

105-10-10100
Stream 105-10-10

Map: Petersburg A-6

Latitude $56^{\circ}12'30''$ Longitude $133^{\circ}52'15''$
 $28''$ $51'10''$

This stream enters Sumner Strait just north of Louise Cove and about 1.35 miles north of Aden marker and 2 miles west-northwest of Ruth marker.

The stream is relatively large (7 miles long) and drains a wide valley on the peninsula separating Affleck Canal and Sumner Strait.

The intertidal area is approximately .25 mile long. The bottom substrates are chiefly composed of ungraded gravel substrates with minimal algae growth and high spawning potential. The substrate of the first 1.5 miles upstream is mainly cobble and ungraded gravel. Large, dry grave bars, undercut banks, bedrock rapids and little natural windfall typify this section of the stream (Photo #29).



Photo #29: "Typical" habitat found in the lower 1.5 miles of 105-10-10.

Two partial barriers, three- to four-foot bedrock falls, are located .4 mile upstream. While few pink salmon were observed in the stream, none were observed above the first of these barriers. The lower of these two barrier falls is depicted in Photo #30.



Photo #30: Four-foot falls located .4 mile upstream.

Another partial barrier, a five-foot-high cascade over bedrock, is located .5 mile upstream. From 1.5 miles to 2 miles upstream, the substrate is mostly loose, ungraded gravel with a high spawning potential. The occurrence of natural windfall increases in this part of the stream and some braiding is apparent.

Five major tributaries enter the stream. Tributary 01 has a four-foot-high beaver dam located .25 mile upstream. Good rearing habitat exists above and below the beaver dam. A lack of riffles with suitable substrate limits spawning below the dam. Coho fry and trout were observed above the beaver dam.

Tributary 02 offers poor spawning and fair rearing habitat due to unsuitable substrates and a rapidly increasing gradient. Coho fry were not observed beyond 60 yards upstream.

Tributary 03 displays loose gravel bottom substrates and has a high spawning potential for the first .25 mile. Rearing habitat is very good in this section of the tributary with moderate amounts of natural windfall providing cover. Spawning habitat decreases rapidly above .25 mile due to unsuitable substrates. Coho fry and trout were not observed beyond .3 mile upstream where the entire tributary became subterranean at the base of a 30-foot-high cascade (bedrock).

Tributary 04 quickly branches into several small, rocky streams with poor spawning/rearing habitat. Coho fry were observed only in the first 300 yards of the tributary. This short section of the tributary displays a gentle gradient and gravel bottom substrates. Undercut banks, natural windfall and a good canopy provide cover.

Tributary 05 has excellent spawning gravel for .25 mile upstream but a lack of riffles lowers the utilization. Excellent rearing habitat exists due to the flat gradient, undercut banks and closed canopy typical of this tributary. No coho fry were observed beyond .25 mile upstream.

ADF&G escapement records show use of the stream by both pink and chum salmon.

ADF&G Escapement Data:

<u>Year</u>	<u>Pink</u>	<u>Chum</u>
1972	2000	--
1973	170	108
1974	--	--
1975	100	--
1976	12	--

Recommendations:

- 1) Further biological reconnaissance is needed to determine if pink and chum salmon are utilizing the spawning habitat above the small barrier falls in the lower section of the stream. If they are not, then removal of these barriers may be warranted.

Figure 1. Stream 105-10-10
105-10-101A

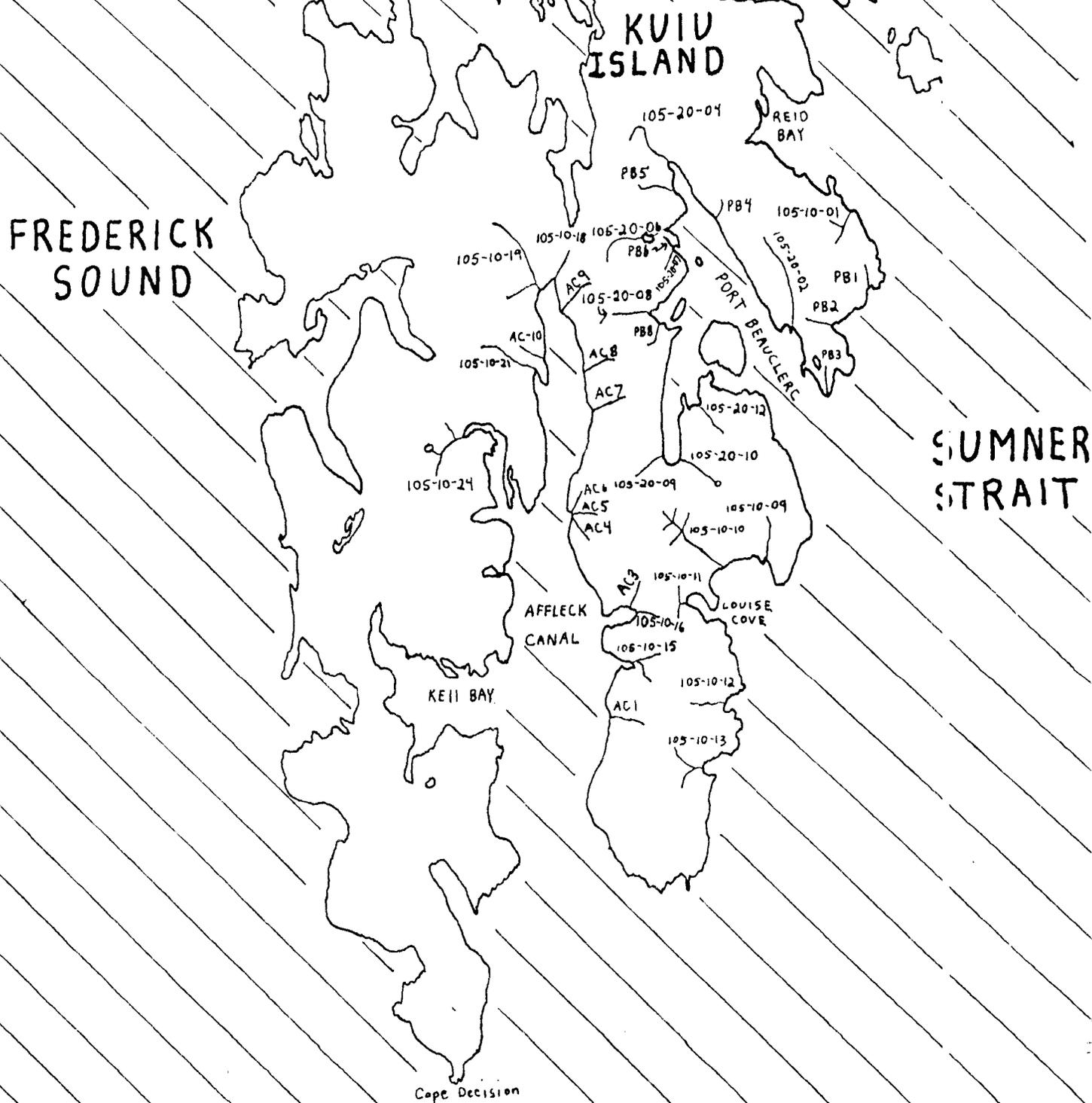


Substrate highly variable. Best spawning in lower part where 5% small boulders, 20% cobble, 75% gravel and fines, gentle gradient, 50:50 riffle: pool, 70% util.



STREAMS OF THE S.E. KUIU STUDY AREA

17



STREAM QUALITY INVENTORY

AREA AND STREAM	TYPE AND DISTANCE OF SURVEY	FISH SPECIES AND MATURITY	STREAM QUALITY			STREAM		VELOCITY		WATER		MAJOR SUBSTRATE		HABITAT
			Spawning Inter-tidal	Upstream	Rearing	Gradient	Mean width (ft.)	Mean depth (ft.)	Inter-tidal	Upstream	Color	Temp. °C	Inter-tidal	
105-20-12	.5 mile foot	adult pink, cutthroat trout	excellent	good/excellent	good	gentle	20-40' channel 15' x 3"	5 cfs	clear	100	1"	1"	no	
105-10-09	.4 mile foot	cutthroat trout	fair	fair/poor	fair	moderate	50' channel 20' x 4"	10 cfs	clear	14.50	cobble 1-3" boulders gravel	cobble	poor	
Kuiu Is. (Summer Strait) 105-10-10	4 mile foot	adult pink salmon, coho fry, trout	very good	good to very good	good to very good	gentle	50' channel 30' x 4"	12-15cfs	clear	11.50	gravel and fines gravel	cobble and gravel	no	
1050-10-11	.6 mile foot	cutthroat trout, coho fry	fair/poor	good	good	gentle	20' channel 10' x 3"	4 cfs	clear	11.0	cobble gravel	gravel	no	
Kuiu Is. (Summer Strait) 105-10-12	0.25 mile foot	salmonid fry (trout fry)	poor	poor	fair/good	mostly flat	20' channel 20' x 1'	6 cfs	1t. tan	16.0	small boulders and organic cobble debris	cobble and organic debris	no	
Kuiu Is. (Summer Strait) 105-10-13	1.4 mile foot	coho fry, trout	lower excellent, upper poor	poor/fair	poor/fair	gentle becoming steep in 0.6 mi	50' channel below forks 10' x 3"	10 cfs	clear	12.50	lower gravel upper cobble	cobble	no	