~5 hrs in pool just downstream of 1' CMP perched 18" into pool; set at steep grade and significantly rusted, water leaking out rusted-through bottom prior to outlet and headcutting under culvert.	2-4	Small Gravel Large Gravel		4-6	MT	2 CO
1096	58.349919	-134.644744	Minnow trap soaked ~5 hrs in small pool with cut banks ~40' upstream of culvert inlet.	2-4		Cut Banks	2-4	MT	No Fish



Figure 1.–Culvert outlet at waypoint 1095.



Figure 2.—Juvenile coho salmon captured at waypoint 1095.



Figure 3.—Upstream view of stream at waypoint 1096.



Figure 4.—Fritz Cove uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10620

CORRECTION

Water body name: Jordan Creek

Survey date: 10/26/2023

Quad: Juneau B-2

Species & Lifestage: CHp,COp,Ps,Sp,CTp,DVp

Upper Reach Latitude: 58.391234 **Longitude:** -134.555673

Survey crew: FC

Lower Reach Latitude: 58.344571 **Longitude:** -134.573882

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-50-10620 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-511

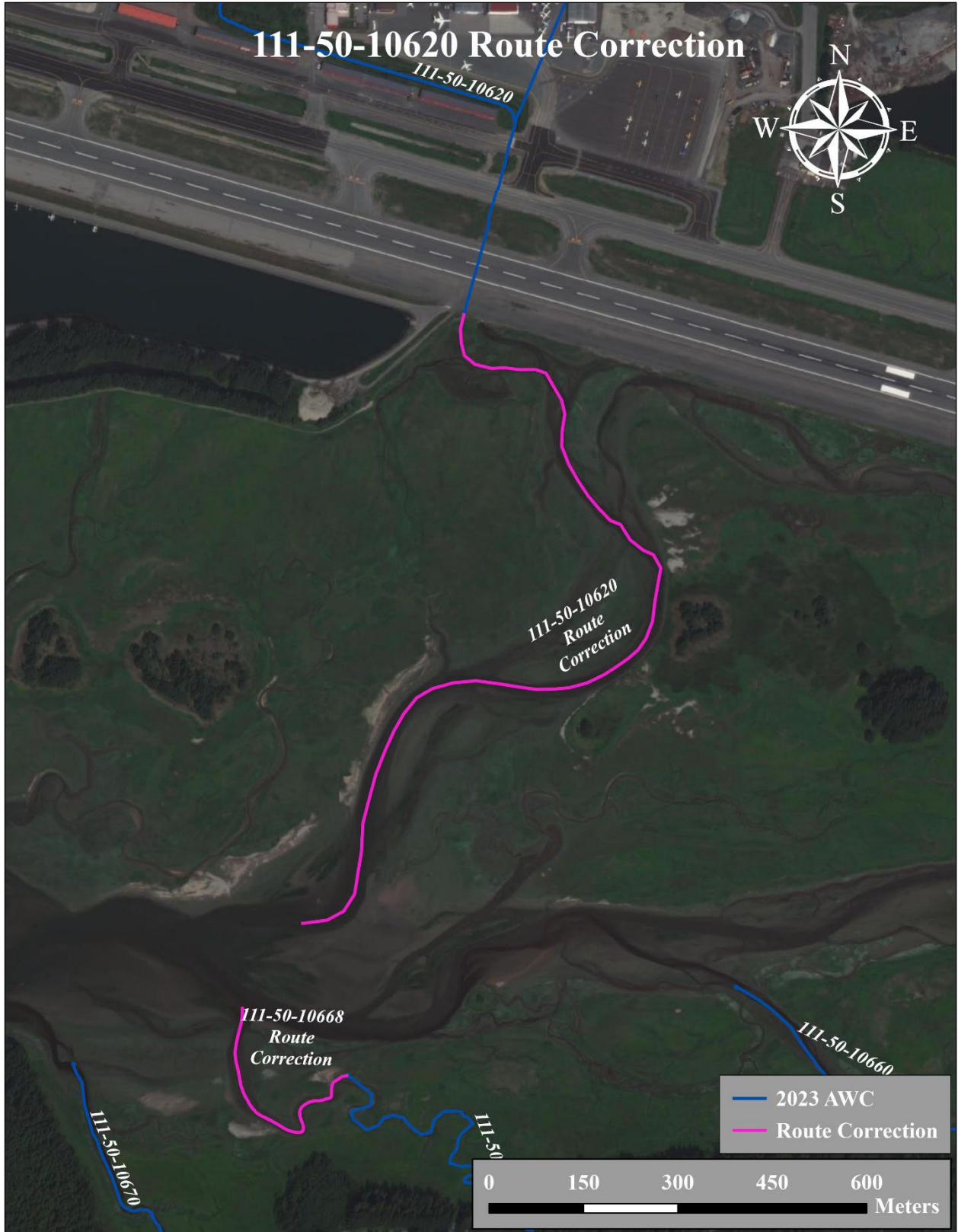


Figure 1.—111-50-10620 route correction map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-40-10100

CORRECTION

Water body name: Lemon Creek

Survey date: 10/26/2023

Quad: Juneau B-2

Species & Lifestage: CHs,COp,Pp,DVp

Upper Reach Latitude: 58.379144 **Longitude:** -134.442721

Survey crew: FC

Lower Reach Latitude: 58.345193 **Longitude:** -134.516150

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-40-10100 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-512



Figure 1.-111-40-10100 route correction map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-40-10070

CORRECTION

Water body name: Switzer Creek

Survey date: 10/26/2023

Quad: Juneau B-2

Species & Lifestage: CHp,COp,Pp,Sp,CTr,DVp

Upper Reach Latitude: 58.365839 **Longitude:** -134.499573

Survey crew: FC

Lower Reach Latitude: 58.348174 **Longitude:** -134.524847

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-40-10070 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-513

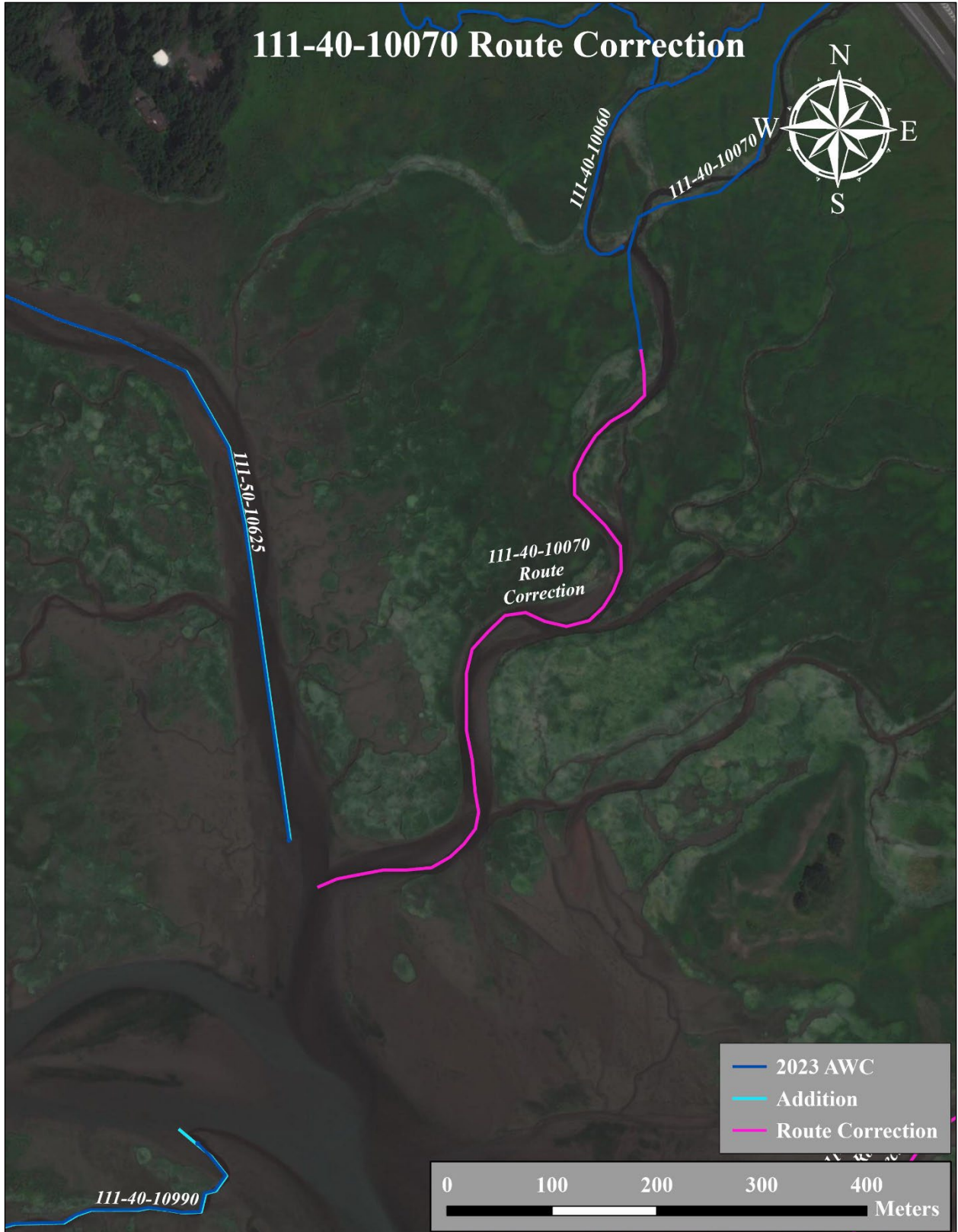


Figure 1.-111-40-10070 route correction map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10658

ADDITION

Water body name:

Survey date: 10/23/2023

Quad: Juneau B-2

Species & Lifestage: CO

Upper Reach Latitude: 58.341320 **Longitude:** -134.542263

Survey crew: FC

Lower Reach Latitude: 58.345332 **Longitude:** -134.544630

Findings: We surveyed this cataloged stream using a backpack electrofisher and GPS and captured juvenile coho salmon. The stream flows through a reach of sporadic subterranean channels and descends a hillside with 4-8% gradient prior to emerging from the forest and into intertidal wetlands (Table 1; Figures 1–3).

Recommendations: Extend upper extent of Stream No. 111-50-10658 in the anadromous waters catalog (Figure 4).

Nomination: 24-514

Table 1.–111-50-10658 survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1055	58.341324	-134.542284	1-yr CO capture despite gradient increase. Small pools with rearing habitat persist sporadically up to here, becoming sparse upstream where stream splits into main and tributary, both with increasingly subterranean flow. Not worth future investigation unless at high flows and already in area.	2-4	Small Gravel Fine Organic	Cut Banks	4-6	EF	2 CO



Figure 1.—Juvenile coho salmon captured at waypoint 1055.



Figure 2.—Downstream view of Stream No. 111-50-10658 at waypoint 1055.



Figure 3.—Upstream view of Stream No. 111-50-10658 at waypoint 1055.

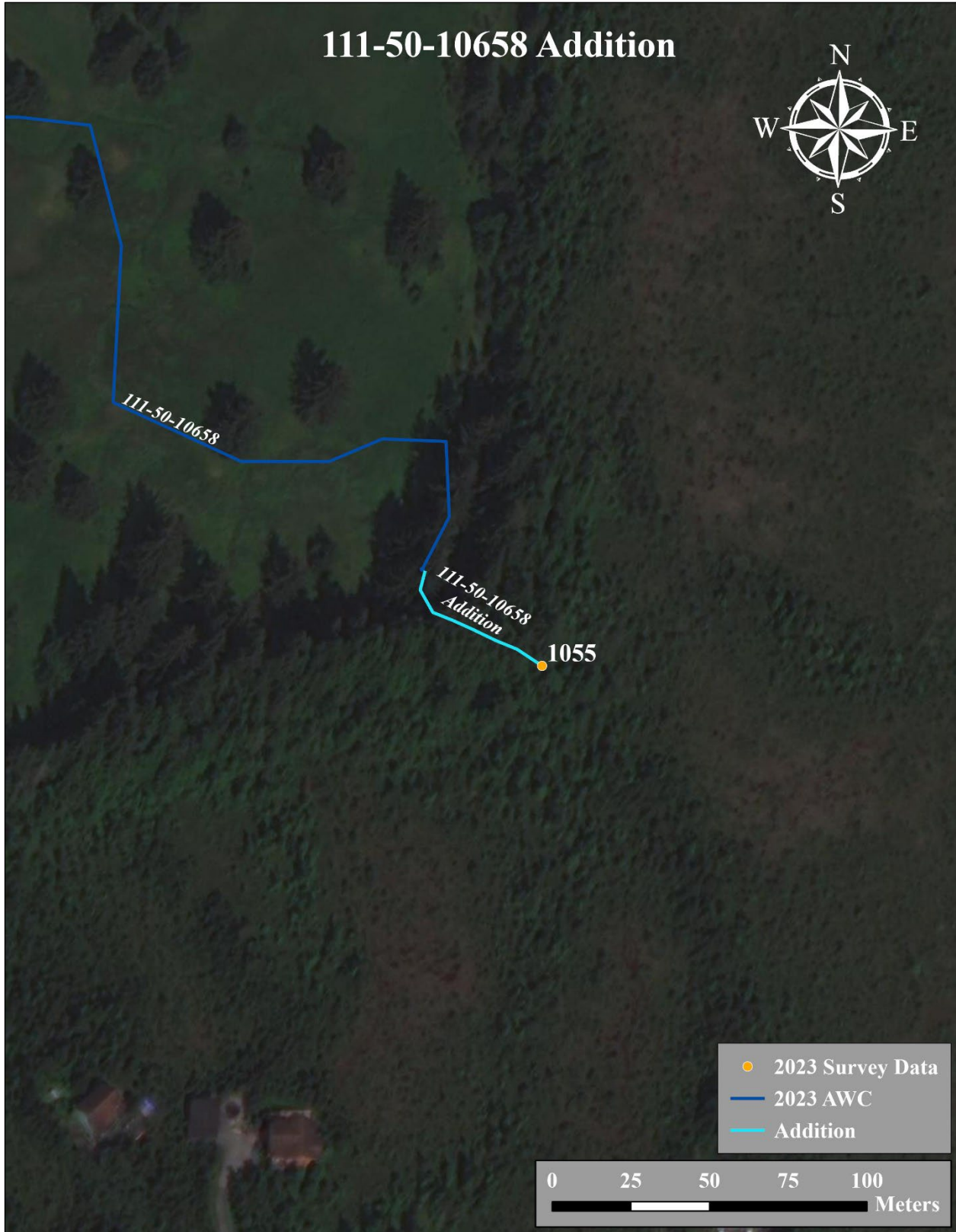


Figure 4.—Stream No. 111-50-10658 addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10668

CORRECTION

Water body name:

Survey date: 10/20/2023

Quad: Juneau B-2

Species & Lifestage: COR

Upper Reach Latitude: 58.340254 **Longitude:** -134.567515

Survey crew: FC

Lower Reach Latitude: 58.343372 **Longitude:** -134.575450

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-50-10668 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-515



Figure 1.-111-50-10668 route correction map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10680 Tributary 1

ADDITION

Water body name:

Survey date: 5/12/2022; 10/20/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.339439 **Longitude:** -134.584823

Survey crew: FC, RR

Lower Reach Latitude: 58.339118 **Longitude:** -134.588109

Findings: We surveyed this uncataloged stream using a backpack electrofisher and GPS and captured juvenile coho salmon. The stream has marginal habitat upstream of a small culvert where the channel becomes overcrowded by woody debris, but has quality rearing habitat downstream to the confluence with a cataloged stream (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-516

Table 1.–111-50-10680 tributary 1 survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
135	58.339072	-134.587704	Start of survey.	12-15	Clay			EF	No Fish
136	58.340137	-134.587368	Stream about to enter woods.	1-2	Large Gravel Cobble		4-6	EF	No Fish
137	58.339993	-134.586383	Stream entering wooded area. No fish found. Good spawning substrate present with pools. Seems like good habitat for coho. No fish found. End of survey.	1-2	Small Gravel	Spawning Substrate	6-8	EF	No Fish
1039	58.339875	-134.586253	1- to 2-yr CO capture ~20' upstream of tree-line where stream enters and meanders through wetland to join cataloged stream. Advancing upstream.	4-6	Small Gravel Fine Organic	SWD	1-2	EF	2 CO
1040	58.339685	-134.585513	Very slight increase in gradient compared to downstream. Good quality rearing habitat with lots of cut banks. Continued CO capture.	2-4	Small Gravel Fine Organic	Cut Banks SWD	2-4	EF	2 CO

Table 2.–Continued.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1041	58.339455	-134.584845	Continued CO capture ~15' downstream of culvert at road crossing. Quality rearing habitat persists up to this point, interspersed with small stretches of subterranean flow. Between here and culvert outlet, the channel is overcrowded by overgrown roots, brush, and riprap nearer outlet. Marginal habitat upstream of pipe. Shocked several pools upstream of pipe; no fish observed.	1-2	Small Gravel Fine Organic	Cut Banks SWD	2-4	EF	2 CO



Figure 1.–Juvenile coho salmon captured at waypoint 1039.



Figure 2.—Tributary 1 at waypoint 1040.



Figure 3.—Overcrowded channel just downstream of culvert outlet at waypoint 1041.

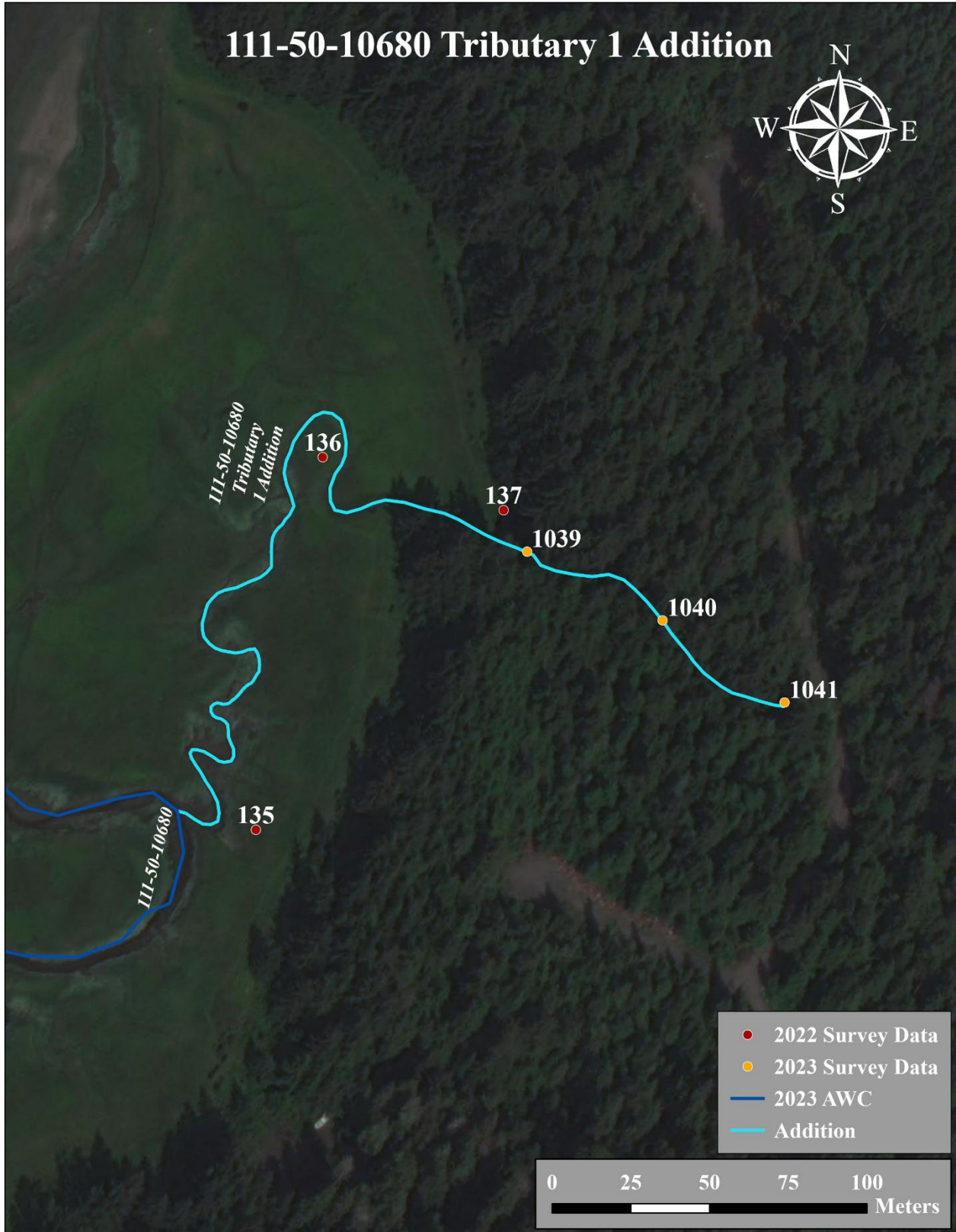


Figure 4.—111-50-10680 tributary 1 addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10690 Tributary 1

ADDITION

Water body name:

Survey date: 10/19/2023; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.330622 **Longitude:** -134.592248

Survey crew: FC

Lower Reach Latitude: 58.330431 **Longitude:** -134.592438

Findings: We surveyed this uncataloged stream using baited minnow traps and GPS and captured juvenile coho salmon. The tributary stream flows around the base of a roadside hill and has potentially viable rearing habitat upstream of where fish were captured (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-517

Table 1.–111-50-10690 tributary 1 survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1020	58.330627	-134.592268	Minnow trap soaked ~4 hrs in river-right tributary of Fish Creek ~60' upstream of confluence; ~18" drop falls with fast flow at outlet of tributary. CO capture; one fell from trap. Secondary tributary on river-right where water seeps out of hillside ~100-150' upstream. Main flow in this tributary veers river-left around base of hillside and becomes more channelized with some intermittent subterranean flow.	8-10	Fine Organic		1-2	MT	2 CO
1097	58.330845	-134.591947	Stream seeps out of hillside here, with uphill gradient increasing; also fairly disconnected from downstream at current low flow. Joins / is fed by runoff from roadside ditch just downstream. Too little water here at current low flow to trap.				6-8	Not Fished	

Table 2.–Continued.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1098	58.330750	-134.591605	Minnow trap soaked in pool overnight. Stream more channelized and with more gravel sediment and rearing habitat (cut banks) compared to downstream. Gradient increases slightly upstream.	6-8	Small Gravel Large Gravel	Cut Banks	2-4	MT	No Fish
1099	58.330987	-134.591023	Minnow trap soaked overnight in pool near confluence with tributary that appears as a seep at current low flow (little diffuse water that regularly flows under ground, but continues a ways; may want to follow up at higher flow). Quality habitat continues upstream on main channel.			Cut Banks		MT	No Fish
1100	58.331483	-134.590833	Minnow trap soaked overnight in small pool ~20' downstream of small woody debris jam. Should continue surveying upstream if fish are caught here as jam is not likely to block passage and quality rearing habitat continues.	4-6	Large Gravel Small Gravel	Cut Banks	4-6	MT	No Fish



Figure 1.—Small falls at confluence of tributary 1 and main channel downstream of waypoint 1020.



Figure 2.—Juvenile coho salmon captured at waypoint 1020.



Figure 3.—Downstream view of re-channelized stream at waypoint 1098.



Figure 4.—111-50-10690 tributary 1 addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10690-2000

ADDITION

Water body name:

Survey date: 10/19/2023

Quad: Juneau B-2

Species & Lifestage: CO

Upper Reach Latitude: 58.328105 **Longitude:** -134.595971

Survey crew: FC

Lower Reach Latitude: 58.327814 **Longitude:** -134.598018

Findings: We surveyed this cataloged stream using baited minnow traps and GPS. We captured juvenile coho salmon and juvenile cutthroat trout. The stream flows through a 3-foot plastic culvert and through intertidal wetlands prior to emptying into Fish Creek (Table 1; Figures 1–3).

Recommendations: Extend upper extent of Stream No. 111-50-10690-2000 in the anadromous waters catalog (Figure 4).

Nomination: 24-518

Table 1.–111-50-10690-2000 survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1018	58.328245	-134.595770	Outlet of 3' smooth-walled plastic pipe culvert crossing Douglas Hwy. Outlet poorly aligned with stream.	4-6	Fine Organic		4-6		
1019	58.328109	-134.595992	Minnow trap soaked ~40' downstream of culvert outlet for ~4 hrs.	4-6	Fine Organic Small Gravel		4-6	MT	29 CO 1 CT



Figure 1.–Outlet of poorly-aligned culvert at waypoint 1018.



Figure 2.—Juvenile coho salmon captured at waypoint 1019.



Figure 3.—Upstream view of Stream No. 111-50-10690-2000 at waypoint 1019.

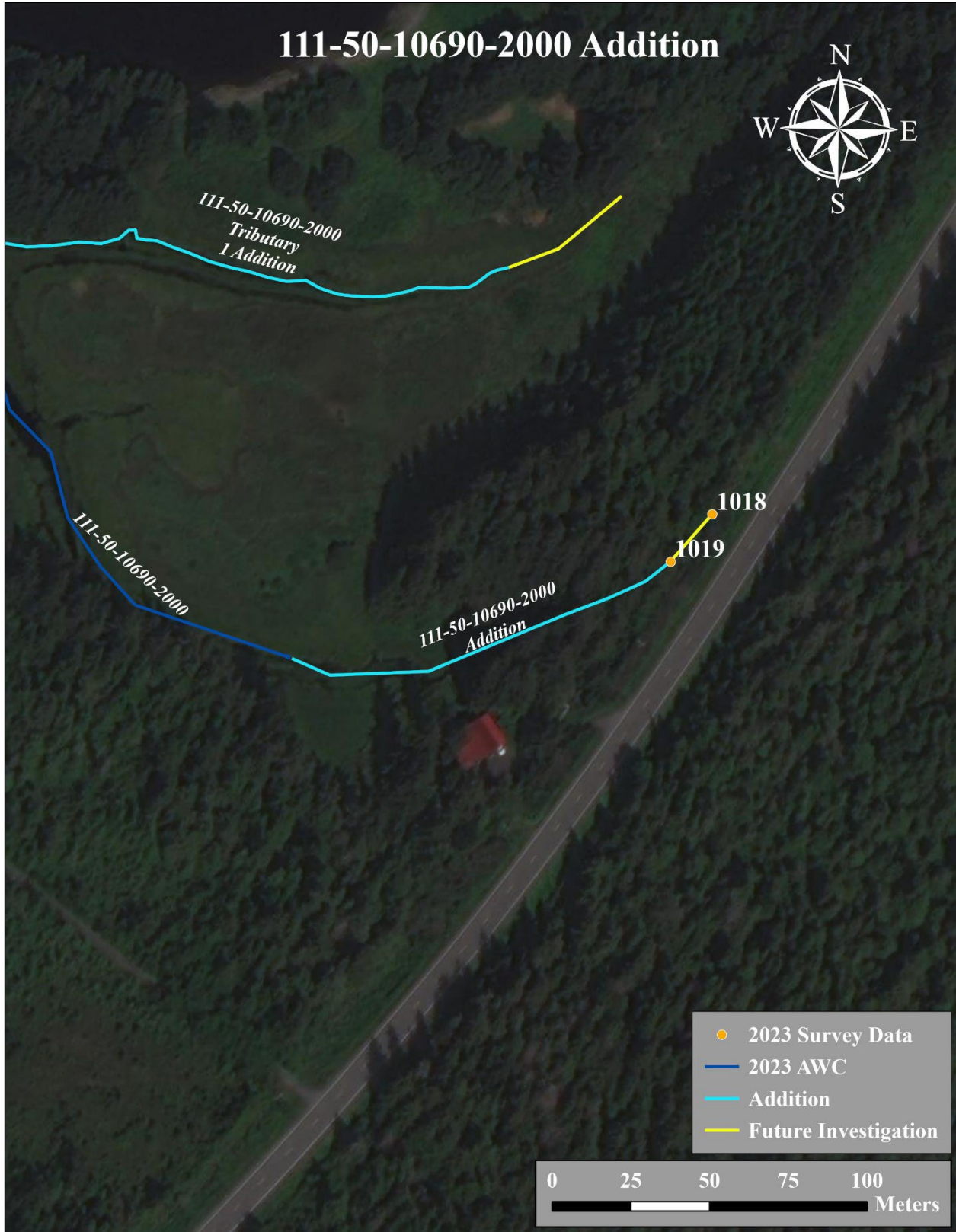


Figure 4.—Stream No. 111-50-10690-2000 addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10690-2000 Tributary 1

ADDITION

Water body name:

Survey date: 10/19/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.328937 **Longitude:** -134.596869

Survey crew: FC

Lower Reach Latitude: 58.328932 **Longitude:** -134.599869

Findings: We surveyed this uncataloged stream using baited minnow traps and GPS. We captured juvenile coho salmon and stickleback. The tributary stream has largely stagnant flow through the intertidal prior to joining a cataloged tributary of Fish Creek (Table 1; Figures 1, 2).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 3).

Nomination: 24-519

Table 1.–111-50-10690-2000 tributary 1 survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1016	58.328971	-134.596916	Minnow trap soaked ~4 hrs.	4-6	Fine Organic		0-1	MT	85 CO 90 SB
1017	58.329048	-134.598894	Minnow trap soaked ~4 hrs. Stagnant stream connected to cataloged channel; not quite connected to large pond on river-right here at current flows, but might be if flow was a little higher.	20-25	Fine Organic		0-1	MT	29 CO 25 SB



Figure 1.—Downstream view of tributary 1 at waypoint 1017.



Figure 2.—Juvenile coho salmon captured at waypoint 1016.



Figure 3.—111-50-10690-2000 tributary 1 addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Gastineau Channel Uncataloged Stream

ADDITION

Water body name:

Survey date: 10/19/2023; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.322697 **Longitude:** -134.610239

Survey crew: FC

Lower Reach Latitude: 58.323506 **Longitude:** -134.610937

Findings: We surveyed this cataloged stream using a backpack electrofisher, baited minnow traps, and GPS. We captured juvenile coho salmon and sculpin. The stream falls out of a significantly perched 2-foot plastic culvert and flows down a steep-gradient hillside, with gradient becoming less severe as it approaches the intertidal (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-520

Table 1.—Gastineau Channel uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream	Stream	Habitat Features	Gradient %	Sample Effort	Sample Results
				Width ft	Substrate				
1026	58.322903	-134.610388	Started shocking here near tree-line. 1-yr CO capture; advancing upstream.	2-4	Small Gravel Large Gravel	Cut Banks	4-6	EF	1 CO 6 SC
1027	58.322701	-134.610259	Continued 1-yr CO capture.	6-8	Large Gravel Small Gravel	Cut Banks	4-6	EF	2 CO
1028	58.322610	-134.610248	Gradient increase compared to just downstream flowing from pool fed by water falling out of 2' smooth-walled plastic pipe culvert onto riprap. Shocked pool and just downstream; no fish.	4-6	Large Gravel Cobble		8-10	EF	No Fish
1105	58.322320	-134.610164	Minnow trap soaked overnight at culvert inlet.					MT	No Fish



Figure 1.—Juvenile coho salmon captured at waypoint 1027.



Figure 2.—Downstream view of stream at waypoint 1027.



Figure 3.—Perched culvert outlet and conveyance stream at waypoint 1028.



Figure 4.—Gastineau Channel uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Gastineau Channel Uncataloged Stream

ADDITION

Water body name:

Survey date: 10/19/2023; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.322943 **Longitude:** -134.608386

Survey crew: FC

Lower Reach Latitude: 58.323658 **Longitude:** -134.610051

Findings: We surveyed this cataloged stream using a backpack electrofisher, baited minnow traps, and GPS. We captured juvenile coho salmon and sculpin. The stream falls out of a 3-foot plastic culvert with 4-foot perch and flows down a hillside, with gradient becoming less severe as it approaches the intertidal (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-521

Table 1.–Gastineau Channel uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream	Stream	Habitat Features	Gradient	Sample	Sample
				Width ft	Substrate		%	Effort	Results
1029	58.323270	-134.609158	1-yr CO capture at tree-line in small stream running through wetland beach with cut banks. Advancing upstream.	2-4	Small Gravel	Cut Banks	2-4	EF	3 CO 12 SC
1030	58.322947	-134.608406	Only SC captured between downstream waypoint at tree-line and here, but then continued CO capture in pool directly below 3' smooth-walled plastic pipe culvert with 4' perch, falls onto riprap / into pool. One CO dropped from net. Downstream gradient from road to tree-line is not quite as steep as nearby streams to the west.	8-10	Small Gravel Large Gravel		4-6	EF	2 CO 1 SC
1104	58.322701	-134.608125	Minnow trap soaked overnight at culvert inlet.					MT	No Fish



Figure 1.—Juvenile coho salmon captured at waypoint 1029.



Figure 2.—Downstream view of stream at waypoint 1030.



Figure 3.—Perched culvert outlet at waypoint 1030.



Figure 4.—Gastineau Channel uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Gastineau Channel Uncataloged Stream

ADDITION

Water body name:

Survey date: 10/19/2023; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.323122 **Longitude:** -134.607476

Survey crew: FC

Lower Reach Latitude: 58.324056 **Longitude:** -134.609808

Findings: We surveyed this cataloged stream using baited minnow traps and GPS. We captured juvenile coho salmon, Dolly Varden, cutthroat trout, and sculpin. The stream flows down a hillside, through a 4-foot culvert with 2-foot perch, and into the intertidal (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-522

Table 1.–Gastineau Channel uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1035	58.323352	-134.608076	Minnow trap soaked overnight.	12-15	Large Gravel Small Gravel	Cut Banks SWD	4-6	MT	1 SC
1036	58.323126	-134.607497	Minnow trap soaked overnight ~20' downstream of 4' CMP with no gravel infill, water rushing out fast and falling over 2' perch onto riprap / into pool. Flow decreased overnight and trap openings were out of water upon checking. Trap reset for ~4 hrs; 2-yr CO capture.	10-12	Large Gravel Small Gravel	Cut Banks SWD	6-8	MT	2 CO 2 DV 1 CT
1037	58.323478	-134.608644	Waypoint for reference of stream outlet. Stream braids into two separate outlets at current high flows.						

Table 2.–Continued.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1101	58.322794	-134.607217	Minnow trap soaked overnight in first decent pool ~30' upstream of culvert inlet. Grade of stream (slightly incised upstream) and even hillside in general is not as steep as expected. Sediment size may be a little large and flow a little fast to be ideal (esp. near culvert influence), but this could be good coho habitat if pipe wasn't blocking passage. Advancing upstream.	10-12	Cobble Large Gravel	Cut Banks	6-8	MT	No Fish
1102	58.322533	-134.607086	Minnow trap soaked overnight in pool just downstream of log jam. Some flow falls over log jam but primarily skirts around and underneath log to river-right.	12-15	Large Gravel Cobble	Cut Banks Log Jams	6-8	MT	2 DV
1103	58.321891	-134.606427	Minnow trap soaked overnight in pool ~30' downstream of large jam of multiple logs restraining and accumulating boulder and cobble sediment with vegetative growth throughout. Just upstream of jam, grade levels out briefly due to accumulated rocky sediment, but stream is buried under; reappears ~40' upstream of jam.	12-15	Large Gravel Small Gravel	Cut Banks Log Jams	6-8	MT	No Fish
1127	58.321478	-134.605959	Stream flows out from woody debris jam at side of bedrock cliff face.	6-8	Cobble Large Gravel	Incised Channel	12-15	Not Fished	



Figure 1.—Upstream view of stream at waypoint 1035.



Figure 2.—Juvenile coho salmon captured at waypoint 1036.



Figure 3.—Perched culvert outlet at waypoint 1036.

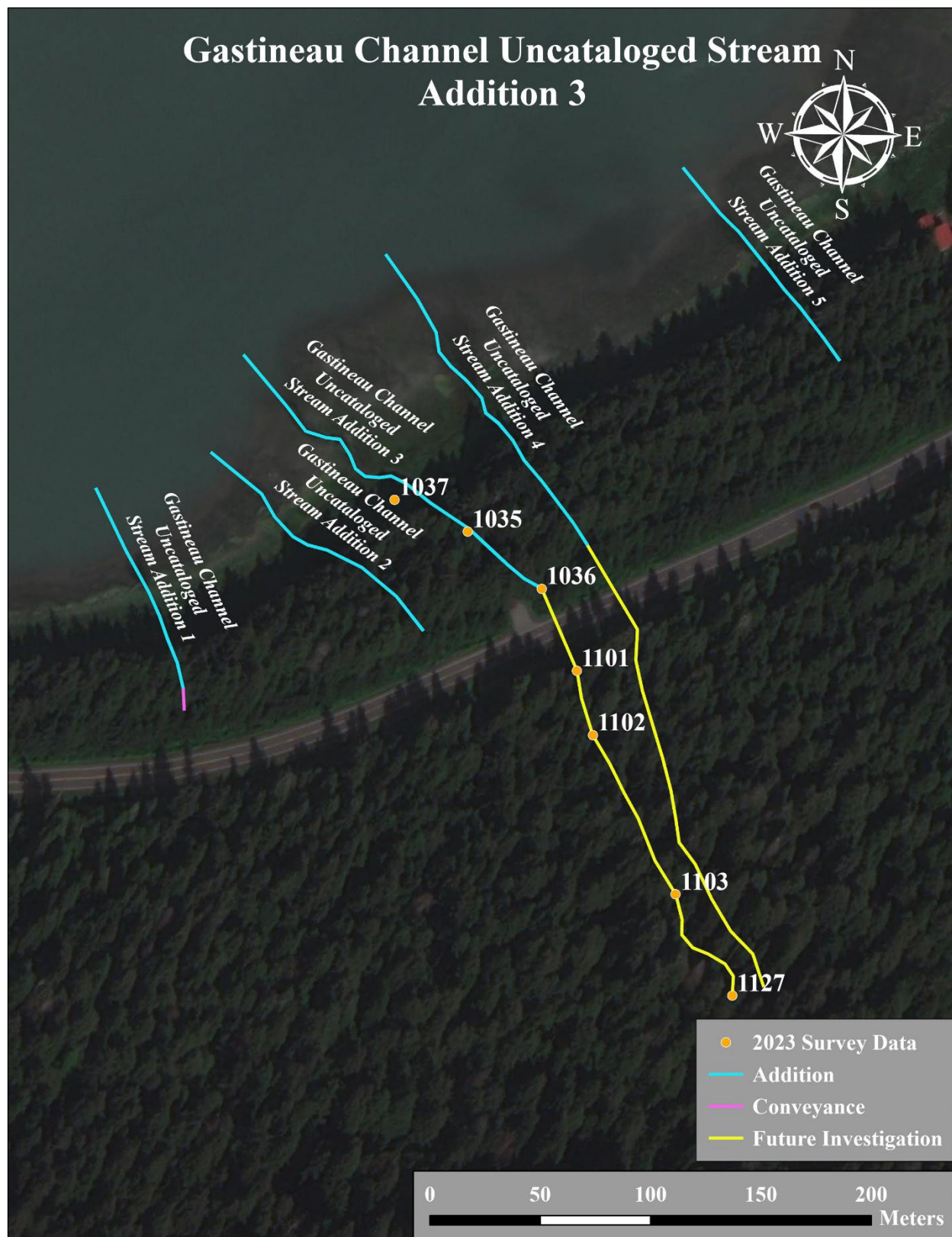


Figure 4.—Gastineau Channel uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Gastineau Channel Uncataloged Stream

ADDITION

Water body name:

Survey date: 10/19/2023; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.323300 **Longitude:** -134.607125

Survey crew: FC

Lower Reach Latitude: 58.324472 **Longitude:** -134.608719

Findings: We surveyed this cataloged stream using a backpack electrofisher, baited minnow traps, and GPS. We captured juvenile coho salmon and sculpin. The stream flows down a hillside, through a 2-foot culvert perched over riprap, and into the intertidal (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-523

Table 1.–Gastineau Channel uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream Width ft	Stream Substrate	Habitat Features	Gradient %	Sample Effort	Sample Results
1033	58.323892	-134.607895	Old abandoned boat in tidal outlet of stream.						
1034	58.323304	-134.607146	1- to 2-yr CO capture once slow-flow rearing habitat became more available compared to downstream. ~60' downstream of outlet of 2' smooth-walled plastic pipe culvert, perched with water falling onto riprap.	6-8	Small Gravel Fine Organic		4-6	EF	2 CO 5 SC
1106	58.322965	-134.606752	Minnow trap soaked overnight ~40' upstream of culvert inlet.					MT	No Fish
1125	58.321871	-134.606129	Separate stream from nearest waypoint. Gradient rapidly increasing upstream; waterfall in view.	12-15	Cobble Boulder	Incised Channel Cut Banks	6-8	Not Fished	
1126	58.321515	-134.605715	20+ bedrock waterfall.	8-10	Cobble Boulder	Incised Channel LWD	20-25	Not Fished	



Figure 1.—Juvenile coho salmon captured at waypoint 1034.



Figure 2.—Downstream view of stream at waypoint 1034.



Figure 3.—Perched culvert outlet at waypoint 1034.

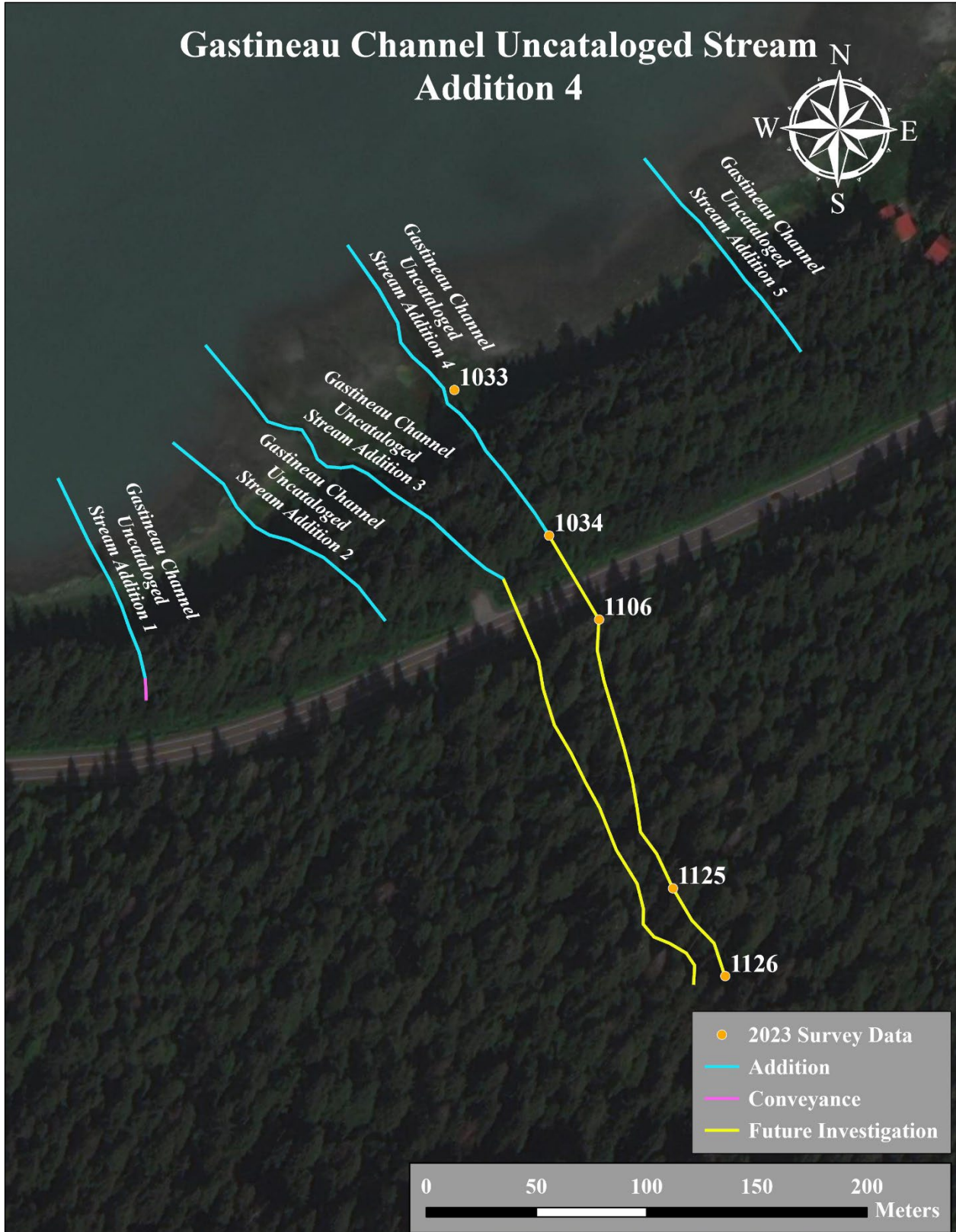


Figure 4.—Gastineau Channel uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Gastineau Channel Uncataloged Stream

ADDITION

Water body name:

Survey date: 10/19/2023; 10/31/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.324063 **Longitude:** -134.605194

Survey crew: FC

Lower Reach Latitude: 58.324841 **Longitude:** -134.606429

Findings: We surveyed this cataloged stream using a backpack electrofisher, baited minnow traps, and GPS. We captured juvenile coho salmon and sculpin. The stream flows down a hillside, through a culvert and over a small falls prior to emptying into the intertidal (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-524

Table 1.—Gastineau Channel uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream	Stream	Habitat Features	Gradient %	Sample Effort	Sample Results
				Width ft	Substrate				
1031	58.324067	-134.605215	1- to 2-yr CO capture in small side pool with considerably less flow than rest of stream, just downstream of 2-3' falls which may block juvenile fish passage. Unable to catch fish above falls at current high flows.	6-8	Small Gravel Large Gravel		4-6	EF	2 CO 6 SC
1032	58.324396	-134.605614	Waypoint for reference of stream outlet.						
1107	58.323541	-134.604738	Minnow trap soaked overnight at culvert inlet.					MT	No Fish



Figure 1.—Juvenile coho salmon captured at waypoint 1031.



Figure 2.—Downstream view of stream at waypoint 1031.



Figure 3.—Upstream view of stream with small falls at waypoint 1031.



Figure 4.—Gastineau Channel uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



Gastineau Channel Uncataloged Stream

ADDITION

Water body name:

Survey date: 10/24/2023

Quad: Juneau B-2

Species & Lifestage:

Upper Reach Latitude: 58.303782 **Longitude:** -134.449679

Survey crew: FC

Lower Reach Latitude: 58.305693 **Longitude:** -134.448037

Findings: We surveyed this cataloged stream using a backpack electrofisher, baited minnow traps, and GPS. We captured juvenile coho salmon, Dolly Varden, and sculpin. The stream falls out of a perched culvert into a small pool and through a channel dominated by boulder and cobble sediment prior to dropping into the intertidal (Table 1; Figures 1–3).

Recommendations: Add this uncataloged stream to the anadromous waters catalog for rearing coho salmon (Figure 4).

Nomination: 24-525

Table 1.—Gastineau Channel uncataloged stream survey data.

Waypoint	Latitude	Longitude	Notes	Stream	Stream	Habitat	Gradient	Sample	Sample
				Width ft	Substrate				
1059	58.303754	-134.449741	Resident fish capture (one DV ~6" long). Gradient increases upstream of here and channel becomes increasingly bedrock-dominated prior to leveling out somewhat near culvert outlet.	8-10	Cobble Small Gravel		10-12	EF	3 DV
1060	58.303768	-134.449659		8-10	Large Gravel Cobble		8-10	EF	2 CO 3 DV 3 SC
1067	58.303661	-134.449908	Minnow trap soaked overnight.					MT	No Fish
1068	58.303459	-134.450153	Minnow trap soaked overnight in large pool just downstream of culvert outlet.					MT	4 DV



Figure 1.—Perched culvert outlet and pool at waypoint 1068.



Figure 2.—Juvenile coho salmon captured at waypoint 1060.



Figure 3.—Upstream view of stream at waypoint 1060.



Figure 4.—Gastineau Channel uncataloged stream addition map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10690

CORRECTION

Water body name: Fish Creek

Survey date: 10/19/2023

Quad: Juneau B-2

Species & Lifestage: CHp,COpr,Kp,Pp,CTp,DVp,SHrs

Upper Reach Latitude: 58.319793 **Longitude:** -134.565299

Survey crew: FC

Lower Reach Latitude: 58.337027 **Longitude:** -134.608549

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-50-10690 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-528



Figure 1.—111-50-10690 route correction map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10670

CORRECTION

Water body name: Ninemile Creek

Survey date: 10/20/2023

Quad: Juneau B-2

Species & Lifestage: CHs,COpr,Pp,DVp

Upper Reach Latitude: 58.332304 **Longitude:** -134.565214

Survey crew: FC

Lower Reach Latitude: 58.343916 **Longitude:** -134.583814

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-50-10670 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-529

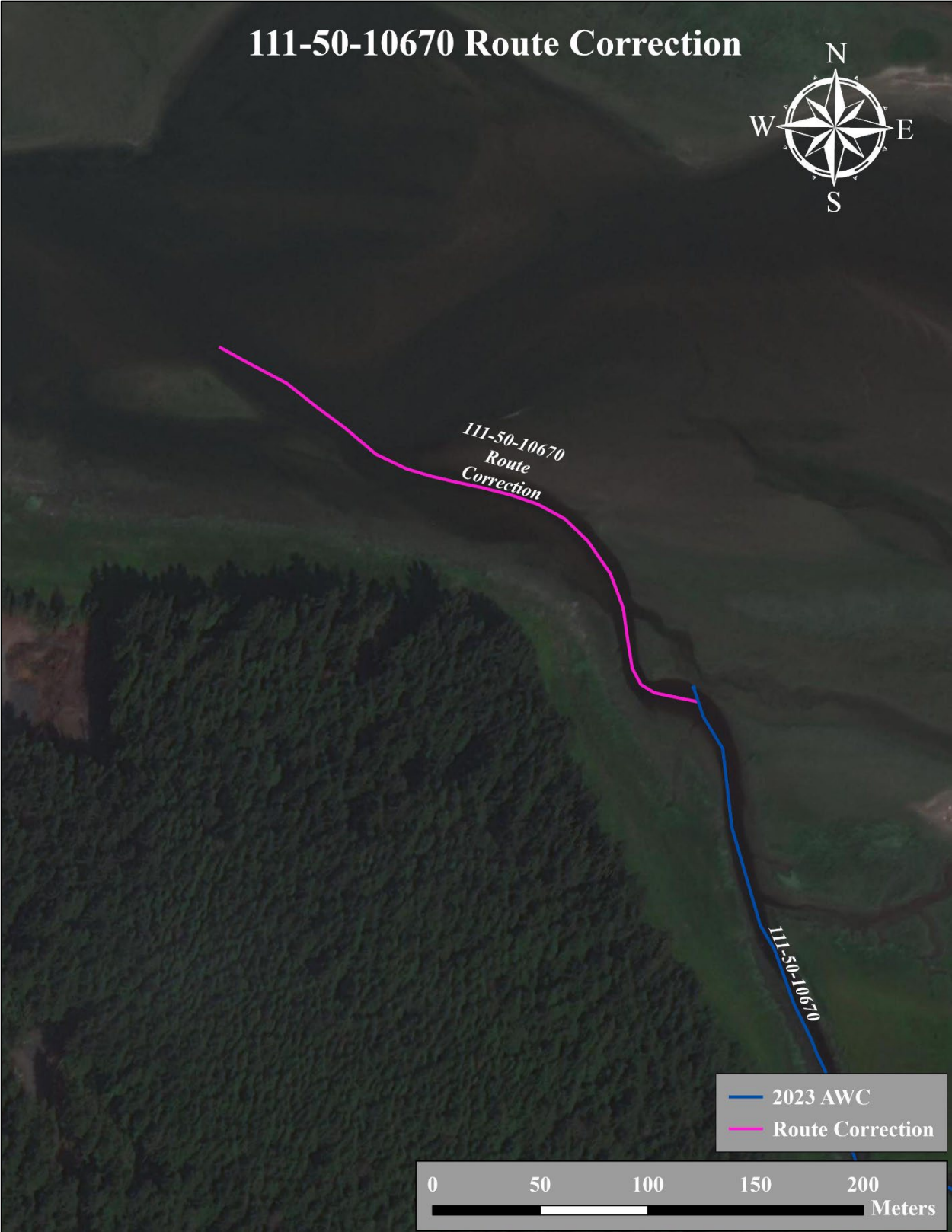


Figure 1.-111-50-10670 route correction map.

Alaska Department of Fish and Game

Habitat Section
Southeast Region



111-50-10500

CORRECTION

Water body name: Mendenhall River

Survey date: 10/26/2023

Quad: Juneau B-2

Species & Lifestage: CHp,COp,Kp,Pp,Sp,CTp,DVp,SHp

Upper Reach Latitude: 58.412721 **Longitude:** -134.577670

Survey crew: FC

Lower Reach Latitude: 58.339484 **Longitude:** -134.627903

Findings: We surveyed this cataloged stream and found that the stream path is incorrectly mapped. The lower reach of the stream should be extended for clarification, particularly in light of potential alternatives identified for eventual construction of a second bridge crossing between Juneau and Douglas.

Recommendations: Correct Stream No. 111-50-10500 in the anadromous waters catalog to reflect the field verified stream path. Please extend stream into the intertidal (Figure 1).

Nomination: 24-530



Figure 1.–111-50-10500 route correction map.