# **Appendix: Gull Cove**

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

**Alaska Department of Fish and Game** 

**Division of Habitat** 



# **Symbols and Abbreviations**

Survey data codes.

Code			
	Species		
K	Chinook salmon		
CH	chum salmon		
CO	coho salmon		
CT	cutthroat trout (anadromous and resident juveniles and adults)		
DV	Dolly Varden char		
OU	eulachon		
S	sockeye salmon		
P	pink salmon		
RT	rainbow trout (unknown juvenile or resident adult)		
SC	sculpin spp.		
SH	steelhead trout (adult)		
SB	threespine stickleback		
LP	lampery		
	T *0 /		
Lifestage			
s spawning			
r rearing			
p	presence		
	C 12		
EE	Sampling		
EF	electrofish		
VI/VL	visual identification		
HN	handnet		
RS	route survey		
MT	minnow trap		
BS	beach seine		
FN	fyke net		

#### Map color key.

Action	Color
route correction	ginger pink
addition	apatite blue
future investigation	solar yellow
resident fish	poinsettia red
conveyance	lepidolite lilac
AWC	lapis lazuli

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

# **GULL COVE SURVEYS**

Gull Cove, located at the head of Idaho Inlet on the north side of Chichagof Island, provides a refuge for mariners during Icy Strait storms (Figure 1).

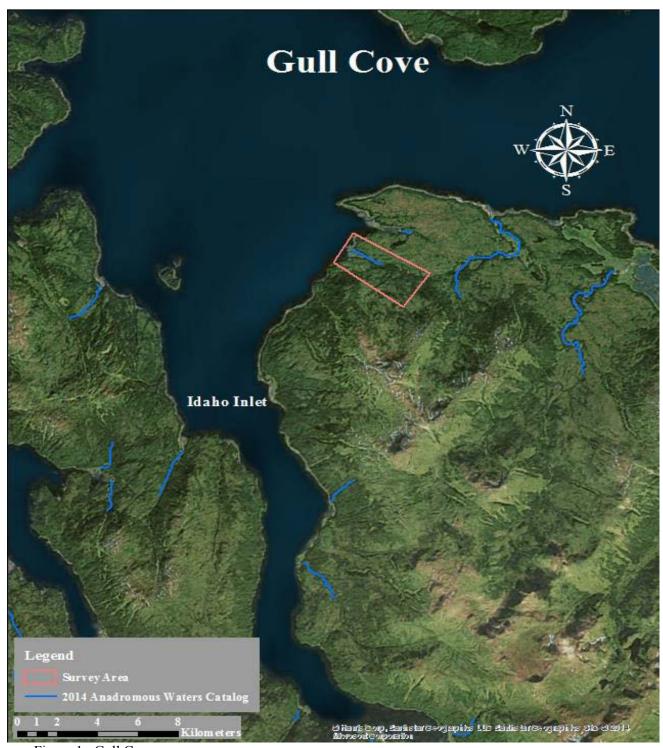


Figure 1.—Gull Cove survey map.

114-40-10280 CORRECTION

Water body name: Survey date: 4/30/2014 Water body number: 114-40-10280 Species & Lifestage: COp,Ps

**Watershed:** Idaho Inlet-Frontal Icy Strait **MTR:** C042S057E **Quad:** Mt Fairweather A-1

**Findings:** We surveyed this stream for fish using a GPS and a backpack electrofisher. The route for this stream differs from the current AWC. We captured rearing coho salmon throughout the stream, including above the current anadromous section (Table 1, Figure 1). Due to time constraints we had to stop the survey early, there was no change in the habitat so there is a possibility there are salmon above where we ended survey.

Recommendations: Extend and correct the current AWC route and add rearing coho salmon

(Figure 2).

**Nomination:** 14-584

Table 1.-114-40-10280 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
125	58.2063	-136.1568	Tributary entering 114-40-		
			10280 on river right.		
170	58.2059	-136.1557	Calling it here. Tides too		
			high!!		
167	58.2033	-136.1503	Tributary entering river left.		
162	58.2032	-136.1495	Tributary entering river left.		
157	58.2033	-136.1486	Tributary entering river left on mainstem.		
153	58.2034	-136.1461	Tributary enter on river left.		
152	58.2036	-136.1436	In side pool, undercut, nice	EF	2 CO, 1 CT, 2 DV
			cobble and gravel. Captured 2		
			CO between 60-100mm, 1 CT		
			and 2 DV.		
117	58.2038	-136.1425	Mouth of tributary.		
116	58.2038	-136.1426	114-40-10280.		
151	58.2037	-136.1423	In mainstem captured 1 young of year CT.	EF	1 CT
171	58.2034	-136.1412		EF	2 CT
172	58.2036	-136.1410	2 DV between 60-150mm and	EF	2 DV, 1 CO
			1 CO about 65mm.		
173	58.2039	-136.1401	Tributary entering river left.		
179	58.2038	-136.1392	1 DV about 70mm.	EF	1 DV
180	58.2037	-136.1388	Tributary entering river left,		
			not tracking just a seep from		
			previous tributary.		
181	58.2037	-136.1387	1 CT about 150mm.	EF	1 CT
182	58.2035	-136.1382		EF	1 CO, 1 CT, 1 DV
			1 CO about 55mm, 1 CT about		
			60mm and 1 DV about 75mm.		<u>.</u>

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
183	58.2032	-136.1373	2 DV between 45-50mm.	EF	2 DV
184	58.2031	-136.1363	Pic on GPS. 1 DV about	EF	1 DV, 1 CO
185	58.2026	-136.1350	55mm and 1 CO about 55mm. Tributary entering river left, not going to stay on main flow.		
186	58.2026	-136.1343	1 CO about 55mm.	EF	1 CO
187	58.2025	-136.1337	Tributary entering river left,		
			not tracking,		
188	58.2026	-136.1333	Stopping here, have to start		
			heading back to pull traps and		
			catch plane.		



Figure 1.—Coho salmon caught in stream number 114-40-10280.

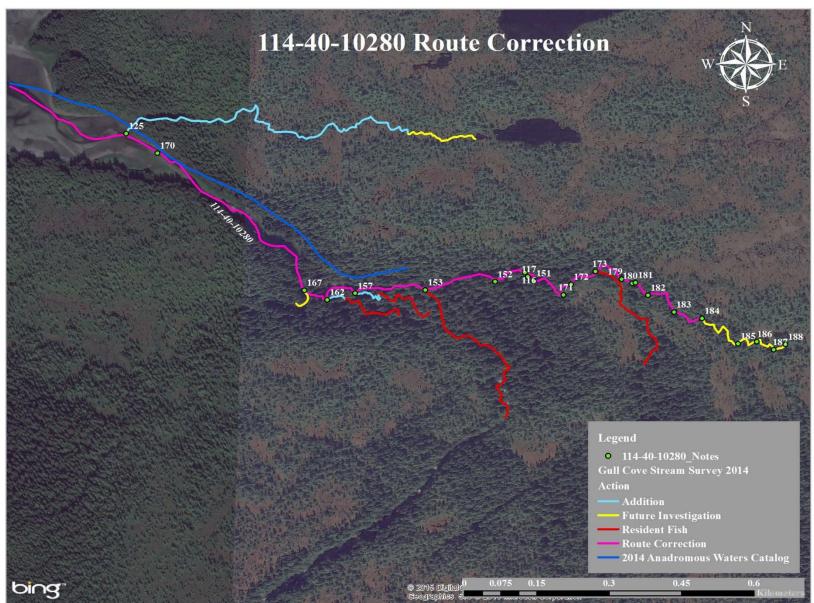


Figure 2.–114-40-10280 route correction map.

#### 114-40-10280-2007

**ADDITION** 

Water body name: Survey date: 4/30/2014 Water body number: 114-40-10280-2007 Species & Lifestage: COr

**Watershed:** Idaho Inlet-Frontal Icy Strait **MTR:** C042S057E **Quad:** Mt Fairweather A-1

**Findings:** We tracked and fish sampled in stream number 114-40-10280-2007 using a GPS and a backpack electrofisher (Table 1). We caught juvenile coho salmon, Dolly Varden char, and cutthroat trout (Figure 1). We encountered a 4' drop in the stream into a small pool that could be a potential fish barrier (Figure 2). We electrofished and minnow trapped above the drop and caught no fish. The stream meanders through a forested area and transitions into meadows.

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

**Nomination:** 14-606

Table 1.–114-40-10280-2007 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
125	58.2063	-136.1568	Tributary entering 114-40-10280 on river right.		
126	58.2065	-136.1560	In pool near rock captured 2 CO about 80mm.	EF	2 CO
127	58.2066	-136.1549	Captured 1 CO about 55mm.	EF	1 CO
128	58.2066	-136.1538	In a undercut bank with nice gravel about 3 ft. wide captured 1 CO about 65mm.	EF	1 CO
129	58.2066	-136.1533	Change of habitat to narrow deep channel through meadow.	EF	No Fish
130	58.2066	-136.1533	Smolty CO about 95mm in deep undercut, shady pool.	EF	1 CO
131	58.2068	-136.1524	Really narrow and incised. Captured 1 CO about 50mm.	EF	1 CO
132	58.2069	-136.1523	Captured 1 CO about 80mm.	EF	1 CO
133	58.2066	-136.1518	Captured 1 CO about 50mm.	EF	1 CO
134	58.2065	-136.1518	Caputred 1 DV about 50mm.	EF	1 DV
135	58.2064	-136.1517	2 CO, one was smolty. Between 50-100mm.	EF	2 CO
136	58.2064	-136.1509	In forested area with increased gradient captured 2 CO about 45mm.	EF	2 CO
137	58.2063	-136.1508	In a pool with small rock drop captured 1 CT about 130mm.	EF	1 CT
138	58.2063	-136.1503	1 DV about 20mm.	EF	1 DV
139	58.2063	-136.1501	1 CO about 45mm.	EF	1 CO
140	58.2065	-136.1492	1 Smolty CO about 95mm.	EF	1 CO
141	58.2065	-136.1490	1 CO about 50mm.	EF	1 CO

Table 1.—Continued.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
142	58.2066	-136.1488	2 CO between 50-80mm.	EF	2 CO
			Entered another meadow.		
143	58.2068	-136.1483	Caught 1 CT about 120mm in	EF	1 CT
			pool below 1.5' drop. Might		
			be barrier.		
144	58.2066	-136.1472	1 DV about 80mm.	EF	1 DV
145	58.2065	-136.1469	1 smolty CO about 90mm.	EF	1 CO
			Narrow channel, but still		
			gravel.		
146	58.2065	-136.1468	1 CO about 65mm.	EF	1 CO
147	58.2065	-136.1467	Potential barrier. 4' drop into	EF	No Fish
			shallow gravel pool.		
148	58.2064	-136.1445	Back at lower pond.		
149	58.2063	-136.1439	Big pond.		
189	58.2065	-136.1438	Upper pond, trap had nothing.	MT	No Fish
190	58.2064	-136.1444	Lower pond, trap had nothing.	MT	No Fish





Figure 2.–Rick Hoffman standing above 4' drop in 114-40-10280-2007.

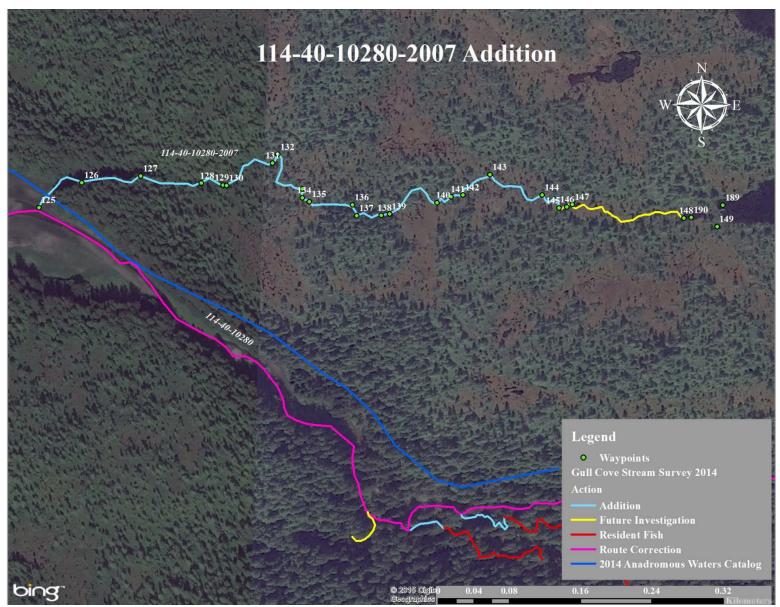


Figure 3.–114-40-10280-2007 addition map.

### 114-40-10280-2022 ADDITION

Water body name: Survey date: 4/30/2014 Water body number: 114-40-10280-2022 Species & Lifestage: COr

Watershed: Idaho Inlet-Frontal Icy Strait MTR: C042S057E Quad: Mt Fairweather A-1

**Findings:** We tracked and fish sampled stream number 114-40-10280-2022 using a GPS and backpack electrofisher (Table 1). We caught juvenile coho salmon, Dolly Varden char, and cutthroat trout. We stopped the survey when the creek became much steeper and there was too much snow to continue (Figure 1).

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

Nomination: 14-607

Table 1.–114-40-10280-2022 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
162	58.2032	-136.1495	Tributary entering river left.		
163	58.2032	-136.1494	1 CO about 45mm.	EF	1 CO
164	58.2032	-136.1489	Caught 3 CO between 45-	EF	3 CO
			60mm in a pool. Creek is		
			shallow with gravel and LWD		
			and vegetation in water.		
			Tannic.		
165	58.2030	-136.1470	Getting snowy.	EF	1 DV, 1 CT
166	58.2029	-136.1470	Top of tributary. Goes up		
			steep hill.		



Figure 1.–114-40-10280-2022.

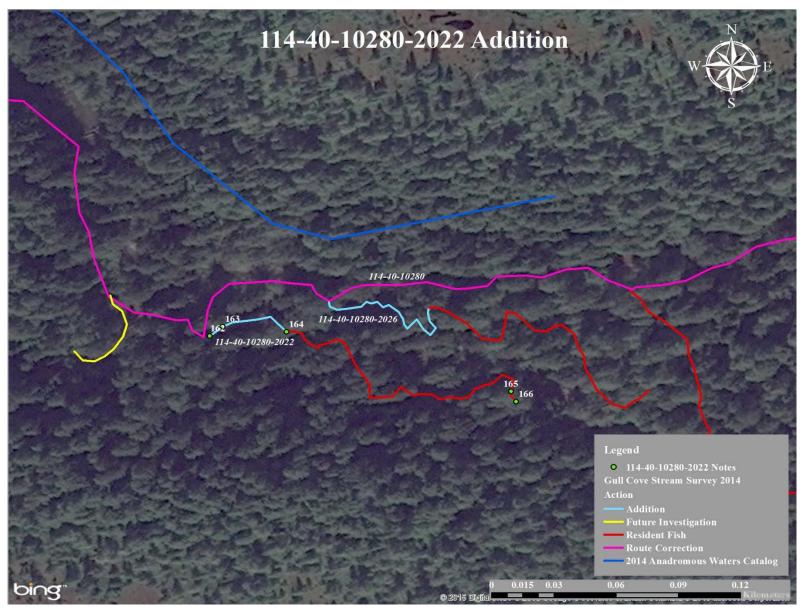


Figure 2.–114-40-10280-2022 addition map.

#### 114-40-10280-2026

**ADDITION** 

Water body name: Survey date: 4/30/2014 Water body number: 114-40-10280-2026 Species & Lifestage: COr

**Watershed:** Idaho Inlet-Frontal Icy Strait **MTR:** C042S057E **Quad:** Mt Fairweather A-1

**Findings:** We tracked and fish sampled stream number 114-40-10280-2026 using a GPS and backpack electrofisher(Table 1). We caught juvenile coho salmon, Dolly Varden char, and

cutthroat trout. The tributary ends at a seep.

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

**Nomination:** 14-608

Table 1.–114-40-10280-2026 survey data.

Waypoint	Latitude	Longitude	Notes	Sample Effort	Sample Results
157	58.2033	-136.1486	Tributary entering river left on		
			mainstem.		
158	58.2033	-136.1482		EF	3 DV, 1 CT
159	58.2033	-136.1477	In shallow pool. Great	EF	2 CO, 1 CT, 3 DV
			spawning gravel and cover.		
160	58.2033	-136.1467		EF	1 DV
161	58.2030	-136.1459	Top of tributary, just seeping		
			out of ground.		

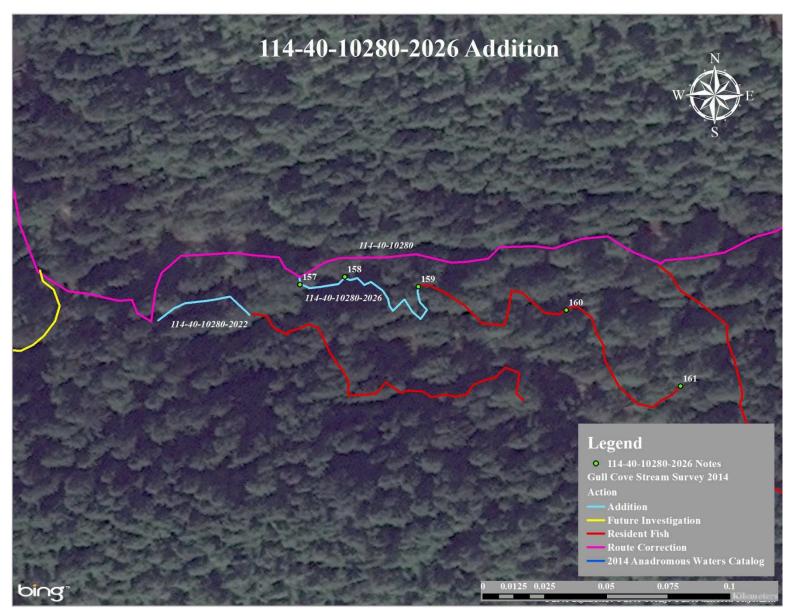


Figure 1.–114-40-10280-2026 addition map.

# GULL COVE STREAMS REQUIRING FUTURE INVESTIGATION

Table 1.—Start points of Gull Cove streams requiring future investigation.

Waypoint	Latitude	Longitude
1	58.2064	-136.1469
2	58.2033	-136.1503
3	58.2030	-136.1362

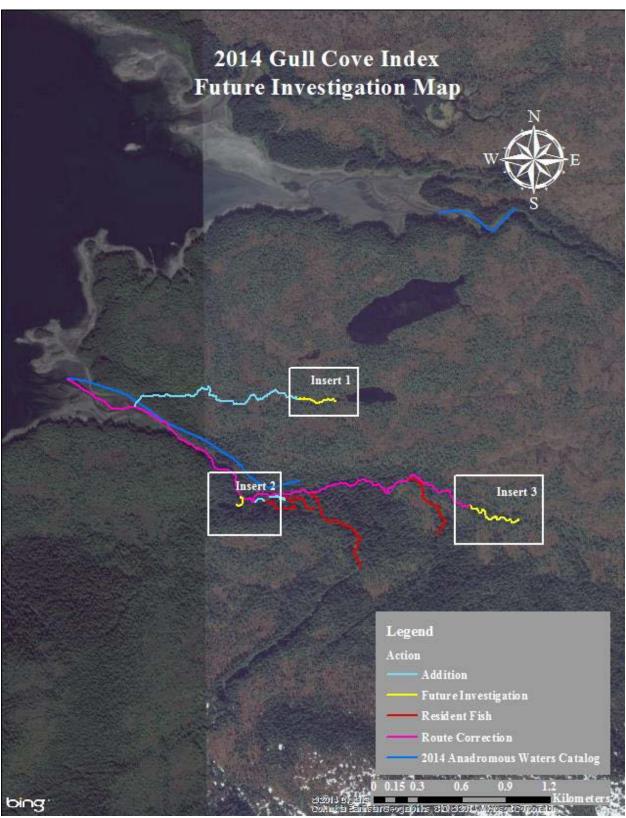


Figure 1.–2014 Gull Cove index future investigation map.

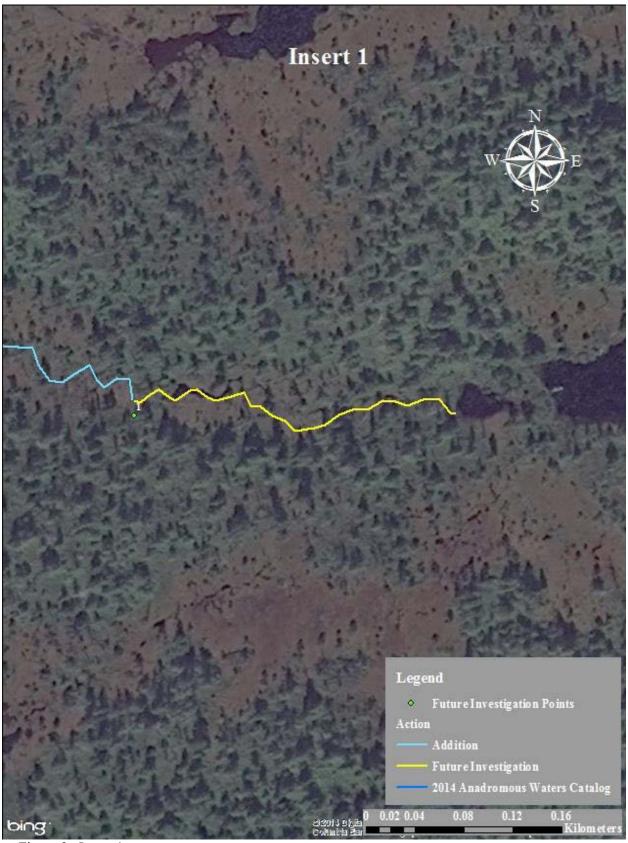


Figure 2.–Insert 1.

Gull Cove

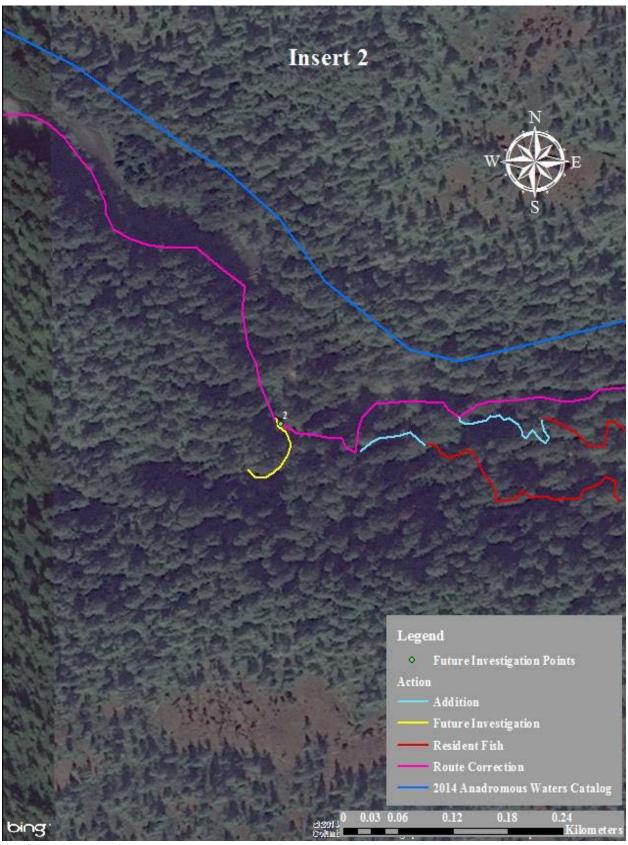


Figure 3.–Insert 2.

Gull Cove

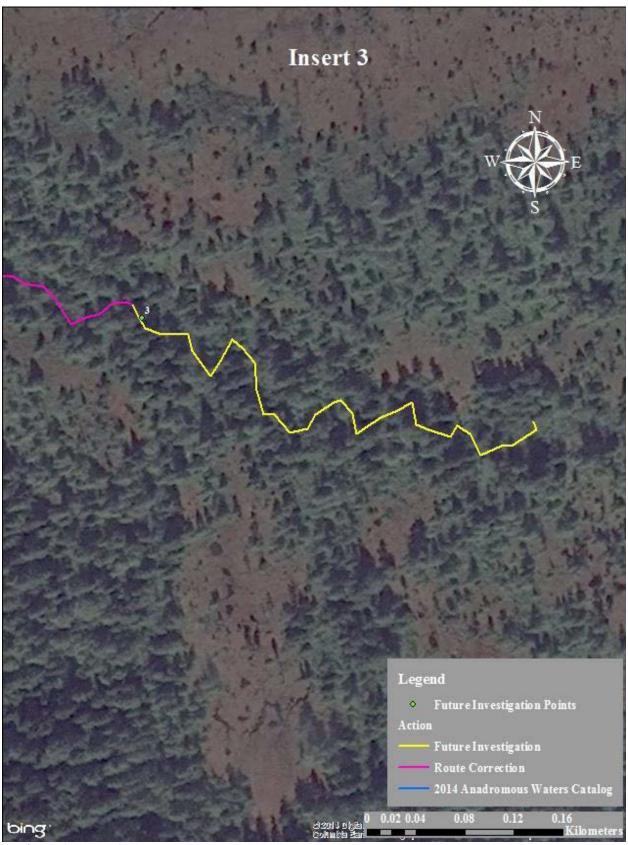


Figure 4.–Insert 3.

Gull Cove