

Cataloging Anadromous Waters in Southeast Alaska

by

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and

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July 2021



Symbols and Abbreviations

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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mideye-to-fork	MEF
gram	g	all commonly accepted		mideye-to-tail fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs., AM, PM, etc.	standard length	SL
kilogram	kg			total length	TL
kilometer	km	all commonly accepted			
liter	L	professional titles	e.g., Dr., Ph.D., R.N., etc.	Mathematics, statistics	
meter	m			<i>all standard mathematical</i>	
milliliter	mL	at	@	<i>signs, symbols and</i>	
millimeter	mm	compass directions:		<i>abbreviations</i>	
		east	E	alternate hypothesis	H _A
Weights and measures (English)		north	N	base of natural logarithm	<i>e</i>
cubic feet per second	ft³/s	south	S	catch per unit effort	CPUE
foot	ft	west	W	coefficient of variation	CV
gallon	gal	copyright	©	common test statistics	(F, t, χ^2 , etc.)
inch	in	corporate suffixes:		confidence interval	CI
mile	mi	Company	Co.	correlation coefficient	
nautical mile	nmi	Corporation	Corp.	(multiple)	R
ounce	oz	Incorporated	Inc.	correlation coefficient	
pound	lb	Limited	Ltd.	(simple)	r
quart	qt	District of Columbia	D.C.	covariance	cov
yard	yd	et alii (and others)	et al.	degree (angular)	°
		et cetera (and so forth)	etc.	degrees of freedom	df
Time and temperature		exempli gratia		expected value	<i>E</i>
day	d	(for example)	e.g.	greater than	>
degrees Celsius	°C	Federal Information		greater than or equal to	≥
degrees Fahrenheit	°F	Code	FIC	harvest per unit effort	HPUE
degrees kelvin	K	id est (that is)	i.e.	less than	<
hour	h	latitude or longitude	lat. or long.	less than or equal to	≤
minute	min	monetary symbols		logarithm (natural)	ln
second	s	(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	log ₂ , etc.
Physics and chemistry		figures): first three		minute (angular)	'
all atomic symbols		letters	Jan,...,Dec	no data	ND
alternating current	AC	registered trademark	®	not significant	NS
ampere	A	trademark	™	null hypothesis	H ₀
calorie	cal	United States		percent	%
direct current	DC	(adjective)	U.S.	probability	P
hertz	Hz	United States of		probability of a type I error	
horsepower	hp	America (noun)	USA	(rejection of the null	
hydrogen ion activity	pH	U.S.C.	United States	hypothesis when true)	α
(negative log of)			Code	probability of a type II error	
parts per million	ppm	U.S. state	use two-letter	(acceptance of the null	
parts per thousand	ppt, ‰		abbreviations	hypothesis when false)	β
			(e.g., AK, WA)	second (angular)	"
volts	V			standard deviation	SD
watts	W			standard error	SE
				variance	
				population	Var
				sample	var

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by

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Cover: Habitat Biologist Dylan Krull electrofishing a small stream for presence of anadromous fish in Appleton Cove.

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EXECUTIVE SUMMARY

Water bodies documented in the anadromous waters catalog are afforded proper protections under the Anadromous Fish Act. The objective of this project was to identify salmon and steelhead habitats and corresponding life history phases in communities in Southeast Alaska and update the *Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes* and its associated atlas accordingly. Between May 2017 and October 2020, Alaska Department of Fish and Game Habitat Section staff completed 1,051 stream surveys in remote and urban areas, resulting in 524 nominations adding 82.78 miles and correcting 83.28 miles in the anadromous waters catalog. This technical report includes maps of areas surveyed and nominations submitted to the anadromous waters catalog. Geospatial survey data is archived by the Alaska Department of Fish and Game and has been submitted to the Alaska Sustainable Salmon Fund.

INTRODUCTION

Pacific salmon and steelhead habitats in Alaska have been protected since 1889, with territorial laws implemented in 1919. In 1962, the state adopted the territorial rules and passed the Anadromous Fish Act (Alaska Statute (AS) 16.05.871) to protect salmonid and other anadromous fish habitats. However, the law required the Alaska Department of Fish and Game (ADF&G) to specify anadromous water bodies before receiving protection. Initially, ADF&G did not compile a list specifying anadromous water bodies as the law required, and asserted authority to regulate all water bodies up to the tributary of a tributary of a water body known to support anadromous fish. Policy interpretation varied, occasionally providing protection to non-anadromous fish-bearing tributaries (Frank et al. 2000).

In 1980, the legislature directed ADF&G to specify water bodies that contain any life stage of anadromous fish and imposed a deadline. ADF&G was tasked to complete the list of water bodies important to anadromous fish, covering 1,717,856 km² of land and over 1.2 million km of streams, in two years. To complete the work ADF&G relied heavily on the experience of biologists throughout the state and aerial surveys. Due to the time constraints, nominations were not field verified; consequently, fish use data was generally incomplete—fundamental information for enforcement and compliance related to AS 16.05.871 (Frank et al. 2000). Also, mapping capabilities were limited to 1:63,360 scale paper maps, resulting in inaccurate depictions of stream courses and the omission of many tributaries.

As a result of the legislature direction and the survey effort, the department created the *Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes and its companion Atlas* (AWC; Giefer and Blossom 2020), which are the documents ADF&G uses to list the water bodies considered important to anadromous fish and affords ADF&G's authority under the Anadromous Fish Act. Fish habitat in undocumented water bodies is not afforded protection under state law, however fish passage is ensured by the Fishway Act (AS 16.05.841) regardless of a water body's listing in the AWC (Al Ott, Operations Manager, ADF&G Habitat Section, Fairbanks, personal communication). Historical nominations often only include a large-scale map with little or no fish observation information; few nominations contain an assessment on habitat quality and quantity, and many smaller streams and tributaries of larger streams remain uncataloged. Additionally, the AWC is used by federal, state, and local government agencies to identify fish and fish habitat during project reviews and law enforcement.

Since 2010, the ADF&G Southeast Region Habitat Section has been working to update the AWC through AKSSF projects 44545,^a 44711,^b 44208,^c 52007,^d and 54012^e. These projects addressed gaps in the AWC throughout Southeast Alaska by providing field surveys documenting fish habitat and use. Habitat Section staff added streams to the AWC, corrected inaccurately mapped streams listed in the AWC, and occasionally deleted streams from the AWC that did not provide anadromous fish habitat.

In addition to the Anadromous Fish Act, the Forest Resources and Practices Act (FRPA) governs forestry-associated activity on state- and privately-owned land and provides for the protection of streams bearing anadromous fish and high-value resident fish habitat when identified in the field, prior to timber harvest. These protections, in the form of streamside buffers, are applied immediately following capture of a single anadromous fish in a water body, up to a permanent migration barrier defined by FRPA. ADF&G, in coordination with the landowner and Alaska Department of Natural Resources Division of Forestry, typically makes anadromous determinations on unsurveyed streams immediately prior to harvest. Though this process results in useful information, surveying streams on timberlands in advance of proposed harvest provides more useful information for all entities involved, and the opportunity to survey streams multiple times if needed (Albrecht and Fritz 2019). For this project, Habitat Section staff surveyed timberlands on public and private land in Yakutat, Haines, Sitka, Petersburg, Wrangell, and Ketchikan.

^a Project 44545: Documenting Anadromous Waters N SEAK; Juneau, Haines and Sitka; 2010, 2011 and 2012.

^b Project 44711: Documenting Anadromous Waters S SEAK; Skagway, Petersburg, Wrangell and Ketchikan; 2012, 2013, and 2014.

^c Project 44208: Cataloging Anadromous Waters on Southeast Alaska Timber Lands; 2016, 2017, and 2018.

^d Project 52007: Cataloging Prince of Wales Anadromous Water Bodies; 2019, 2020, and 2021 (ongoing).

^e Project 54012: Surveying Anadromous Waters on Road Systems in Southeast Alaska; 2021, 2022, and 2023 (ongoing).

METHODS

We primarily used the *Guide to Direct Fieldwork for Cataloging Anadromous Water Bodies in Southeast Alaska* (Guide; ADF&G 2015 and 2018) to identify streams to survey. In areas that we were able to survey that were not included in the Guide, we used information provided in databases and geographic information system (GIS) modeling tools to plan and prioritize field surveys including existing stream survey data from the AWC, a U.S. Forest Service (USFS) stream class prediction layer^f, and the ADF&G Division of Sport Fish slope-elevation model (Figure 1; Table 1)^g.



Figure 1.—Slope-elevation model projected with stream class predictions layer in Port Snettisham, south of Juneau.

^f U.S. Forest Service stream class designations projected in ArcGIS are based on topographic and physical habitat metrics derived from digital elevation models and field verified corrections.

^g The slope-elevation model combines elevation data obtained through the Shuttle Radar Topography Mission flown by NASA in 2000. The model results are projected as polygons on the landscape highlighting combinations of slope and elevation that can be used to identify areas where salmon and steelhead presence is probable. Unpublished Regional Operational Plan obtained from Jeff Nichols, Alaska Department of Fish and Game, Division of Sport Fish, Douglas, AK, March 2004.

Table 1.—Anadromous habitat predictions based on elevation and slope, displayed using color in the map.

Elevation class (ft)	Slope class (%)			
	0-2	2-16	16-25	>25
0-200	1	1	2	3
200-400	1	1	2	3
400-1200	2	4	4	4
>1200	5	5	5	5

Note: (1) Probable anadromous habitat, (2) Probable anadromous habitat fringe, (3) Upper extent of anadromous habitat, (4) Improbable anadromous habitat, and (5) No anadromous habitat.

We used myriad methods of transportation (e.g., motor vehicles, watercrafts, and aircrafts) to access streams. Proceeding in an upstream direction on foot and pursuing each tributary encountered, we used a Smith-Root LR-24 backpack electrofisher and ¼ inch mesh Gee minnow traps baited with disinfected salmon eggs to sample flowing and ponded waters. We identified fish captured using Pollard et al. (1997) and released them into slow-moving water for recovery. In 2017 and 2018, we surveyed streams using recreational grade handheld GPS units to record stream courses and take waypoints, point-and-shoot cameras to take photos of the stream habitat and fish, and rite-in-the-rain notebooks to record notes on habitat features and fish observations. In 2019, we began collecting data with an iPad using ArcGIS Collector, which allowed us to forego the use of notebooks and cameras.^h We developed a fillable shapefile on ArcGIS Online which allowed us to download it on ArcGIS Collector to collect georeferenced field data including the observer(s), date, sample method, fish captured, stream width, stream depth, fish habitat features, barriers, stream substrate, and a blank notes portion. We also incorporated additional layers useful for offline reference, including high-resolution imagery, the most current version of the AWC, and the USFS stream shapefile.

Throughout the project, we used clinometers, tape measures, and rangefinder/hypsometer units to measure stream gradient, distance, and fall heights at suspected barriers to fish passage and at waypoints representative of the habitat within the stream reach. We ended stream surveys when we stopped catching anadromous fishⁱ, the stream seeped out of the ground, or encountered a fish passage obstruction (e.g., significant log jam, or a steep reach not considered a permanent fish barrier). We sampled above suspected obstructions to confirm the presence or absence of anadromous fish. We used FRPA criteria (Table 2) and professional judgement to determine fish passage barriers and sampled upstream of barriers if fish navigation was questionable. Crews ended some surveys prematurely before the furthest extent of fish habitat was reached due to time and logistical constraints.

^h We continued to use a handheld GPS to record a track, which we used to aid in drawing stream courses.

ⁱ For a minimum of 1,000 ft.

Table 2.—Anadromous fish block criteria (11 AAC 95.265(g) Table A).

Species Requirements (ft)					
Criterion	Coho	Steelhead	Sockeye	Chinook	Pink/Chum
Maximum Fall Height. A blockage may be presumed if fall height in feet exceeds:	11	13	10	11	a) 4 with deep jump pool b) 3 without pool
Pool depth. A blockage may be presumed if the unobstructed water column depth in feet within the pool is less than:	1.25 × jump height, except that no minimum pool depth exists for falls as follows: a) less than 4 in the case of coho and steelhead; and b) less than 2 in the case of other anadromous fish species.				
Steep channel. A blockage may be presumed at the upper end of the reach if channel steepness in feet is equal to or greater than the following without resting places for fish:	>225 at 12 percent gradient >100 at 16 percent gradient >50 at 20 percent gradient >25 at 24 percent gradient			>100 at 9% gradient	

Source: Alaska Department of Natural Resources Division of Forestry 2019.

Note: Fall heights greater than 3 ft are considered barriers to fish migration in streams with only rearing habitat available.

After field work, we transcribed notebook data on a Microsoft Excel spreadsheet and converted it to shapefiles to use in ArcMap and ArcGIS Pro. While using ArcGIS Collector, we synced^j shapefiles on ArcGIS Online and exported the shapefiles to Microsoft Excel. We used ArcMap or ArcGIS Pro to manage data, draw stream courses, and create maps. Using the field data, we developed the following classification system:

- Additions:
 - Streams or stream reaches not included in the AWC that contain anadromous fish.
- Route corrections:
 - Streams already listed in the AWC but were either inaccurately mapped or missing the lower extent portion of the channel to mean lower low tide.
- Conveyances:
 - Streams that do not provide fish habitat due to either a lack of habitat or the presence of a downstream fish barrier.^k
- Resident fish streams:
 - Streams or stream reaches in which only nonanadromous fish (e.g., sculpin, stickleback, Dolly Varden char^k, cutthroat trout^k, and rainbow trout^l) were captured. These streams are usually above an anadromous fish barrier or do not have potential of containing anadromous fish.

^j Completed daily to avoid data loss.

^k Some resident fish populations occur above anadromous fish barriers; these are denoted by Habitat Section as resident fish streams.

^l These fish may occur in anadromous and resident life history forms and cannot be used as the sole indication of anadromy.

- Future investigations:
 - Streams in which we did not capture anadromous fish, though may provide anadromous fish habitat due to gradient and stream size and warrant a resurvey when conditions permit.^{m,n}
- Polygons:
 - Areas where we captured or observed anadromous fish in ponds, flooded wetlands, lakes, or areas of unconfined channels that resulted in numerous side channels or distributaries that were difficult to map individually. Once adopted into the AWC, all waters in these polygons are considered anadromous (Giefer and Blossom 2020).
- Lakes:
 - An inland waterbody within a basin that has defined inlet and outlet where anadromous fish have been captured.
- Deletions:
 - Streams or stream reaches that are listed in the AWC that do not contain anadromous fish habitat.
- Braided channels:
 - Channels that split and rejoin the main channel. Braided channels of cataloged anadromous streams are generally not mapped in the AWC but are included by definition.

We created nominations incorporating location and current stream information, survey results, recommendations, nomination number, data tables, photos, and map(s). We submitted all nominations on the Alaska Department of Fish and Game website^o: <https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=noms.home>. Data that did not result in changes to the AWC are kept by the Douglas Habitat Section and are available upon request. The appendices to this report contain the stream numbers and temporary names prior to revisions to the AWC produced by this project, many numbers have been changed or assigned to new streams since this report was published.

^m Some of these streams contain resident fish.

ⁿ During 2018 and 2019, Southeast Alaska experienced a prolonged summer drought, resulting in many surveys ending prematurely due to dry stream beds or a depressed disbursement of fish due to low water conditions.

^o All nominations submitted during this project are available on the website.

RESULTS

Between May 2017 and October 2020, we completed field surveys of 1,051 water bodies in the Southeast Alaska communities of Yakutat, Haines, Juneau, Gustavus, Hoonah, Sitka, Petersburg, Wrangell, and Ketchikan, and the two remote areas of Appleton Cove and Kruzof Island (Table 3). Effort associated with a single drainage survey ranged from a few minutes to several days depending on fish habitat present, which ranged from conveyance high gradient seeps with no potential fish habitat^p to a complex low gradient system with multiple tributaries and ponds created by beaver activity. Furthermore, extreme dry or wet conditions resulted in the need to revisit streams or document a recommendation for future investigation prior to land management decisions. Project stream surveys resulted in 524 nominations^q submitted to the AWC resulting in 82.78 miles of stream added, 83.28 miles of streams corrected, 4.18 miles deleted,^r and 948.51 acres of polygons added to the AWC (Table 3).

^p About 150 of the 1,035 water bodies we surveyed were conveyance streams that had no potential fish habitat.

^q Some nominations included multiple revisions to the AWC.

^r The AWC contains streams that were either never field verified or inaccurately mapped with fish habitat occurring upstream of migration barriers. When encountered, we submitted documentation to reduce stream length to the field verified barrier.

Table 3.–Community stream survey metrics.

Overview Map	Streams Surveyed	Addition Nominations	Addition Distance	Route Correction Nominations	Route Correction Distance (mi)	Polygon Addition	Polygon Acerage	Deletion Nominations	Deletion Distance	Back Up Nominations	Total Nominations
Yakutat	89	41	20.84	12	17.10	1	6.52	5	3.02	1	59
Chilkoot	40	4	0.97	15	11.81	3	216.91	5	0.19	0	24
Haines	179	44	7.43	43	10.18	14	388.48	1	0.13	0	89
Juneau	217	85	11.67	31	11.54	9	128.67	0	0	1	117
South Juneau	64	27	5.76	13	16.39	2	207.6	0	0	0	40
Gustavus	14	3	2.34	4	3.19	0	0	0	0	0	7
Hoonah	12	5	1.49	0	0	0	0	0	0	0	5
Appleton Cove	13	4	0.67	1	0.58	0	0	0	0	0	5
Sitka	204	79	8.25	16	6.20	0	0.11	2	0.32	0	97
Kruzof Island	36	23	6.91	2	3.10	1	0.22	1	0.53	0	26
Petersburg	128	34	11.87	4	2.74	0	0	0	0	0	38
Wrangell	17	3	1.63	1	0.13	0	0	0	0	0	4
Ketchikan	38	12	2.94	2	0.32	0	0	0	0	0	14
Total	1051	364	82.78	144	83.28	30	948.51	14	4.18	1	525

DISCUSSION

We routinely captured juvenile coho salmon in streams as small as 6 inches wide with gradient less than 8% and generally under 200 ft elevation; most of these areas were identified on the slope-elevation models. In areas of low gradient (0–16%), defined by the slope-elevation model, we observed the USFS stream layer underestimated the number of fish-bearing streams—especially streams less than 6 ft wide. The USFS data also underestimated anadromous fish habitat in ponds due to beaver activity and other wetlands. In instances where we did not capture juvenile coho salmon in low gradient streams, we observed a lack of rearing habitat with no resting pools (i.e., consistent riffle habitat), fish passage barriers not defined by FRPA (e.g., beaver dams or log jams), no upstream spawning habitat, or the stream having subsurface flow due to weather conditions or porous stream substrate. We routinely captured Dolly Varden char and cutthroat trout in streams under 20% grade^s and above anadromous fish barriers, which may have persisted in those streams from higher sea levels in the region dating back to 10,000 years before present (Hastings 2005).

We determined steep channels were the most common form of barrier encountered; these features often required the application of best professional judgement to assess whether resting habitat was present in steep channel segments, as outlined in Table 2. We also encountered numerous waterfalls that exceeded anadromous fish block criteria identified in Table 2 and areas where the channel seeped out of the ground.

In 2017 and 2018, we collected stream survey data with handwritten notes and later transcribed data into Microsoft Excel, an inherently time-consuming process. In 2019 and 2020, we used ArcGIS Collector for survey data collection, greatly improving data consistency and efficiency, as the need for transcribing data was eliminated; this transition allowed staff to spend more time collecting data in the field. Additionally, the application of ArcGIS Collector provided us with more geospatial references in the field including imagery, historical data, and other reference shapefiles, which allowed us to plan and conduct stream surveys more efficiently. Compared to efforts in 2017 and 2018, we submitted 30% more nominations to the AWC in 2019 and 2020.

In the areas we surveyed, we observed a lack of completeness and accuracy of the AWC. While the AWC typically depicts the main channel of large streams in a watershed, tributaries are often poorly identified or not listed. Within nonrural communities, we found that streams were cataloged more often than not; but lacked data on fish species and life stages. In remote areas and rural communities, streams often lack the same data, are inaccurately depicted geographically, or are extended above a noticeable anadromous fish barrier (some streams were cataloged up steep mountainsides to elevations over 2,000 ft). This project provided the funding necessary to support surveys in remote areas.

Prior to surveying Slocum Inlet, a remote area about 17 miles south of Juneau, the only cataloged stream in the area was Slocum Creek^t and one tributary with no supporting data. After one day of

^s And up to about 1,400 ft elevation in some cases.

^t Stream No. 111-32-10990; cataloged for chum and pink salmon.

surveying, we identified 6 additional tributaries within the estuary^u supporting coho salmon, corrected the route of Slocum Creek to extend into the estuary and follow the field verified stream course, and added coho salmon to the species list (Figure 2). Based on aerial imagery and the slope habitat probability mapper, we believe there are an additional 8–15 anadromous streams within the watershed.

Before surveying Taku Harbor, the only cataloged stream in the area was Taku Lake Creek^v. The cove is a heavily used recreational area with historic development, including a small town formed around a cannery. After one day of surveying, we identified 8 anadromous streams supporting coho salmon and corrected the route of Taku Lake Creek to reflect the field verified stream course (Figure 3). We estimate an additional 10 streams and stream reaches^w that may contain anadromous fish throughout the unsurveyed portion of the watershed.

Near Sitka, Katlian Bay was heavily logged in the 1960s and contains a relic road system that continues to be used for recreation. Currently, the Alaska Department of Transportation and Public Facilities is constructing a road to access the valley. Prior to our survey efforts in the area, 18 streams were listed in the AWC—12 of which had no supporting data. During our surveys, we added 24 streams to the AWC, and corrected seven stream courses (Figure 4). All our survey efforts were within the first 4 miles of the valley and we estimate an additional 54 streams and stream reaches that may contain anadromous fish throughout the rest of the valley. We plan to complete additional surveys in 2021 and 2022 under AKSSF project 54012.

We successfully completed project objectives by identifying salmon and steelhead habitats and corresponding life history phases (e.g., spawning, rearing, migration) in communities, and updating the AWC accordingly. Though some of the areas identified were previously surveyed, the maximum extent of anadromous fish habitat was not documented in some of the streams for various reasons—e.g., uncondusive streamflow conditions, omitted life history phases of anadromous species due to run timing, temporary obstructions to fish passage to upper extent due to flow-dependent fish passage barriers, and time constraints. Further work is needed to accurately identify the maximum extent of fish habitat.

^u Each of these streams have an independent freshwater source.

^v Stream No. 111-31-10050; cataloged for coho and sockeye salmon, Dolly Varden char, and cutthroat and steelhead trout.

^w Of cataloged streams.

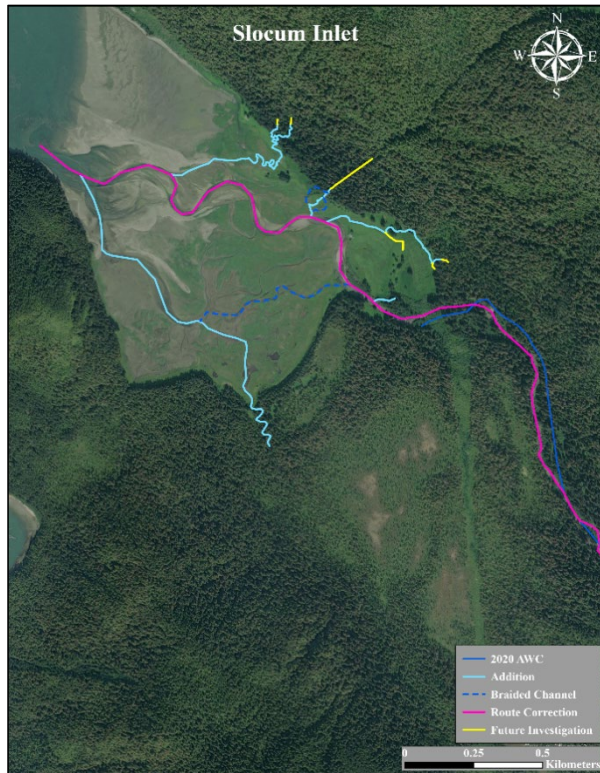


Figure 2.—Slocum Inlet survey results.

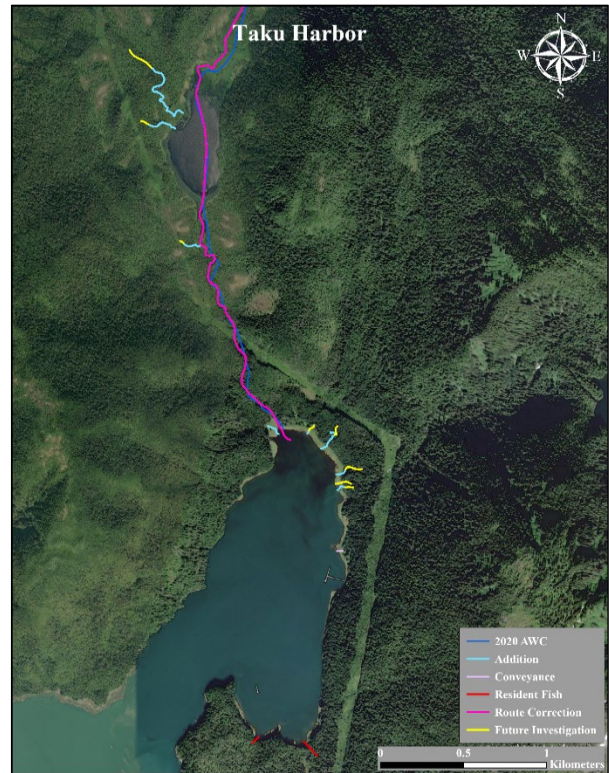


Figure 3.—Taku Harbor survey results.

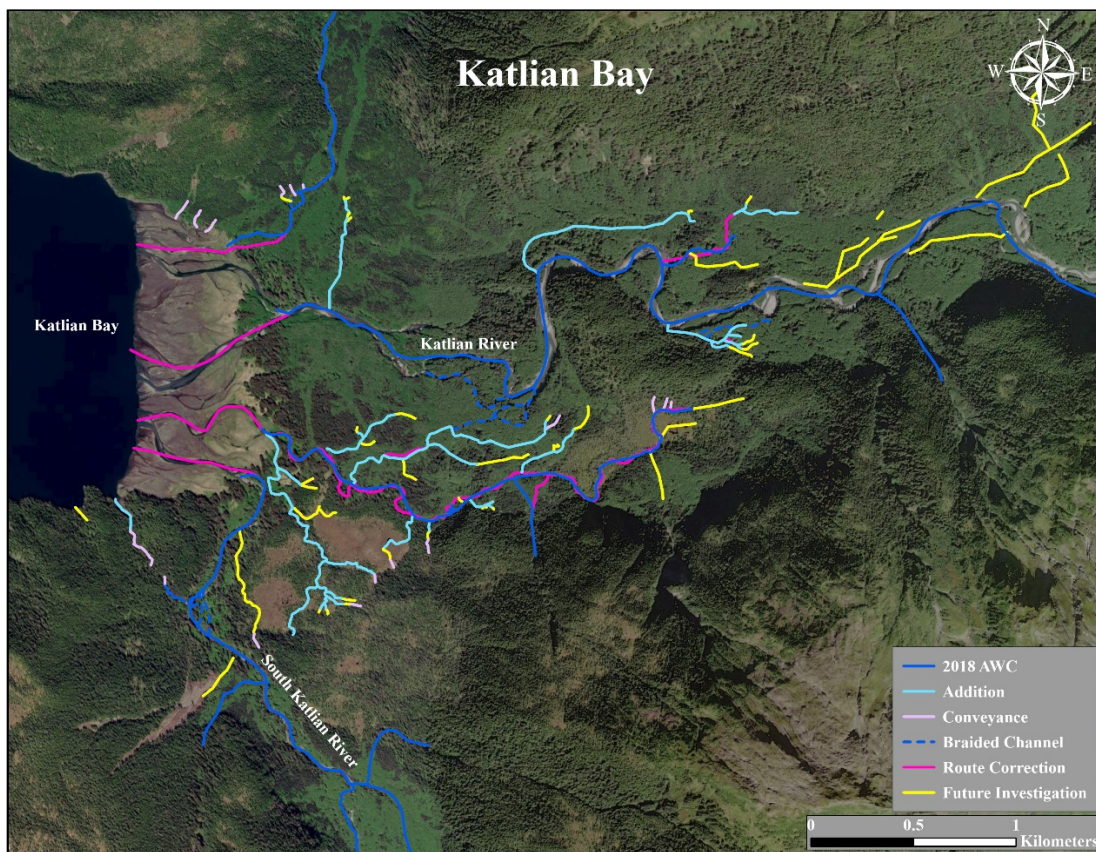
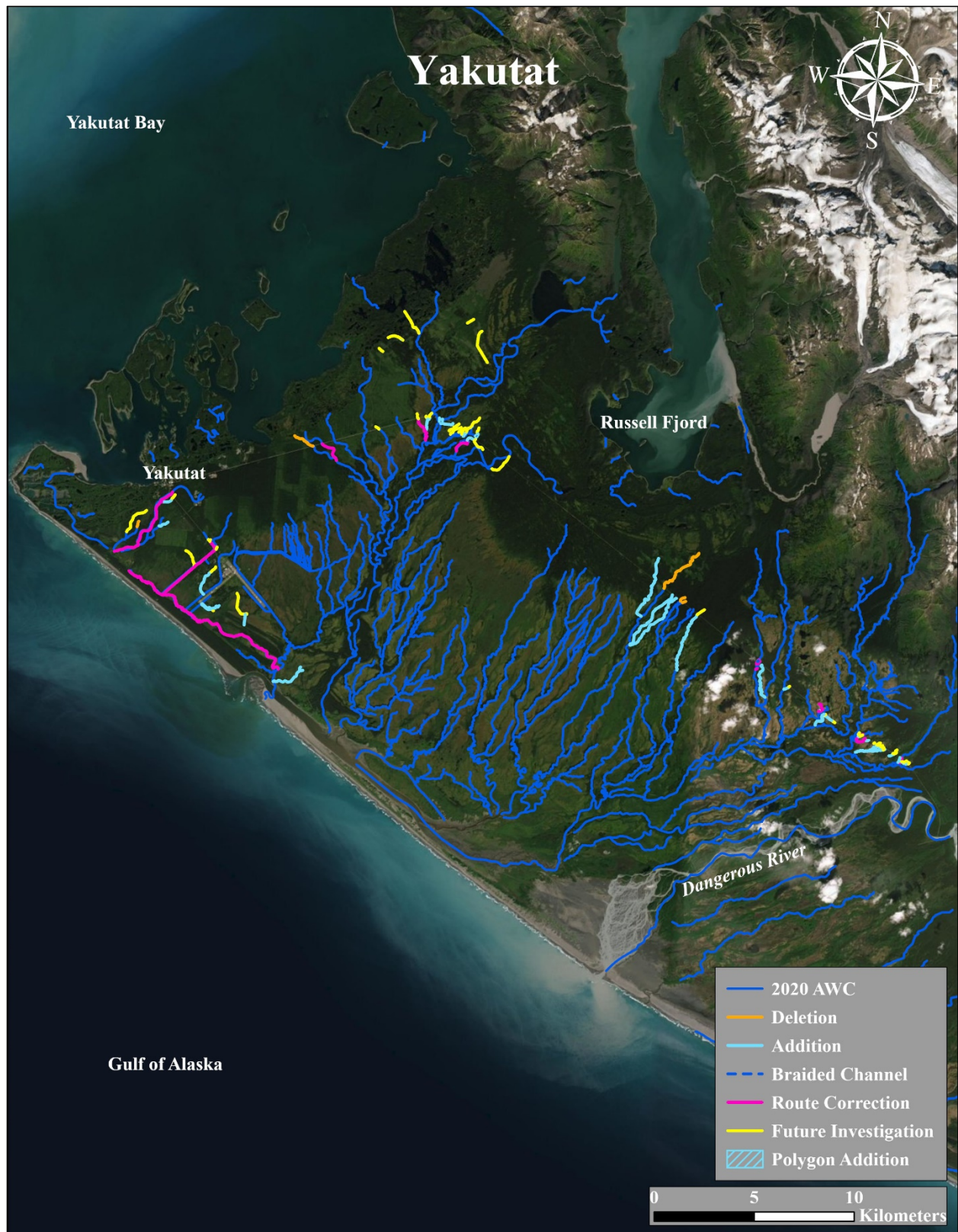


Figure 4.—Katlian Bay survey results.

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APPENDIX A: YAKUTAT



Appendix A.1.—Yakutat AWC revisions.

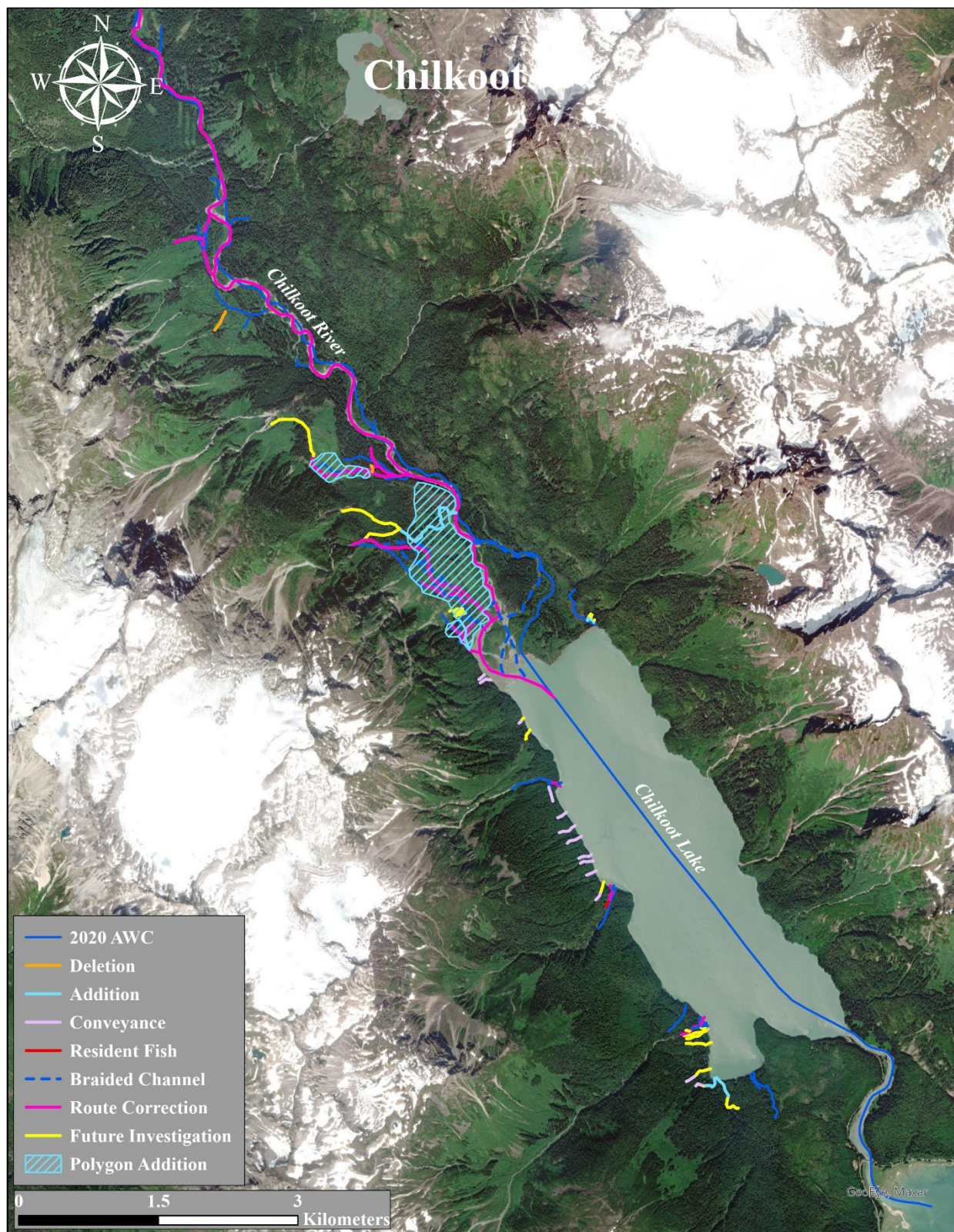
Appendix A.2.–Yakutat AWC revisions.

Stream Number	Nomination Number	Type
182-70-10100 Tributary	20-736	Addition
182-70-10100-2017-3011-4011	20-737	Route Correction
182-70-10100-2017-3011-4011-5041	20-738	Deletion
182-70-10100-2020-3021	20-739	Addition
182-70-10100-2022 Polygon	20-740	Addition
182-70-10100-2022 Tributary	20-741	Addition
182-70-10100-2023	20-742	Route Correction
182-70-10100-2023 Tributary 1	20-743	Addition
182-70-10100-2023 Tributary 2	20-744	Addition
182-70-10100-2024 Tributary 1	20-745	Addition
182-70-10100-2024 Tributary 2	20-746	Addition
182-70-11600	20-747	Deletion
182-70-11600 Tributary 1	20-748	Addition
182-70-11600 Tributary 2	20-749	Addition
182-70-11600 Tributary 3	20-750	Addition
182-70-12000 Tributary 1	20-751	Addition
182-70-12000 Tributary 2	20-752	Addition
182-70-12000 Tributary 3	20-753	Addition
182-70-12000 Tributary 4	20-754	Addition
182-70-12000 Tributary 5	20-755	Addition
182-70-12000 Tributary 6	20-756	Addition
182-70-12000 Tributary 7	20-757	Addition
182-70-12000-2005	20-758	Addition
182-70-12000-2005-3005	20-759	Deletion
182-70-12000-2005-3005-4011	20-760	Deletion
182-70-12000-2013 Tributary 1	20-761	Addition
182-70-12000-2013 Tributary 2	20-762	Addition
182-70-12000-2013-3005 Tributary	20-763	Addition
182-70-12000-2013-3005-4013	20-765	Route Correction
182-70-12000-2013-3005-4013-5014	20-766	Route Correction
182-70-12000-2013-3009 Tributary	20-767	Addition
182-70-12000-2013-3017-4008	20-768	Route Correction
182-70-12000-2013-3017-4008 Tributary 1	20-769	Addition
182-70-12000-2013-3017-4008 Tributary 2	20-770	Addition
182-70-12000-2020	20-771	Route Correction
182-70-12000-2020 Tributary 1	20-772	Addition
182-70-12000-2020 Tributary 2	20-773	Addition
182-70-12000-2020 Tributary 3	20-774	Addition
182-70-12000-2024	20-775	Route Correction

Appendix A.2.–Continued.

Stream Number	Nomination Number	Type
182-70-12000-2024 Tributary	20-776	Addition
182-70-12000-2026	20-777	Route Correction
182-70-12000-2026 Tributary 1	20-778	Addition
182-70-12000-2026 Tributary 2	20-779	Addition
182-80-10100 Tributary	20-780	Addition
182-80-10100 Tributary	21-623	Addition
182-80-10100-2005	21-624	Route Correction
182-80-10100-2005 Tributary	20-781	Addition
182-80-10100-2005 Tributary	21-625	Addition
182-80-10100-2005-3010 Tributary 1	21-626	Addition
182-80-10100-2005-3010 Tributary 2	21-627	Addition
182-80-10100-2005-3012 Tributary	20-782	Addition
182-80-10100-2005-3012 Tributary	21-630	Addition
182-80-10100-2005-3014	21-632	Route Correction
182-80-10100-2005-3014-4015	21-636	Route Correction
182-80-10100-2005-3015-4022	20-783	Route Correction
182-80-10100-2005-3014-4022	21-637	Back Up
182-80-10100-2005-3015-4022 Tributary	20-784	Addition
182-80-10100-2005-3015-4030	20-785	Deletion
182-80-10100-2005-3015-5010 Tributary	21-631	Addition

APPENDIX B: CHILKOOT VALLEY

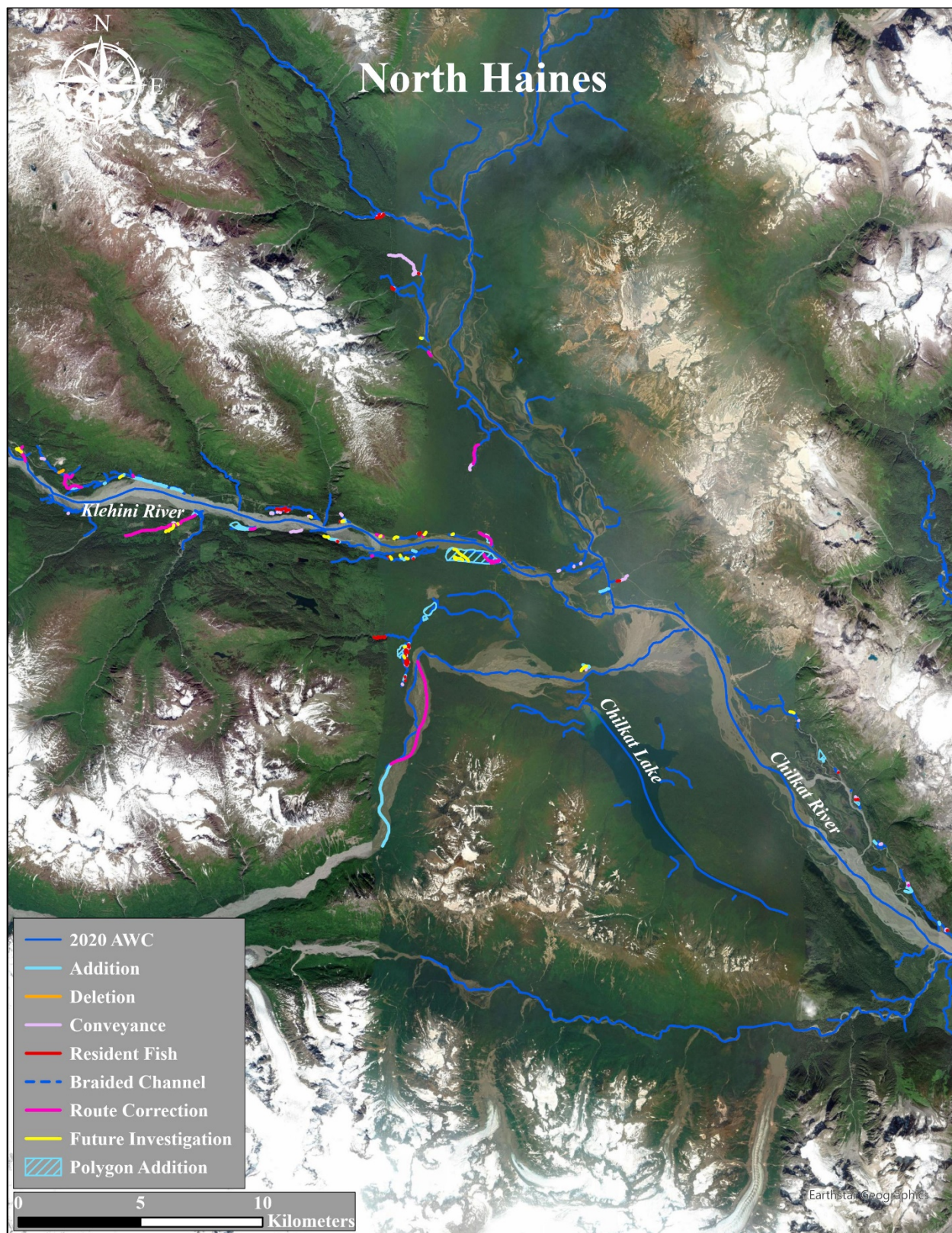


Appendix B.1.—Chilkooot Valley AWC revisions.

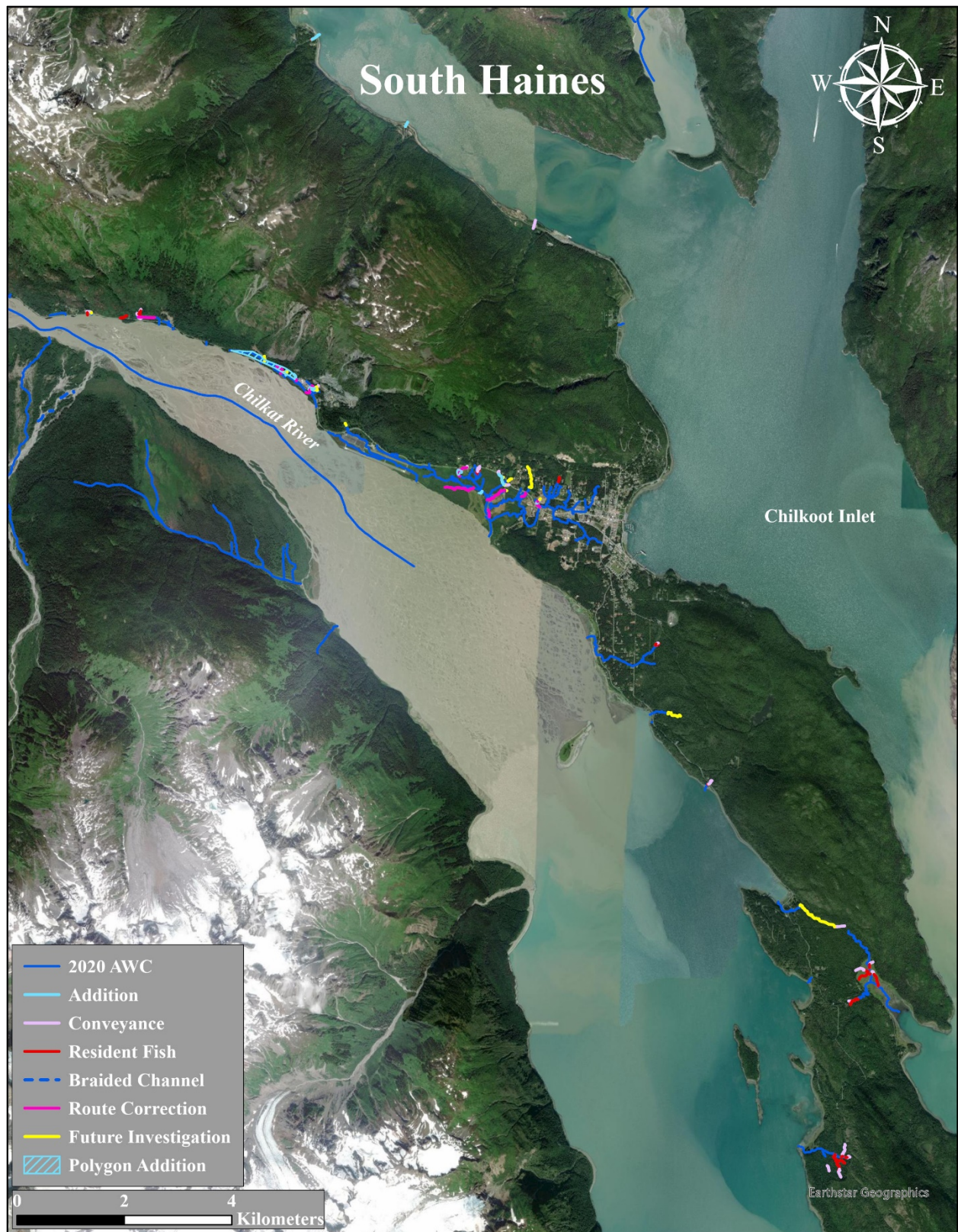
Appendix B.2.—Chilkoot Valley AWC revisions.

Stream Number	Nomination Number	Type
115-33-10200	21-515	Route Correction
115-33-10200 Tributary 1	20-732	Addition
115-33-10200 Tributary 2	20-733	Addition
115-33-10200 Tributary 3	21-516	Addition
115-33-10200 Tributary 4	21-517	Addition
115-33-10200-0010	21-518	Route Correction
115-33-10200-2003	21-519	Route Correction
115-33-10200-2005	20-734	Route Correction
115-33-10200-2007	20-735	Route Correction
115-33-10200-2009	21-520	Route Correction
115-33-10200-2009-3008	21-521	Route Correction
115-33-10200-2011	21-522	Route Correction
115-33-10200-2011-3007	21-523	Route Correction
115-33-10200-2011-3007-4004	21-524	Deletion
115-33-10200-2011-3007-4004-0010	21-525	Deletion
115-33-10200-2011-3007-4005	21-526	Deletion
115-33-10200-2013	21-527	Route Correction
115-33-10200-2013-3001	21-528	Deletion
115-33-10200-2015-3013	21-529	Deletion
115-33-10200-2017	21-530	Route Correction
115-33-10200-2017-3005	21-531	Route Correction
115-33-10200-2911	21-532	Route Correction
115-33-10200-2911-3015	21-533	Route Correction
115-33-10200-2915	21-534	Route Correction

APPENDIX C: HAINES



Appendix C.1.–North Haines AWC revisions



Appendix C.2.–South Haines AWC revisions.

Appendix C.3.–Haines AWC revisions.

Stream Number	Nomination Number	Type
115-32-10250 Tributary	21-507	Addition
115-32-10250-2004	20-709	Route Correction
115-32-10250-2004 Tributary 1	20-710	Addition
115-32-10250-2004 Tributary 2	20-711	Addition
115-32-10250-2004 Tributary 3	20-712	Addition
115-32-10250-2006	17-607	Route Correction
115-32-10250-2006 Addition	20-713	Addition
115-32-10250-2006-3003	20-714	Addition
115-32-10250-2008-3004	20-715	Route Correction
115-32-10250-2017	20-716	Route Correction
115-32-10250-2018-3018	20-717	Addition
115-32-10250-2020	18-523	Route Correction
115-32-10250-2022	18-522	Route Correction
115-32-10250-2028-3020	18-524	Route Correction
115-32-10250-2028-3020 Tributary 1	18-525	Addition
115-32-10250-2028-3020 Tributary 2	18-526	Addition
115-32-10250-2030 Tributary	17-594	Addition
115-32-10250-2030-3002	18-527	Route Correction
115-32-10250-2040	17-608	Route Correction
115-32-10250-2042 Tributary	19-728	Addition
115-32-10250-2044 Polygon	18-509	Addition
115-32-10250-2044-3020	18-510	Route Correction
115-32-10250-2044-3020-4021	18-511	Route Correction
115-32-10250-2046	17-609	Route Correction
115-32-10250-2052	20-718	Addition
115-32-10250-2067 Tributary	17-610	Addition
115-32-10250-2067	21-556	Addition
115-32-10250-2067-3000	17-611	Route Correction
115-32-10250-2067-3008-4007 Polygon	18-582	Addition
115-32-10250-2067-3008-4007-5015 Tributary	18-584	Addition
115-32-10250-2077 Tributary	18-568	Addition
115-32-10250-2077-3015	20-719	Route Correction
115-32-10250-2077-3017	20-720	Route Correction
115-32-10250-2077-3022	20-721	Route Correction
115-32-10250-2077-3038	18-528	Route Correction
115-32-10250-2077-3052	18-505	Route Correction
115-32-10250-2077-3052 Tributary 1	18-506	Addition
115-32-10250-2077-3052 Tributary 2	18-507	Addition
115-32-10250-2077-3052 Tributary 3	18-508	Addition

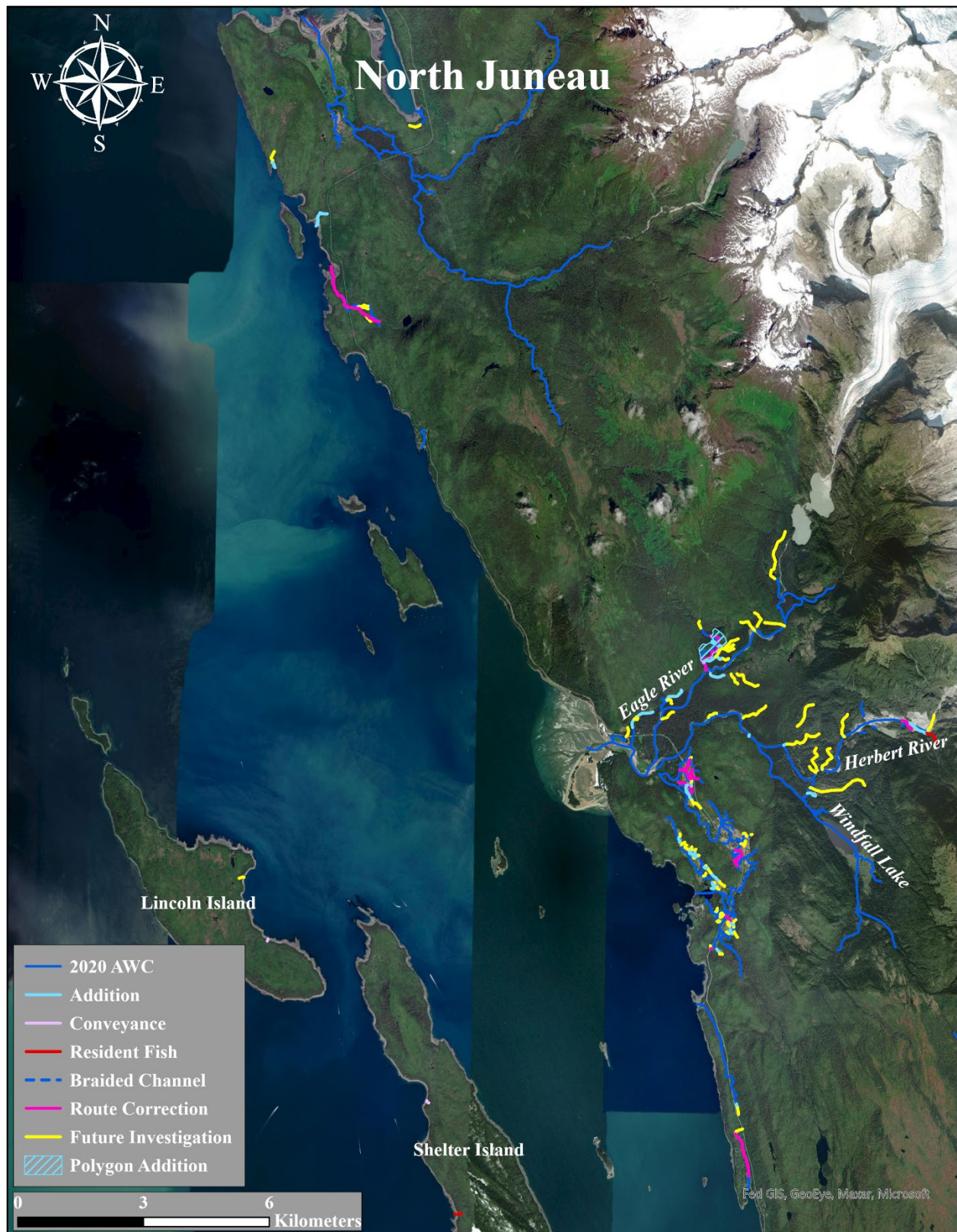
Appendix C.3.—Continued.

Stream Number	Nomination Number	Type
115-32-10250-2077-3061 Tributary 2	18-579	Addition
115-32-10250-2077-3061 Tributary 3	18-581	Addition
115-32-10250-2077-3061-4002	17-595	Route Correction
115-32-10250-2077-3066 Tributary 1	18-563	Addition
115-32-10250-2077-3066 Tributary 2	18-565	Addition
115-32-10250-2077-3067	18-574	Route Correction
115-32-10250-2077-3067 Tributary	18-575	Addition
115-32-10250-2077-3082-4025	18-569	Route Correction
115-32-10250-2077-3082-4025 Tributary	18-572	Addition
115-32-10250-2077-3082-4025-5019	18-570	Route Correction
115-32-10250-2077-3093	20-652	Route Correction
115-32-10250-2077-3113	19-730	Route Correction
115-32-10250-2077-3113 Tributary 1	20-722	Addition
115-32-10250-2077-3113 Tributary 2	20-723	Addition
115-32-10250-2077-3136	20-724	Route Correction
115-32-10250-2077-3136 Tributary 1	18-583	Addition
115-32-10250-2077-3136 Tributary 2	20-792	Addition
115-32-10250-2077-3136 Tributary 3	20-793	Addition
115-32-10250-2077-3136 Tributary 4	20-794	Addition
115-32-10250-2077-3136-4004	20-796	Route Correction
115-32-10250-2077-3136-4053-5008	21-677	Deletion
115-32-10250-2077-3180	20-725	Route Correction
115-32-10250-2081-3031	18-529	Route Correction
115-32-10250-2081-3061-4005	18-530	Route Correction
115-32-10250-2123	21-557	Route Correction
115-32-10250-2133	21-558	Route Correction
115-32-10250-2137 Tributary	21-559	Addition
115-32-10250-2137-3023	18-573	Route Correction
115-32-10260-2005	18-513	Route Correction
115-32-10300-2002-3011	20-726	Route Correction
115-32-10300-2002-3011 Tributary	20-727	Addition
115-32-10300-2006	20-728	Route Correction
115-32-10300-2006-3010	18-521	Back Up
115-32-10300-2006-3010	20-729	Route Correction
115-32-10300-2008	20-730	Route Correction
115-32-10300-2010 Tributary	17-593	Addition
115-32-10300-2011	17-613	Route Correction

Appendix C.3.—Continued.

Stream Number	Nomination Number	Type
115-32-10300-2011	17-613	Route Correction
115-32-10300-2011-0010	17-614	Route Correction
115-32-10300-2014 Polygon	18-519	Addition
115-32-10300-2014-3006 Tributary 1	18-531	Addition
115-32-10300-2014-3006 Tributary 2	18-532	Addition
115-32-10300-2017	20-731	Route Correction
115-33-10198	17-585	Addition
115-33-10200 Tributary 1	20-732	Addition
115-33-10200 Tributary 2	20-733	Addition
115-33-10200-2005	20-734	Route Correction
115-33-10200-2007	20-735	Route Correction
115-34-10210	18-520	Route Correction

APPENDIX D: JUNEAU



Appendix D.1.–North Juneau AWC revisions.



Appendix D.2.—Juneau AWC revisions.

Appendix D.3.—Juneau AWC revisions.

Stream Number	Nomination Number	Type
111-40-10070-2009-3016	21-560	Addition
111-40-10070-2020	19-508	Addition
111-40-10600	21-561	Route Correction
111-40-10910	20-677	Addition
111-40-10920	21-562	Route Correction
111-40-10940	21-563	Route Correction
111-50-10070 Tributary 1	20-1035	Addition
111-50-10070-2004	19-507	Addition
111-50-10070-2004 Tributary 1	21-565	Addition
111-50-10070-2004 Tributary 2 and Polygon	21-568	Addition
111-50-10070-2004-3002	21-566	Route Correction
111-50-10070-2004-3002-4007-5004	20-964	Route Correction
111-50-10070-2004-3002-4007-5004 Tributary 1	20-1036	Addition
111-50-10070-2004-3002-4007-5004 Tributary 2	20-1037	Addition
111-50-10070-2004-3002-4007-5010	20-1040	Route Correction
111-50-10070-2004-3002-4007-5010-6003	20-1041	Route Correction
111-50-10070-2004-3002-4007-5010-6009	21-503	Route Correction
111-50-10070-2005	21-567	Addition
111-50-10070-2007	20-965	Addition
111-50-10070-2007 Tributary	20-966	Addition
111-50-10070-2009	20-967	Route Correction
111-50-10070-2009 Tributary 1	20-968	Addition
111-50-10070-2009 Tributary 2	20-976	Addition
111-50-10070-2009 Tributary 3	20-977	Addition
111-50-10070-2009 Tributary 4	20-981	Addition
111-50-10070-2009 Tributary 5	21-569	Addition
111-50-10070-2009 Tributary 6	21-570	Addition
111-50-10100 Tributary 1	21-564	Addition
111-50-10100 Tributary 2	21-571	Addition
111-50-10100-0010 Tributary 1	20-1042	Addition
111-50-10100-0010 Tributary 2	20-1043	Addition
111-50-10100-2034	21-502	Addition
111-50-10100-2035 Tributary	21-572	Addition
111-50-10100-2035-3010	21-574	Addition
111-50-10100-2035-3010 Tributary	21-573	Addition
111-50-10100-2035-3302	21-601	Addition
111-50-10100-2035-3302 Tributary 1	21-599	Addition
111-50-10100-2035-3302 Tributary 2	21-594	Addition
111-50-10100-2078-3021	21-505	Addition

Appendix D.3.—Continued.

Stream Number	Nomination Number	Type
111-50-10100-2078-3021 Tributary	20-506	Addition
111-50-10100-2085	20-958	Addition
111-50-10100-2085 Tributary 1	20-959	Addition
111-50-10100-2085 Tributary 2	20-960	Addition
111-50-10100-2085 Tributary 3	20-961	Addition
111-50-10100-2085 Tributary 4	21-514	Addition
111-50-10100-2085 Tributary 5	20-957	Addition
111-50-10100-2102	21-593	Addition
111-50-10100-2102-3011	21-592	Addition
111-50-10140	21-587	Addition
111-50-10200	18-512	Route Correction
111-50-10420-2013 Tributary	20-532	Addition
111-50-10420-2013-3003	20-533	Route Correction
111-50-10420-2013-3003-4001	20-534	Route Correction
111-50-10500 Tributary 1	21-683	Addition
111-50-10500 Tributary 2	20-982	Addition
111-50-10500-2002	21-586	Route Correction
111-50-10500-2003 Polygon 1	20-892	Addition
111-50-10500-2003 Polygon 2	20-893	Addition
111-50-10500-2003	20-983	Route Correction
111-50-10500-2003	21-546	Route Correction
111-50-10500-2003 Tributary 1	17-586	Addition
111-50-10500-2003 Tributary 2	20-895	Addition
111-50-10500-2003 Tributary 3	20-984	Addition
111-50-10500-2003 Tributary 4	17-591	Addition
111-50-10500-2003 Tributary 5	20-896	Addition
111-50-10500-2003 Tributary 6	20-894	Addition
111-50-10500-2003 Tributary 7	20-897	Addition
111-50-10500-2003 Tributary 8	21-547	Addition
111-50-10500-2003 Tributary 9	20-898	Addition
111-50-10500-2003-3006 Polygon 1	20-992	Addition
111-50-10500-2003-3006 Polygon 2	20-994	Addition
111-50-10500-2003-3006 Tributary 1	20-995	Addition
111-50-10500-2003-3006 Tributary 2	20-996	Addition
111-50-10500-2003-3009-4021	20-990	Addition
111-50-10500-2003-3053 Tributary	20-524	Addition
111-50-10500-2003-3053-4003	20-525	Route Correction
111-50-10500-2003-3053-4003 Tributary	20-523	Addition
111-50-10500-2003-3053-4009	20-526	Route Correction

Appendix D.3.—Continued.

Stream Number	Nomination Number	Type
111-50-10500-2003-3053-4013	20-527	Route Correction
111-50-10500-2003-3054	20-900	Route Correction
111-50-10500-2003-3054	21-548	Route Correction
111-50-10500-2003-3054-4014	20-901	Route Correction
111-50-10500-2003-3054-4014	21-549	Route Correction
111-50-10500-2003-3054-4014 Tributary 1	20-902	Addition
111-50-10500-2003-3054-4014 Tributary 2	20-903	Addition
111-50-10500-2003-3060	21-550	Route Correction
111-50-10500-2003-3060-4019	21-551	Route Correction
111-50-10500-2003-3061	20-528	Route Correction
111-50-10620 Tributary 1	20-997	Addition
111-50-10625	20-1004	Route Correction
111-50-10625 Tributary 1	20-1020	Addition
111-50-10625 Tributary 2	20-1022	Addition
111-50-10625 Tributary 3	20-1023	Addition
111-50-10625 Tributary 4	20-1024	Addition
111-50-10630	20-1025	Route Correction
111-50-10660 Tributary	21-583	Addition
111-50-10670	21-513	Route Correction
111-50-10690 Tributary 1	20-904	Addition
111-50-10690 Tributary 2	20-905	Addition
111-50-10746 Tributary	21-580	Addition
111-50-10750	20-906	Route Correction
111-50-10750 Tributary	20-907	Addition
111-50-10750-2027-3030	20-908	Addition
111-50-10750-2027-3031	20-909	Addition
111-50-10750-2035-3035	20-889	Addition
111-50-10750-2054	20-910	Route Correction
111-50-10850	21-555	Route Correction
115-10-10230 Tributary	21-579	Addition
115-10-10250	21-577	Back Up
Campers Cove Uncataloged Stream	20-798	Addition
Gastineau Channel Uncataloged Stream 1	21-508	Addition
Gastineau Channel Uncataloged Stream 2	21-509	Addition
Gastineau Channel Uncataloged Stream 3	21-510	Addition
Gastineau Channel Uncataloged Stream 4	21-511	Addition
Gastineau Channel Uncataloged Stream 5	21-576	Addition
North Douglas Uncataloged Stream	21-575	Addition
North Gastineau Channel Uncataloged Stream	21-512	Addition

APPENDIX E: SOUTH OF JUNEAU



Appendix E.1.—South of Juneau AWC revisions.

Appendix E.2.—South of Juneau AWC revisions.

Stream Number	Nomination Number	Type
111-31-10050	21-578	Route Correction
111-31-10050 Tributary 1	21-581	Addition
111-31-10050 Tributary 2	21-582	Addition
111-31-10050 Tributary 3	21-584	Addition
111-32-10990	21-595	Route Correction
111-32-10990 Tributary 1	21-596	Addition
111-32-10990 Tributary 2	21-597	Addition
111-32-10990 Tributary 3	21-598	Addition
111-32-10990 Tributary 4	21-600	Addition
111-32-10990 Tributary 5	21-602	Addition
111-32-10990 Tributary 6	21-603	Addition
111-32-10990 Tributary 7	21-604	Addition
111-33-10080	21-622	Route Correction
111-34-10200	21-628	Route Correction
111-34-10220	21-629	Route Correction
111-34-10240	21-633	Route Correction
111-34-10400	21-634	Route Correction
111-34-10410	21-635	Route Correction
111-35-10170	21-638	Route Correction
111-35-10320	21-639	Route Correction
111-35-10320 Tributary 1	21-640	Addition
111-35-10320 Tributary 2	21-641	Addition
111-35-10340	21-642	Route Correction
111-35-10360	21-643	Route Correction
111-35-10360	21-644	Addition
111-35-10420	21-645	Route Correction
Snettisham Uncataloged Stream 1	21-646	Addition
Snettisham Uncataloged Stream 2	21-647	Addition
Snettisham Uncataloged Stream 3	21-648	Addition
Snettisham Uncataloged Stream 4	21-649	Addition
Snettisham Uncataloged Stream 5	21-650	Addition
Snettisham Uncataloged Stream 6	21-653	Addition
Snettisham Uncataloged Stream 7	21-654	Addition
South Gastineau Uncataloged Stream 1	21-681	Addition
South Gastineau Uncataloged Stream 2	21-682	Addition

Appendix E.2.–Continued

Stream Number	Nomination Number	Type
Taku Harbor Uncataloged Stream 1	21-585	Addition
Taku Harbor Uncataloged Stream 2	21-588	Addition
Taku Harbor Uncataloged Stream 3	21-589	Addition
Taku Harbor Uncataloged Stream 4	21-590	Addition
Taku Harbor Uncataloged Stream 5	21-591	Addition

APPENDIX F: GUSTAVUS



Appendix F.1.—Gustavus AWC revisions.

Appendix F.2.—Gustavus AWC revisions.

Stream Number	Nomination Number	Type
112-50-10250-2011	20-797	Addition
112-50-10260	21-655	Addition
112-50-10300-2003 Tributary 1	20-803	Addition
112-50-10300-2003 Tributary 2	20-804	Addition
112-50-10300-2003 Tributary 3	20-805	Addition

APPENDIX G: HOONAH

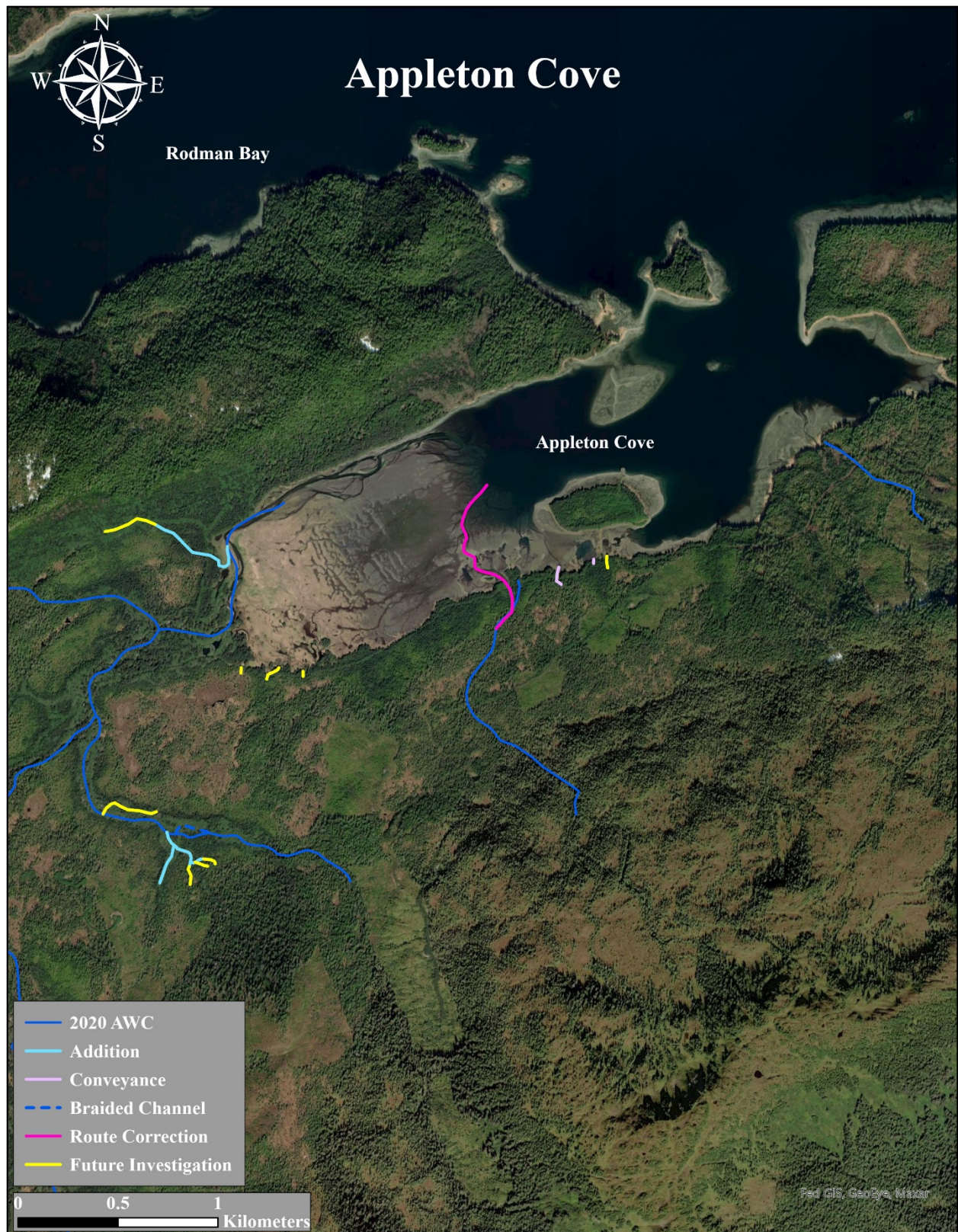


Appendix G.1.—Hoonah AWC revisions.

Appendix G.2.–Hoonah AWC revisions.

Stream Number	Nomination Number	Type
112-50-10250-2011	20-797	Addition
112-50-10260	21-655	Addition
112-50-10300-2003 Tributary 1	20-803	Addition
112-50-10300-2003 Tributary 2	20-804	Addition
112-50-10300-2003 Tributary 3	20-805	Addition

APPENDIX H: APPLETON COVE

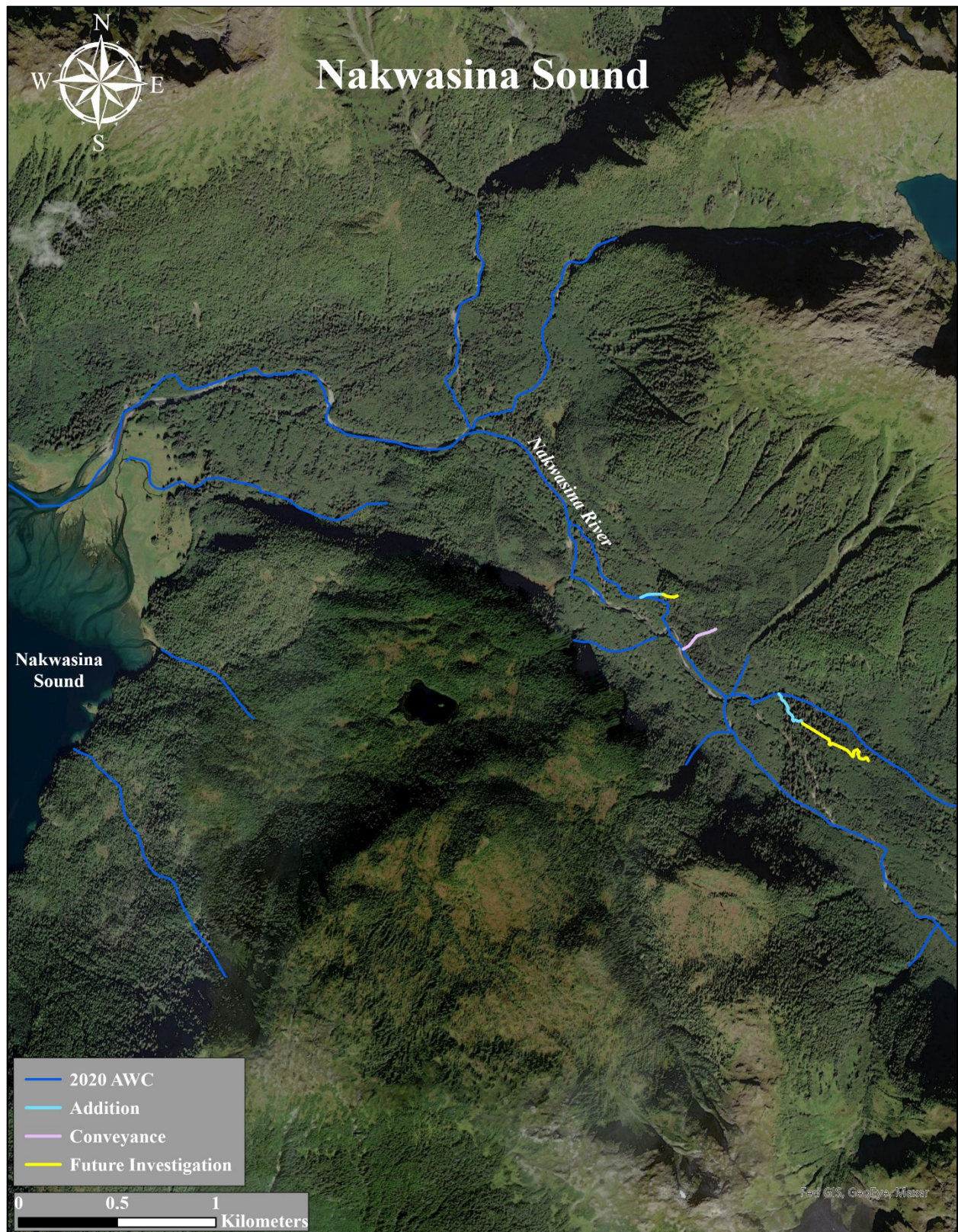


Appendix H.1.—Appleton Cove AWC revisions.

Appendix H.2.–Appleton Cove AWC revisions.

Stream Number	Nomination Number	Type
113-54-10040	20-859	Route Correction
113-54-10050 Tributary	20-860	Addition
113-54-10050-2001-3003 Tributary 1	20-861	Addition
113-54-10050-2001-3003 Tributary 2	20-862	Addition
113-54-10050-2001-3003 Tributary 3	20-863	Addition

APPENDIX I: SITKA



Appendix I.1.–Nakwasina Sound AWC revisions.



Appendix I.2.—Sitka AWC revisions.

Appendix I.3.–Sitka AWC revisions.

Stream Number	Nomination Number	Type
113-41-10148 Tributary	20-806	Addition
113-41-10150 Tributary 1	20-807	Addition
113-41-10150 Tributary 2	20-808	Addition
113-41-10150 Tributary 3	20-809	Addition
113-41-10150-2003	21-611	Route Correction
113-41-10150-2005	20-810	Addition
113-41-10150-2005	21-612	Addition
113-41-10150-2005 Tributary 1	21-613	Addition
113-41-10150-2005 Tributary 2	21-614	Addition
113-41-10150-2005-3021	21-615	Route Correction
113-41-10150-2008 Tributary 1	20-811	Addition
113-41-10150-2008 Tributary 2	20-812	Addition
113-41-10150-2008 Tributary 3	20-813	Addition
113-41-10150-2008 Tributary 4	20-814	Addition
113-41-10150-2010	20-815	Addition
113-41-10150-2013-3003	20-816	Addition
113-41-10150-2013-3003 Tributary	20-817	Addition
113-41-10150-2017-3002	20-818	Addition
113-41-10150-2017-3002-4017	20-819	Addition
113-41-10150-2017-3002-4017 Tributary	20-827	Addition
113-41-10153	21-678	Route Correction
113-41-10160 Tributary	20-820	Addition
113-41-10170-2008 Tributary	20-821	Addition
113-41-10170-2008-3012	21-616	Addition
113-41-10170-2008-3016 Tributary	20-822	Addition
113-41-10170-2008-3017	20-828	Addition
113-41-10170-2008-3020	20-823	Route Correction
113-41-10170-2008-3020 Tributary	20-824	Addition
113-41-10185	21-617	Addition
113-41-10190 Tributary	20-825	Addition
113-41-10190-2011 Tributary	20-826	Addition
113-41-10190-2013	20-829	Addition
113-41-10190-2013 Tributary	20-830	Addition
113-41-10190-2017	21-618	Addition
113-41-10190-2019-3015	20-831	Addition
113-41-10190-2019-3025 Tributary	20-838	Addition
113-41-10190-2030 Tributary 1	20-833	Addition
113-41-10190-2030 Tributary 2	20-834	Addition
113-41-10190-2030 Tributary 3	20-835	Addition

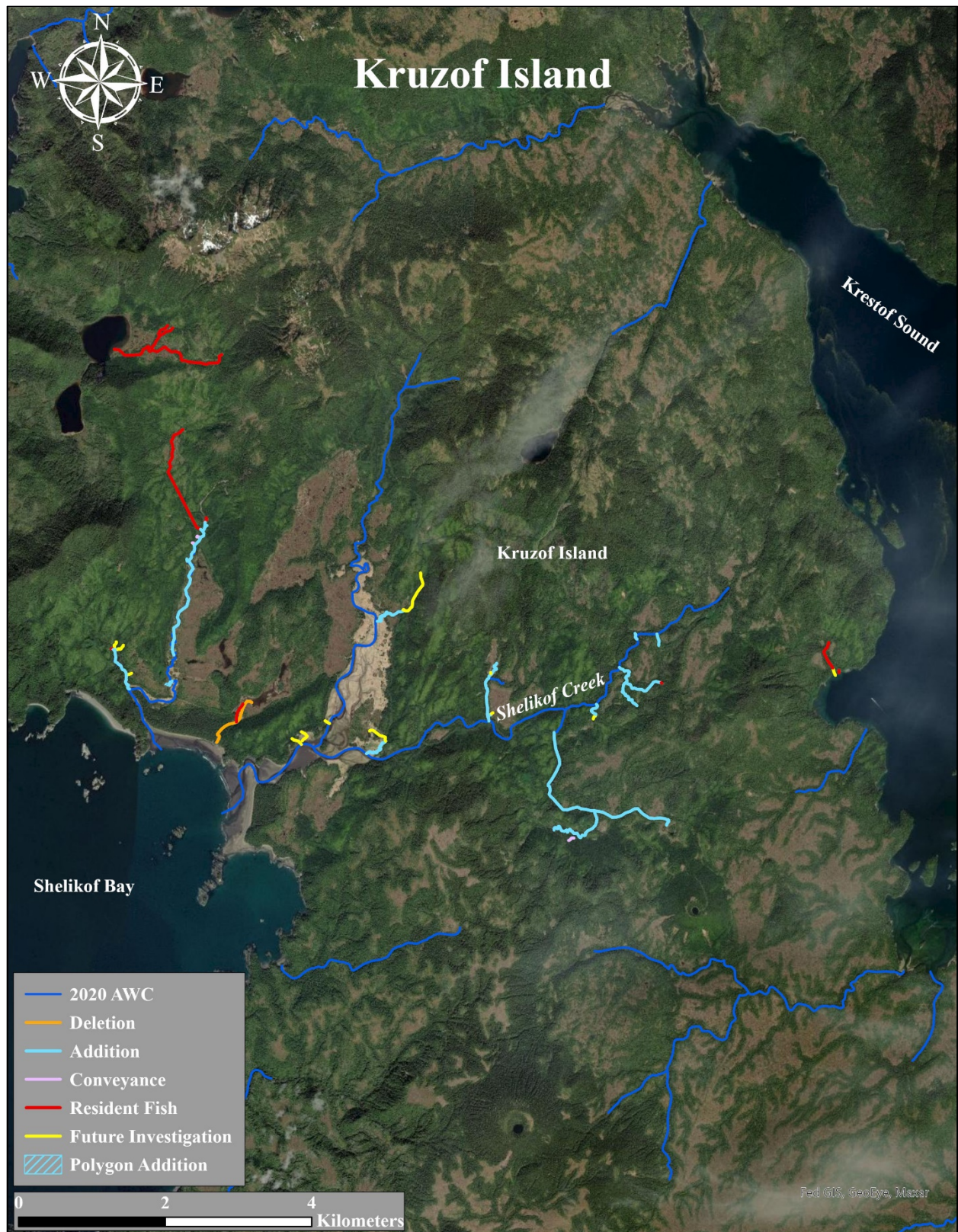
Appendix I.3.—Continued.

Stream Number	Nomination Number	Type
113-41-10190-2030 Tributary 4	20-836	Addition
113-41-10190-2030-3012	20-837	Addition
113-41-10190-2030-3012	20-839	Addition
113-41-10190-2033	20-840	Addition
113-41-10190-2035-3006	20-841	Addition
113-41-10190-2038	20-842	Addition
113-41-10190-2038 Tributary 1	20-843	Addition
113-41-10190-2038 Tributary 2	20-844	Addition
113-41-10190-2038 Tributary 3	20-845	Addition
113-41-10190-2038-3007	20-846	Addition
113-41-10250	21-621	Deletion
113-41-10280	20-847	Route Correction
113-41-10290	21-620	Deletion
113-43-10010 Tributary	20-848	Addition
113-43-10010-2013 Tributary	20-849	Addition
113-44-10020	18-700	Route Correction
113-44-10030	18-701	Route Correction
113-44-10030 Tributary 1	18-697	Addition
113-44-10030 Tributary 2	18-698	Addition
113-44-10030 Tributary 3	19-732	Addition
113-44-10030 Tributary 4	20-850	Addition
113-44-10030-2001	20-851	Addition
113-44-10030-2004 Tributary	20-978	Addition
113-44-10030-2004-3010	20-979	Route Correction
113-44-10030-2004-3010 Tributary	20-985	Addition
113-44-10030-2005	18-699	Addition
113-44-10030-2005	20-852	Route Correction
113-44-10030-2005	20-853	Addition
113-44-10030-2005 Tributary	20-986	Addition
113-44-10040	18-702	Route Correction
113-44-10040	20-980	Route Correction
113-44-10040 Tributary	20-987	Addition
113-44-10040 Tributary 1	18-688	Addition
113-44-10040 Tributary 2	18-689	Addition
113-44-10040 Tributary 3	18-690	Addition
113-44-10040 Tributary 4	18-691	Addition
113-44-10040 Tributary 5	18-692	Addition
113-44-10040 Tributary 6	18-693	Addition
113-44-10040 Tributary 7	18-694	Addition

Appendix I.3.—Continued.

Stream Number	Nomination Number	Type
113-44-10040 Tributary 8	18-695	Addition
113-44-10040 Tributary 9	18-696	Addition
113-44-10040-2002 Tributary	20-1026	Addition
113-44-10040-2002-3031 Tributary 1	20-1027	Addition
113-44-10040-2002-3031 Tributary 2	20-1028	Addition
113-44-10040-2002-3031 Tributary 3	20-1029	Addition
113-44-10040-2003	20-1030	Addition
113-44-10040-2003	20-854	Addition
113-44-10040-2003 Tributary	20-855	Addition
113-44-10040-2005-3020	20-1031	Addition
113-44-10040-2008	20-1032	Addition
113-44-10040-2008 Tributary	20-1033	Addition
113-44-10040-2010	20-1034	Route Correction
113-44-10050	18-703	Route Correction
113-44-10054	19-731	Addition
113-44-10070	19-729	Route Correction
113-44-10080	20-856	Route Correction
113-44-10090	20-857	Route Correction
Katlion Bay Uncataloged Stream	20-864	Addition
Silver Bay Uncataloged Stream	21-619	Addition

APPENDIX J: KRUZOF ISLAND



Appendix J.1.—Kruzof Island AWC revisions.

Appendix J.2.—Kruzof Island AWC revisions.

Stream Number	Nomination Number	Type
113-45-10030	19-659	Addition
113-45-10030 Tributary 1	19-654	Addition
113-45-10030 Tributary 2	19-660	Addition
113-45-10030 Tributary 3	19-661	Addition
113-45-10030 Tributary 4	19-662	Addition
113-45-10030 Tributary 5	19-663	Addition
113-45-10030 Tributary 6	19-664	Addition
113-45-10030 Tributary-Tributary 1	19-657	Addition
113-45-10030 Tributary-Tributary 2	19-658	Addition
113-45-10040	19-668	Deletion
113-45-10050	19-669	Route Correction
113-45-10050	19-670	Addition
113-45-10060	19-681	Route Correction
113-45-10060 Tributary	20-858	Addition
113-45-10060 Tributary 1	19-672	Addition
113-45-10060 Tributary 2	19-673	Addition
113-45-10060 Tributary 3	19-674	Addition
113-45-10060 Tributary 4	19-675	Addition
113-45-10060 Tributary 5	19-676	Addition
113-45-10060 Tributary 6	19-677	Addition
113-45-10060 Tributary 7	19-678	Addition
113-45-10060 Tributary 8	19-679	Addition
113-45-10060 Tributary 9	19-680	Addition
113-45-10060-2010	19-665	Addition
113-45-10060-2010 Tributary 1	19-666	Addition
113-45-10060-2010 Tributary 2	19-667	Addition

APPENDIX K: PETERSBURG



Appendix K.1.—North Petersburg AWC revisions.

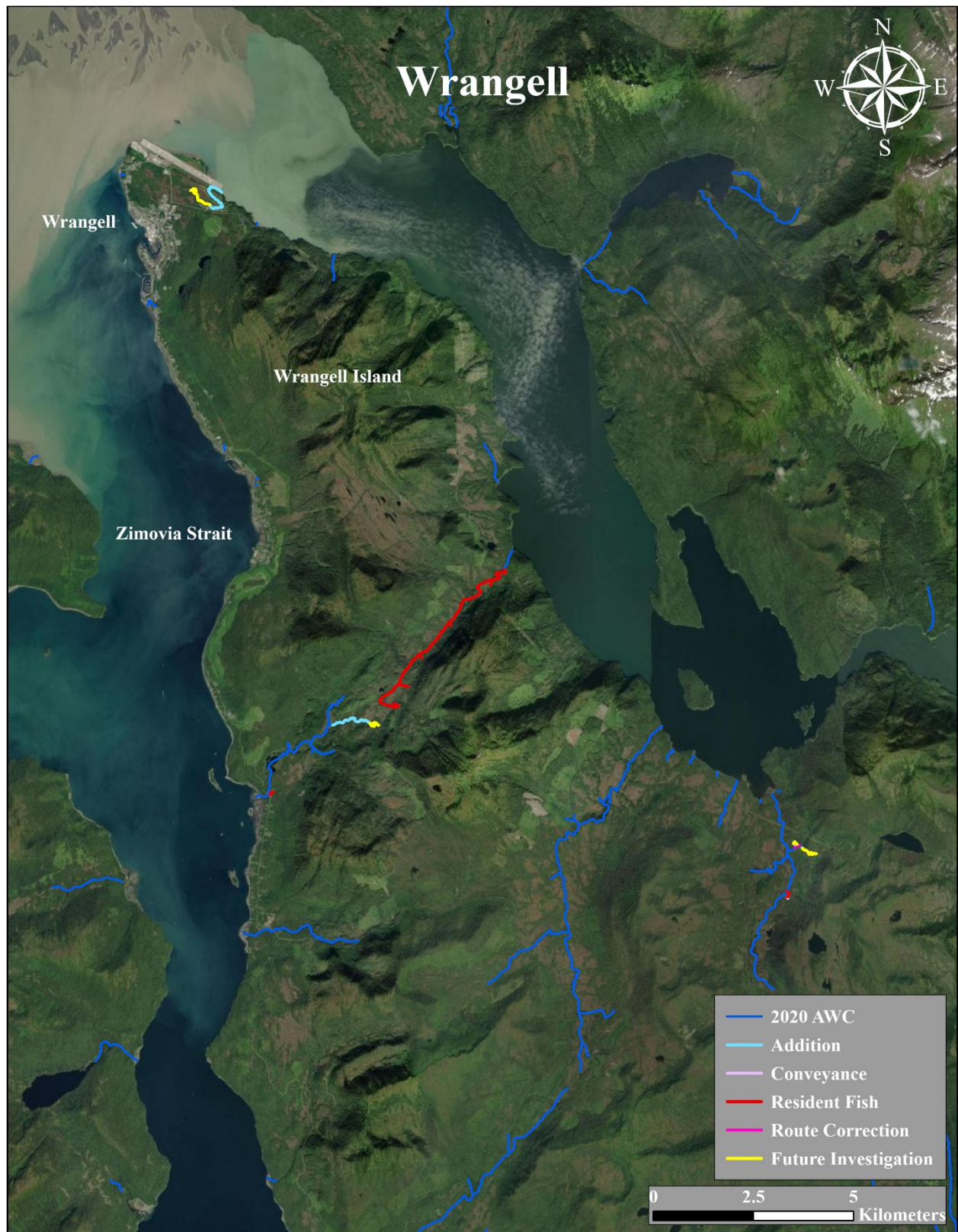


Appendix K.2.—South Petersburg AWC revisions.

Appendix K.3.–Petersburg AWC revisions.

Stream Number	Nomination Number	Type
106-44-10090-2008	20-687	Addition
106-44-10195-2020	20-688	Addition
106-44-10240-2015-3026	20-689	Addition
108-30-10400	21-606	Addition
108-30-10400 Tributary 1	21-607	Addition
108-30-10400 Tributary 2	21-608	Addition
108-30-10400 Tributary 3	21-609	Addition
108-30-10400-2010	21-610	Route Correction
108-40-10500-2096	20-690	Addition
108-40-10500-2100-3002	20-691	Addition
108-40-10500-2100-3002	20-694	Route Correction
108-40-10500-2103-3004-4010	20-703	Route Correction
108-40-10500-2103-3004-4014	20-695	Addition
108-40-10500-2103-3004-4020	20-696	Route Correction
108-40-10550 Tributary	20-697	Addition
108-40-10630	20-698	Addition
108-40-10632	20-700	Addition
108-60-10051	20-701	Addition
109-42-10100-2023 Tributary	20-531	Addition
109-42-10100-2023-3019	20-530	Addition
109-42-10100-2023-3019 Tributary	20-529	Addition
110-11-10030 Tributary 1	20-633	Addition
110-11-10030 Tributary 2	20-634	Addition
110-11-10030 Tributary 3	20-635	Addition
110-11-10030 Tributary 4	20-636	Addition
110-11-10030 Tributary 5	20-637	Addition
110-16-10020	20-638	Addition
110-16-10020 Tributary 1	20-639	Addition
110-16-10020 Tributary 2	20-640	Addition
110-16-10020 Tributary 3	20-641	Addition
110-16-10020 Tributary 4	20-642	Addition
110-16-10030	20-643	Addition
110-16-10030 Tributary	20-644	Addition
110-16-10040	20-645	Addition
110-16-10040 Tributary 1	20-646	Addition
110-16-10040 Tributary 2	20-647	Addition
110-16-10060	20-648	Addition
Petersburg Uncataloged Stream	20-702	Addition

APPENDIX L: WRANGELL

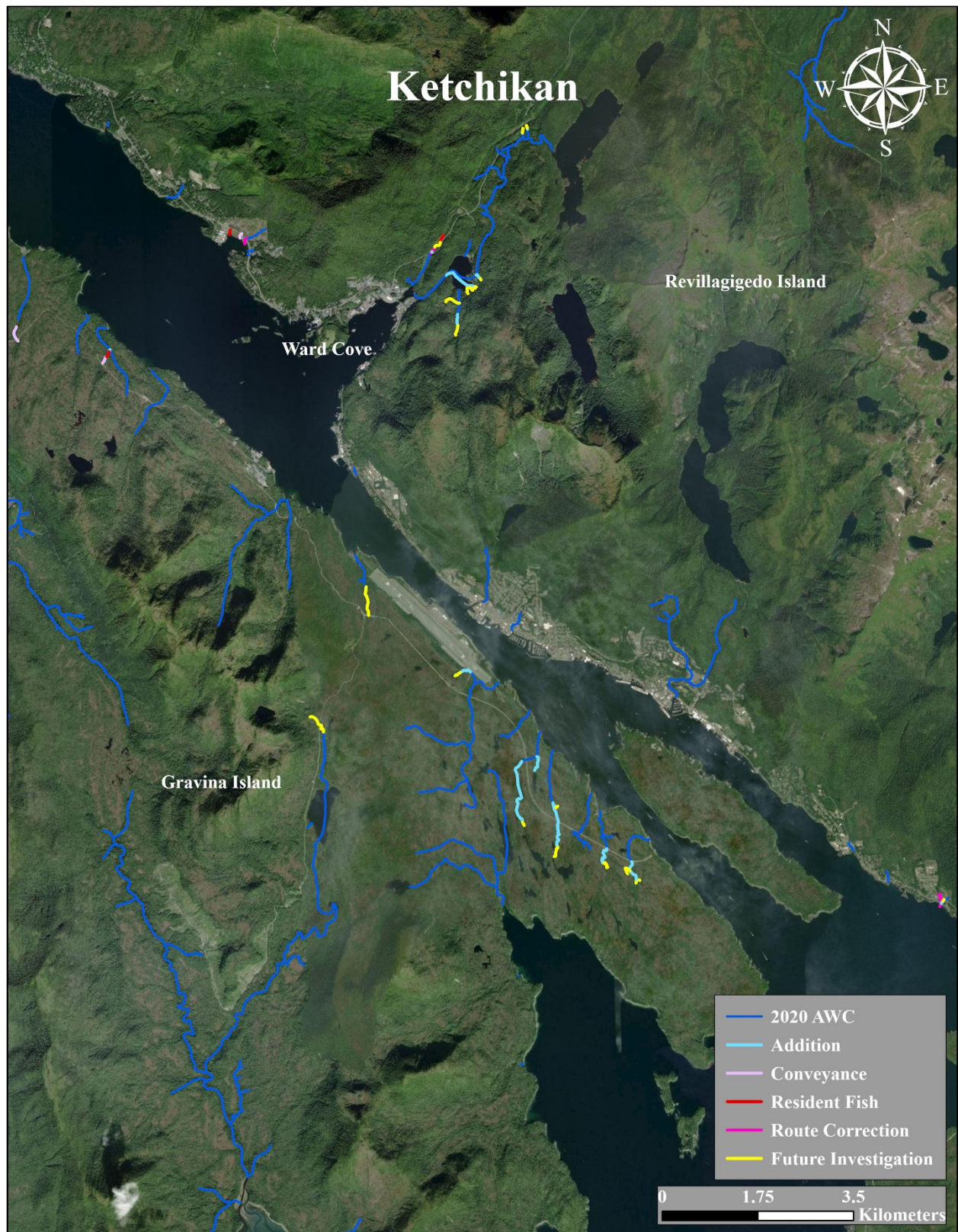


Appendix L.1.—Wrangell AWC revisions.

Appendix L.2.—Wrangell AWC revisions.

Stream Number	Nomination Number	Type
107-40-10780-2003	20-705	Route Correction
107-40-10780-2003 Tributary	20-706	Addition
108-10-10050-2047	20-707	Addition
Wrangell Uncataloged Stream	20-704	Addition

APPENDIX M: KETCHIKAN



Appendix M.1.–Ketchikan AWC revisions.

Appendix M.2.–Ketchikan AWC revisions.

Stream Number	Nomination Number	Type
101-41-10010	20-678	Route Correction
101-41-10010 Tributary	20-679	Addition
101-47-10116	21-605	Route Correction
101-47-10150 Tributary 1	20-680	Addition
101-47-10150 Tributary 2	20-681	Addition
101-47-10150-2008	20-682	Addition
101-47-10150-2049	20-683	Addition
101-47-10306	20-684	Addition
101-47-10310-2004	20-685	Addition
101-47-10340	20-686	Addition
101-47-10340 Tributary	20-799	Addition
101-47-10350	20-800	Addition
101-47-10350 Tributary	20-801	Addition
101-47-10400-2009	20-802	Addition