State of Alaska
Department of Fish and Game
Habitat and Restoration Division

Nomination for Waters Important to Anadromous Fish

Region: SOUTHEAST

USGS Quad: JUNEAU B-2

Anadromous Water Catalog Number of Waterway: 111-40-10070-2009

Name of Waterway: ☐ USGS Name ☐ Local Name

☑ Addition ☐ Deletion ☐ Correction ☐ Backup Information

For Office Use

Nomination #: 98 292

Revision Year:

Revision to: Atlas ____ Catalog ____ Both X

Revision Code: A-Z

Regional Supervisor: Ed Weiss — Date: 2/6/98

AWC Project Biologist: Tom Thuett — Date: 2/12/98

Drafted

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
COHO	See attached		X		☑
					☐
					☐
					☐
					☐

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: See attached documentation from Juneau Fish Habitat Assesment Report , ADF&G 1995, Bethers, Munk & Seifert, Ppl113-115.

Name of Observer (please print): M. BETHERS / K. MUNK

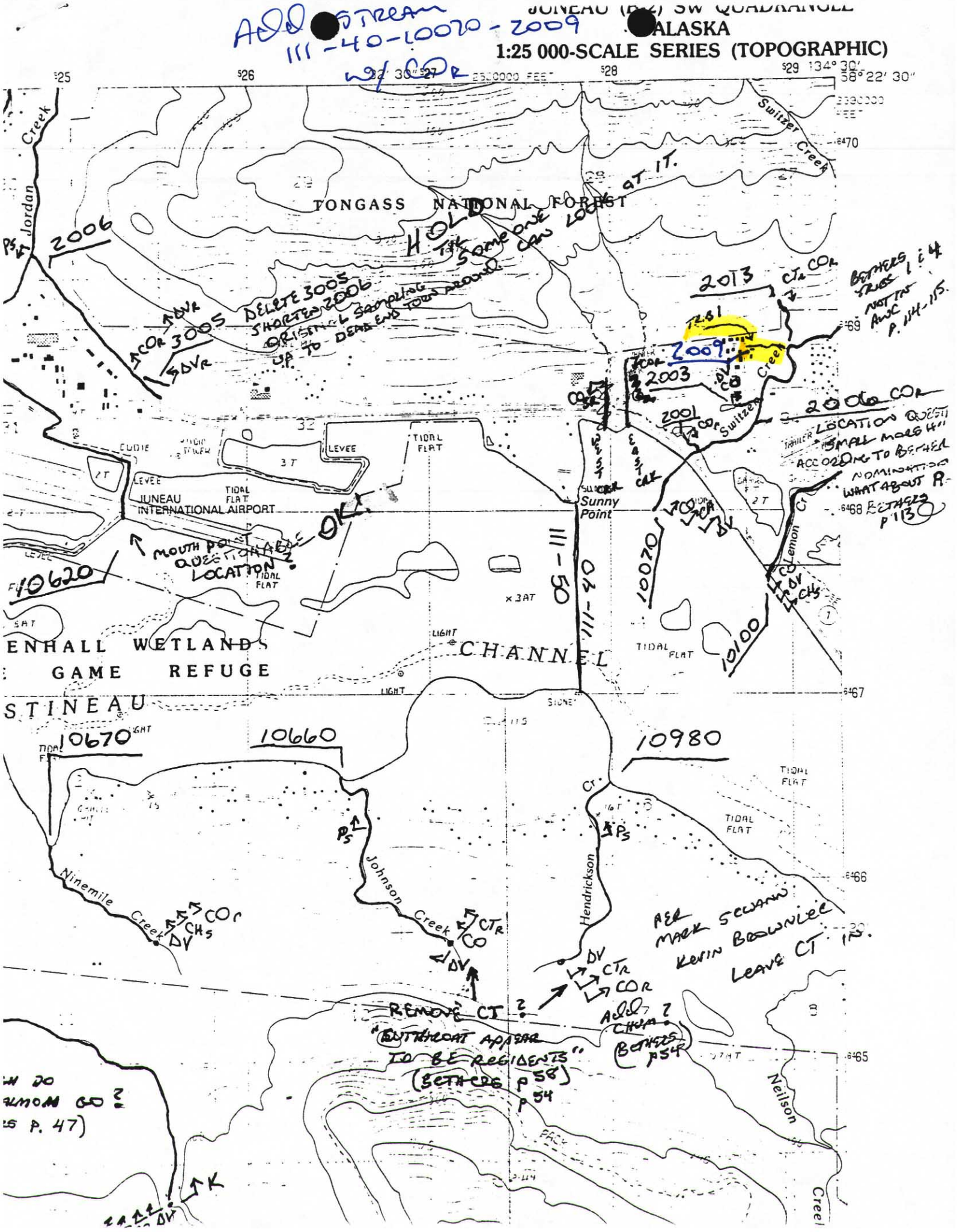
Signature: _____ Date: 2/6/98

Address: _____

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: _____

Revision 3/97


ALASKA
1:25 000-SCALE SERIES (TOPOGRAPHIC)
TONGASS NATIONAL FOREST
HOLD
Switzer Creek
2006
2013
2009
2003
2001
2006 COR
Sunny Point
JUNEAU INTERNATIONAL AIRPORT
TIDAL FLAT
LEVEE
10620
10670
10660
10980
10100
10070
CHANNEL
GAME REFUGE
Ninemile Creek
Johnson Creek
Hendrickson
Neilson
Creek
REMOVE CT ?
"CUTTHROAT APASSA
TO BE RESIDENTS"
(BETHERS P 56)
P 54
PER MARK SCHAAP KEVIN BROWNLEE
LEAVE CT IN.
MOUTH POINT QUESTIONABLE LOCATION
OK
DELETE 3005
SHORTEN 2006
ORIGINAL SAMPLING UP TO DEAD END TOWARD
ADD STREAM
111-40-10070-2009
W/ CO R
BETHERS TREE 1 & 4
NOT IN ANC
P. 114-115.
LOCATION QUEST
SMALL MARSH
ACCORDING TO BETHER
NOMINATED
WHAT ABOUT R-
BETHERS
P 130

Chapter 57

Strawberry Creek

Anadromous Stream Catalog Number: 111-50-10070-2004-3002

Location: Lat. 58°31'14" N. Long. 134°48'04" W. (south of Herbert River, west of Glacier Hwy. from Mile 25.5 to Herbert River Rd.)

Description

Strawberry Creek is an extensive network of small channels draining an area of approximately 3 square miles. Strawberry Creek is a tributary of the Herbert River and enters the river about ¼ mile above its confluence with the Eagle River (figure 57.1). The system generally has a very low gradient and has four main branches draining the ridge east of Glacier Highway.

The entire system is characterized by numerous small tributaries draining the extensive meadows and muskegs through which it flows. The water in the stream is clear, with a dark brown tint.

Near its mouth, Strawberry Creek ranges from 4 to 6 feet wide. In the lower muskeg area, the stream is over 3 feet deep in many areas. The numerous small feeder streams are 1 to 3 feet wide and up to 2½ feet deep.

Fish Species Present

Strawberry Creek has populations of coho, sockeye, and pink salmon, Dolly Varden, and cutthroat trout.

Salmon escapement data for this stream are not available; however, on October 21, 1981 one coho salmon was observed near the stream mouth.

The entire Strawberry Creek drainage was inventoried using juvenile fish traps in June 1985. Rearing salmonids were found throughout Strawberry Creek and all of its tributaries. In total, 73 traps were fished and 772 rearing coho, 271 Dolly Varden, and 9 cutthroat trout were caught.

Fish Habitat

Rearing habitat in Strawberry Creek is of excellent quality and is found

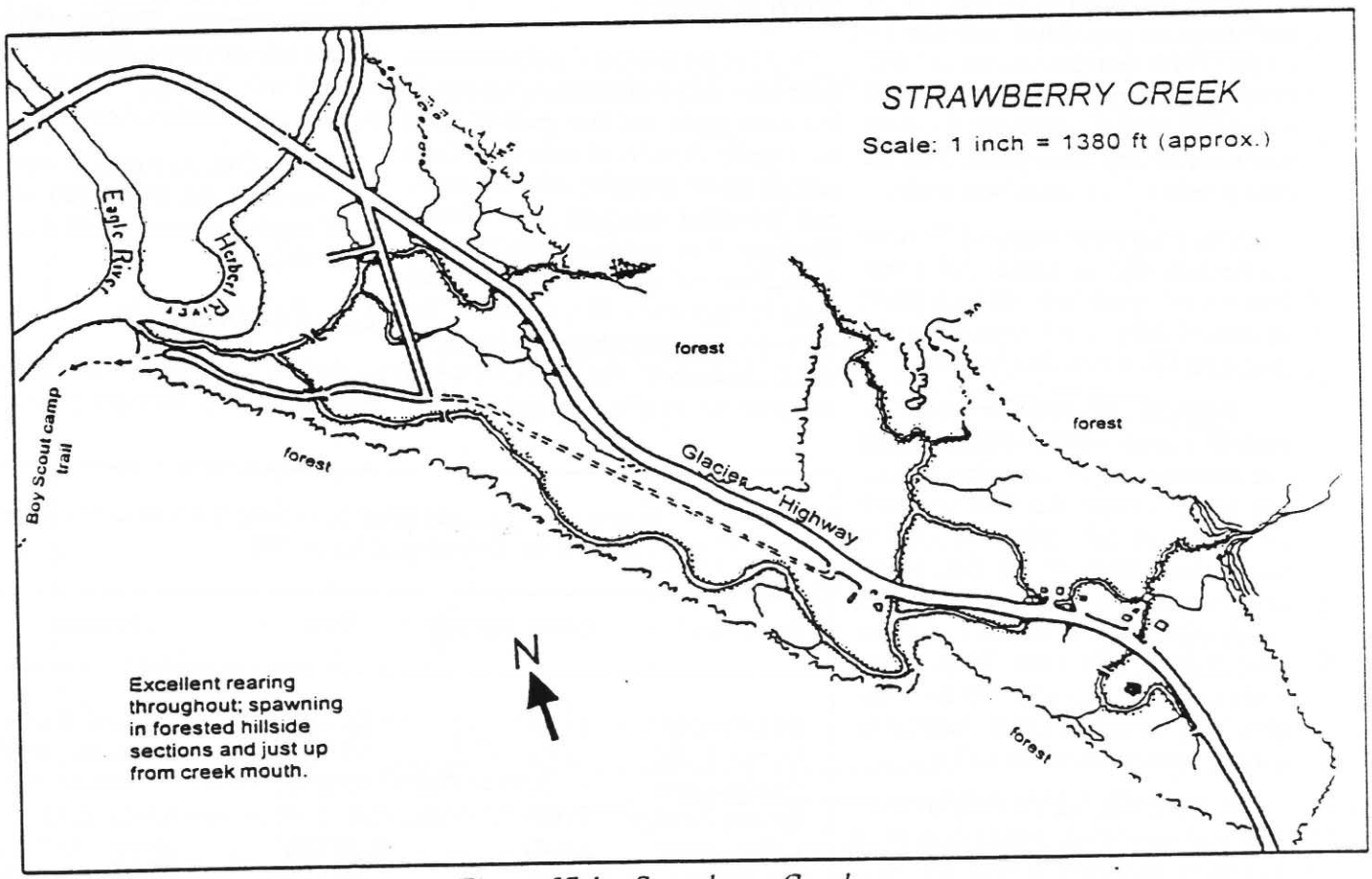


Figure 57.1 Strawberry Creek.

throughout the system. Spawning habitat is found in the forested hillside sections of the four branches. Stream gradient increases in the headwaters of the four main branches, where most spawning habitat is located.

The lower creek provides several deep pools (the remains of a larger beaver pond system) that are used by adult salmon for holding and ripening. Vegetative cover within the flats consists of overhanging grass mats and undercut banks. The forest cover is mostly spruce and hemlock, with low brushy vegetation and occasional windfalls. During dry periods, some of the smaller tributaries may go dry. There are no barriers on the stream.

Public Use

Some sport fishing does occur at the mouth of Strawberry Creek, but the level of effort and harvest are not known.

Land Ownership

Most of the Strawberry Creek drainage is located on undeveloped, privately owned property. There is a parcel of state property near the stream mouth, and the uppermost sections of the tributaries are located on U.S. Forest Service property.

Land Uses

Strawberry Creek has been crossed by Glacier Highway in at least ten locations, and sections of some of the creek's branches have been ditched along the highway. The stream has generally recovered from the effects of road construction.

Strawberry Creek is very vulnerable to impact from development of the adjacent private properties. The adjacent properties are low and wet; they will require a lot of fill to make the land usable. The very low gradient of Strawberry Creek will not allow sediments to flush out of the system very well.

Conclusion

Strawberry Creek consists of an extensive network of small stream channels, all of which are very productive fish rearing habitats. Most of the stream is located on flat, privately owned property. The stream is especially vulnerable to impacts from land development.

Recommendations

Fish habitat values of this extensive drainage must be maintained through careful review of land use permit applications. Because of its length and very low gradient, the system is especially vulnerable to sedimentation from construction. Thus, it is necessary to identify all valuable stream channels and ensure adequate streamside buffers are maintained. Potential sediment pollution must also be adequately addressed. ■

Chapter 58

Switzer Creek

Anadromous Stream Catalog Number: 111-40-10070

Location: Lat. 58°21'26" N. Long. 134°20'52" W. (6.4 mile Glacier Highway)

Description

Switzer Creek is a relatively small stream which flows approximately 1 mile before entering Gastineau Channel east of Sunny Point (figure 58.1, opposite page). The stream ranges from 2 feet in width in its upper reaches to 15 feet at the intertidal area. Its depth ranges to 2½ feet. Switzer Creek has a moderate to low gradient, and the water is clear. The stream is spring-fed at least in part and has one major pool approximately 50 feet wide by 100 feet long. The intertidal section of the stream is nearly 1 mile long. Streambed substrate is primarily gravel; some pools have sediment deposits.

Switzer Creek has at least four tributaries upstream from Old Glacier Highway. Two tributaries enter the mainstem in the meadow directly upstream from Old Glacier Highway, and the other two enter the mainstem further upstream in the forested area (see figure 58.1, following page).

Fish Species Present

Switzer Creek has populations of coho, pink, and chum salmon, Dolly Varden, and cutthroat trout. The long intertidal area has populations of numerous marine species.

Juvenile and spawning fish populations in Switzer Creek have been well-documented. Juvenile trapping data are presented in table 58.1.

Salmon escapement data are presented in table 58.2. As many as 1,000 Dolly Varden, an estimated 10% of which were spawners, have been counted in Switzer Creek at one time during the salmon escapement surveys.

Coho smolt were tagged in Switzer Creek during April 13–15, 1982; in total, 340 smolt were tagged. In 1983, 6 of the tagged fish were recovered in fisheries and 2 were recovered in the escapement.

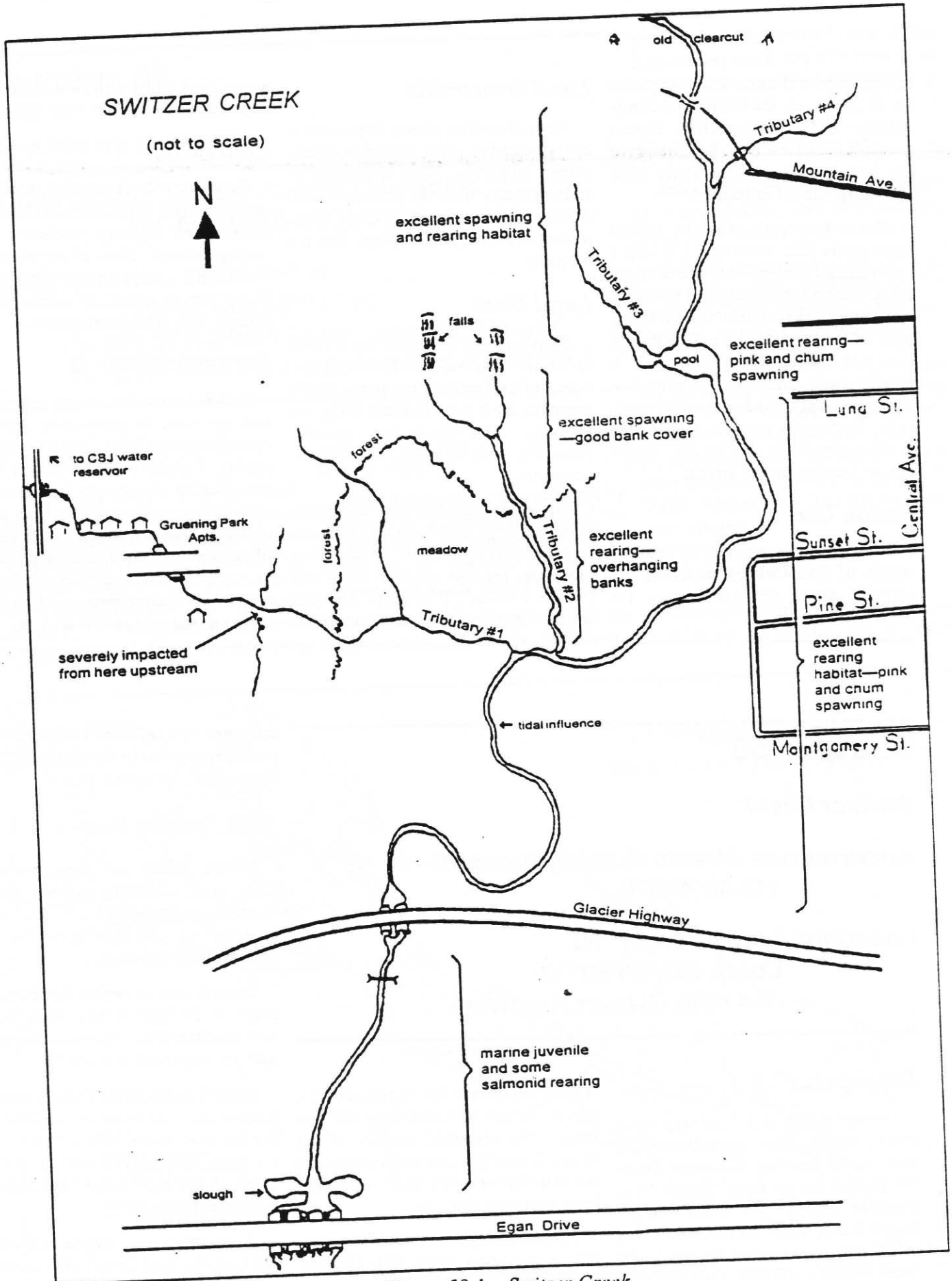


Figure 58.1 Switzer Creek.

Table 58.1. Switzer Creek juvenile fish trapping data.

Area	Date	No. of traps	Cutthroat	Dolly Varden	Coho
Mainstem[1]	7/20/70	9	1	72	27
Area 1[2]	7/25-8/7/84	19	0	236	13
Area 2[3]	7/25-8/7/84	7	1	172	47
Area 3[4]	7/25-8/7/84	3	0	24	120
Area 4[5]	7/25-8/7/84	6	0	51	51
Area 5[6]	7/25-8/7/84	7	2	163	38
Area 6[7]	7/25-8/7/84	3	0	28	31
Area 7[8]	7/25-8/7/84	2	0	22	34

1 An additional 32 coho, 23 Dolly Varden, and 30 unidentified fish were observed.
2 From Egan Drive upstream to Pine Street.
3 Pine Street to above Mountain Avenue (excluding Spring Pond).
4 Switzer Creek's Spring Pond.
5 Tributary #1(B).
6 Tributary #2.
7 Tributary #4.
8 Tributary #4.

During the trapping period, a mark and recapture population estimate indicated that a total population of 1,697 coho smolt (at the 95% confidence level) were in the stream. Undoubtedly, some smolt had already outmigrated from the stream before the estimate was made.

Of the coho smolt tagged, 51% were 1-year-olds and averaged 106.4 mm fork length. Two-year old coho smolt composed 49% of the population and averaged 120.9 mm fork length.

Using the estimated marked/unmarked ratio of smolt leaving the system and commercial port sampling factors, one could estimate that Switzer Creek contributed 69 coho salmon in 1983 to the various fisheries; 66 fish would amount to 45% harvest rate for Switzer Creek coho. This is similar to harvest rates calculated for Auke Creek, where much more data on tagged fish are available. Tag recovery data on Switzer Creek coho are presented on table 58.3.

Switzer Creek has not been stocked. However, eyed king salmon eggs were planted in the stream in 1952 and 1953. Evidently these egg plants were not successful.

Fish Habitat

Most of the Switzer Creek streambed s composed of potential spawning gravel, but some pools and low gradient areas have heavy deposits of sediment. Coho salmon spawn throughout the tributaries and mainstem upstream from Glacier Highway. Pink and chum salmon spawn throughout the intertidal area upstream to the Spring Pond (off Lund Street). The entire creek drainage has excellent overhead, streamside, and instream cover and provides excellent rearing habitat.

The spring-fed water flowing into Switzer Creek adds significantly to its fish habitat values. The stream maintains a good flow all winter long, while other non-spring-fed systems may freeze dry or experience extremely low flows.

The age classes of coho smolt and the large average size of age-1 (106.4 mm) and age-2 (120.9 mm) smolt indicate that Switzer Creek has especially productive rearing habitat. Coho smolt of this size are generally older or reared in a warm lake environment.

Public Use

Switzer Creek flows alongside a major residential area and provides an excellent area for neighbornood children to play and explore streamside ecology. A heavily used trail parallels the stream next to the residential area.

Because of its extremely high fishery values and accessibility, the Sport Fish Division uses the creek as an outdoor fisheries laboratory for 'Sea Week' activities every spring and for aquatic education purposes. The D'zantiki Heeni Middle School plans to construct an educational trail through the drainage for outdoor and aquatic education.

Switzer Creek is closed to sport fishing; however, the stream still receives some angling pressure from neighborhood children.

Land Ownership

Switzer Creek heads on USFS property and flows through private and

Table 58.3. Recoveries of tagged adult coho from Switzer Creek were made in the following areas in 1983.

Location	Comm. district	Date	Fishery
Outside coast	(116)	01/25/85	commercial troll
Outside coast	(116)	08/26/83	commercial troll
Outside coast	(113, 114, 116)	09/01/83	commercial troll
Stevens Passage	(109)	08/01/83	Juneau sport
Inside waters	(109)	08/17/83	commercial troll
Lower Lynn Canal	(115)	09/21/83	commercial gillnet