# **STREAM INVENTORY**

# TAGIT CREEK AND ADJACENT TRIBUTARIES 1997

**WATERSHED CODE: 460-6006-445** 

Prepared by

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for

**HOUSTON FOREST PRODUCTS LTD.** (Funded by Forest Renewal BC)

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# BACKGROUND

An aquatic stream inventory was conducted in Tagit Creek and four adjacent tributaries located in the Morice Watershed 40 km southwest of Houston, BC (Figure 1). These studies were a continuation of an aquatic inventory program initiated in the Thautil Operating Area (Morice TSA 20) during the summer and fall of 1996 (Bustard 1997).

The specific objectives of the program were as follows:

- to identify the known watershed distributions of fish presence/absence based on existing information;
- to identify stream gradients and potential obstructions to fish passage within the study streams;
- to identify stream reaches for all study streams;
- to delineate the distributions of fish and fish habitat throughout the study streams to allow for the identification and classification of fish-bearing streams under the Forest Practices Code (FPC) at a mapping scale of 1:20,000;
- to provide FPC riparian classification for stream reaches sampled during watershed inventory;
- to identify key habitat features/sites requiring special management attention during watershed inventory, including whether bull trout were present in the watersheds;
- to provide baseline distributions of stream-dependent amphibian species and lifehistory stages.

The major emphasis of the study was to provide a broad-based aquatic inventory at an operational and landscape level to facilitate planning for forest development that minimizes impacts on the aquatic resources of the watershed. Emphasis was placed on accurately describing the distribution of fish within the study streams and establishing a riparian classification for all stream sections.

The report is separated into three sections:

**SECTION 1** presents an overview of the key results of the fish and habitat sampling including fish distribution, relative abundance, and a comparison to historical data where available. Recommendations concerning habitat restoration (mainly stream crossing concerns) are included in this section. A 1:50,000 map showing the location of the study streams, fish distribution and main barriers is included at the back of this report. This map also shows the main roads and logging history of the study area.

**SECTION 2** presents the detailed results for sampling. A summary of all fish sampled and the stream survey card information for each tributary are presented in this section. These summaries are intended for use with 1:20,000 maps accompanying this report.

Photodocumentation information is presented in **SECTION 3**.

## ACKNOWLEDGMENTS

The studies were funded by the Operational Inventory Program of Forest Renewal BC, with Houston Forest Products (HFP) as the project proponent. The overall inventory program was coordinated by Melissa Todd of HFP. Andy Witt was the contract monitor. The field surveys were conducted by Rob Dams, Kate Portman, Dave Bustard, Jordan Beblow, and Ian Fuhr. Kate Portman and Rob Dams were responsible for all data compilation and draft map preparations. Western Geographic Information Systems Inc. was responsible for GIS digital mapping.

# **Provincial Disclaimer**

The Province has not accepted the contents of this product for the purposes of the Forest Practices Code, and reserves the right to dispute the validity of the summarized results. The Province does not necessarily agree with the classification assigned to any individual stream reach, for use in logging plans, silviculture prescriptions or any other application.

# **SECTION 1**

## 1.1 STUDY AREA

The study area is located on the north side of the Morice River immediately east of the Thautil River, and comprises the southeast section of the Thautil Operating Area. The three main creek systems, Tagit, False Tagit, and O'Dine creeks range from approximately 8 to 11 km in length. Two small creek systems at either end of the study area (Swamp Creek and Unnamed Creek WS Code 400-60006-397) are 2 and 4 km in length.

The study area is located in the Sub-boreal Spruce biogeoclimatic zone. The streams drain moderately steep forested hillsides, interspersed with wetlands and rock outcrops at elevations ranging from 700 to 1300 m. Stream gradients in all of the streams tend to steepen in the lower one km section as the creeks drop off the gentle bench areas down onto the Morice River floodplain.

No permanent snowfields or glaciers are present in the watershed, and these small streams typically experience highest flows during the snowmelt period in May and early June. Low flows occur during both the late summer and winter periods. Some smaller tributaries dewater during these periods. The presence of Chisholm Lake in Tagit Creek, as well as four smaller unnamed lakes in False Tagit Creek, and numerous beaver damwetland complexes play an important role in retaining water during these low flow periods.

Water temperatures up to 17°C were recorded in Tagit and False Tagit creeks during the first week of July. We suspect that temperatures can approach 20°C during warm dry periods in the late summer.

The mainline logging road into the Thautil on the north side of the Morice crosses all of the study streams. Spur roads are present into logged settings in the lower and midreaches of Tagit and False Tagit creeks. Proposed cutblocks are planned throughout the study area during the next decade (see 1:50,000 map).

The southern boundary of the study area borders on the Morice River, an outstanding salmon and steelhead river offering a provincially significant sport fishery. The streams flow directly into river sections utilized by chinook (*Oncorhynchus tshawytscha*), coho (*Oncorhynchus kisutch*) and pink (*Oncorhynchus gorbuscha*) salmon and steelhead trout (*Oncorhynchus mykiss*) for spawning and rearing<sup>1</sup>. Both water quality and viewscape are important features associated with land-use activities along the Morice River.

Chisholm Lake is the most significant waterbody in the study area. The lake area is 122 ha, with mean and maximum depths of 9 and 24 m respectively (DeGisi and Schell

<sup>&</sup>lt;sup>1</sup> See Envirocon (1984) for detailed information describing fish utilization of this section of the Morice River.

1997). Chisholm Lake supports a relatively diverse fish community including a moderately abundant population of cutthroat trout (*Oncorhynchus clarki*). Although there is good access to this lake, it does not attract many anglers due to the small fish size. For example, the maximum fork length of 93 cutthroat trout sampled in the lake was 26 cm (DeGisi and Schell 1997). Inlet streams to Chisholm Lake were examined for up to 0.5 km upstream, and sampling information from these surveys has been incorporated into the mapping and data summaries of this report.

Some background fisheries information was collected on lower lower Tagit and False Tagit creeks during the Kemano Completion studies on the Morice River (Envirocon Ltd. 1984). These studies were conducted during 1979 prior to the development of the Chisholm Forest Service Road, and access was gained by walking upstream from the mainstem Morice. The Envirocon studies indicated that juvenile steelhead and coho were present in Tagit and False Tagit creeks. Surveys on lower Tagit Creek (Shepard and Algard 1977) and on lower False Tagit Creek (Morris and Eccles 1975) also indicated juvenile steelhead and coho were present in these systems during the mid 1970's.

All of the early stream surveys in the study area were restricted to the lower portions of the mainstem creeks, and indicated that steelhead and coho were present in these lower sections. It was assumed that they had moved up into these creeks from the mainstem Morice River. No surveys included the upper reaches and the extensive network of tributary streams present in the study area.

Dolly Varden (*Salvelinus malma*) and Pacific lamprey (*Lampetra tridentata*) were also noted up to 4 km upstream on False Tagit Creek (Envirocon Ltd. 1984).

# 1.2 METHODS

## **1.2.1 TIMING**

Preliminary mapping and air photo studies to identify preliminary reach breaks and sample site locations was conducted during April and May 1997. The field studies were undertaken from the last week of May through until mid-July. The end of May period coincided with the cutthroat trout spawning period, while some fry emergence had begun by early July. The early portion of the study period concentrated on the small tributaries and lake-headed areas. The downstream sections of the larger tributaries were not sampled until the early July period due to high flow conditions making sampling difficult.

## 1.2.2 LOGISTICS

Road access combined with walking was used whenever available throughout the study area. Approximately 10 hours of helicopter time (Northern Mountain Helicopters based out of Houston) was required to access areas too far from the roads to walk into.

Most of the field surveys were conducted by a crew of two. A second crew assisted during flying days, to make effective use of the helicopter.

#### 1.2.3 STREAM IDENTIFIERS

Watershed codes were available from the MELP office in Smithers from maps at a 1:50,000 scale. These were transferred to the 1:20,000 base maps. Since many of the smaller tributaries do not appear on the larger scale maps and therefore did not have a map designation at the 1:20,000 scale, we developed an interim location point identifier consisting of a mix of letters (first letter of tributary) and the number (n<sup>th</sup> tributary upstream from the mouth of the main tributary). Each stream has this unique designation, while only some have the official watershed code as digitized by MELP.

#### 1.2.4 HABITAT AND FISH SAMPLING

Resources Inventory Committee (RIC) Standard Reconnaissance Level Stream Inventory (MOELP, Draft 1995) and Forest Practices Code guidebooks provided the framework for conducting the fish and habitat surveys. The details of the sampling procedure are laid out in the *Schedule A Streams* accompanying reconnaissance level stream survey contracts conducted in 1996. These surveys were a continuation of a 1996 contract.

Several modifications were made to methodologies in consultation with the project monitor to allow for a more realistic achievement of program objectives. These are outlined below:

- The stream surveys emphasized distribution information. Considerable effort was directed at establishing the upstream barriers to fish distribution. In areas with poor access, or where tributaries continued for a considerable distance at slopes less than 20%, an estimate of the upper extent of fish access was made based on map contours and aerial reconnaissance observations. These sites have been delineated as suspected fish habitat on the accompanying aquatic maps (dashed red lines).
- Fish sampling was conducted above and below potential barriers. If extensive areas of potential fish habitat were identified as barren due to downstream barriers, a minimum of two sites were established to confirm barren designation. The main fish species present in the upper reaches of study streams were cutthroat and Dolly Varden. These species are present in the tributaries year-round, making it unnecessary to repeat sampling in these creeks during a different season to confirm that they are barren.

We did not conduct detailed ground habitat assessments along the entire length of larger channels similar to those conducted in the Thautil River on any of the five study streams. None of these streams were utilized by bull trout, and although they are utilized by coho and steelhead, use is restricted to the lower sections accessible from the Morice River.

Electrofishing was the main method of fish sampling in the study area. Generally, a lower stopnet was used at the sample sites, and a single pass was made up and back down to the net. Stopnets were not used where access was poor and a long hike was required. Overnight minnow trap sets were used in some of the deep slow-flowing stream and small lake habitats. Fish index sites assessing fish densities using multiple pass removal were not established at sites in this study area.

Branchiostegal ray counts were conducted on all char larger than 50 mm fork length. These counts, in conjunction with head shape, were used to separate Dolly Varden and bull trout (*Salvelinus confluentus*) in this study.

# 1.2.5 AMPHIBIAN DISTRIBUTION

Amphibian presence/absence information was recorded during the reconnaissance inventory. Electrofishing and minnow trapping, particularly in pond and small headwater lake areas provided special opportunities for amphibian observations. Care was taken to look for tailed frogs in steeper tributaries.

## 1.3 RESULTS AND DISCUSSION

#### 1.3.1 DISTRIBUTION AND ABUNDANCE BY SPECIES

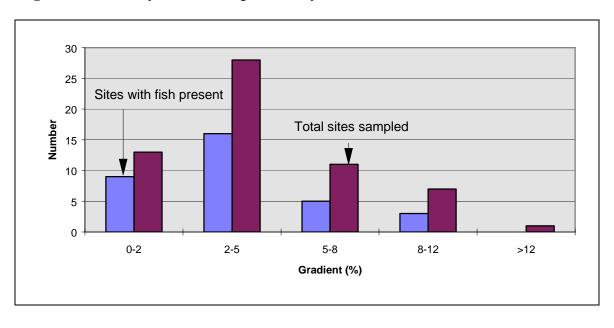
Habitat descriptions and fish sampling was conducted at a total of 60 sites in the five study streams, primarily in Tagit and False Tagit creeks (Table 1). Fish were present at 33 of these sites. No bull trout were identified in any of the study streams.

Figure 2 shows the summary of sample sites by gradient characteristics. Only a single site with a stream gradient of >12% was sampled, reflecting the relatively gentle terrain characteristic of much of the fish-producing sections of the watershed. The upper limit of fish distribution in the study streams was often determined by a sharp increase in stream gradient at the base of steeper hillsides in conjunction with decreased stream size to a point that the streams were too small to support resident fish populations. Beaver dams play an important role in determining the upper extent of anadromous fish access in both Tagit and False Tagit creeks.

Table 1. Summary of Number of Sites Sampled and Breakdown of Species Present at Sample Sites for the Five Study Streams.

	Number of sites sampled	Fish present	Fish not present	Cutthroat Trout	Dolly Varden	Coho	Steelhead
Unnamed	1	0	1	0	0	0	0
False Tagit	23	12	11	12	1	0	1
Tagit <sup>2</sup>	27	15	12	12	9	1	1
O'Dine	6	4	2	4	0	1	1
Swamp	3	2	1	2	0	1	0
Total	60	33	27	30	10	3	3

Figure 2. Summary of Fish Sample Sites by Gradient.



<sup>&</sup>lt;sup>2</sup> Four sample sites LS1 to LS4 are not included in these totals. These sites were examined during the 1996 lake surveys at Chisholm Lake (DeGisi and Schell 1997).

# 1.3.1.1 Cutthroat Trout

Cutthroat trout were the most frequently encountered species, and were present at 30 of the 33 fish sites (Table 1). Cutthroat trout were the dominant species in all of the creeks sampled except Swamp Creek, and comprised 78% of the total number of fish sampled in the five study streams (Table 2).

Spawners in Tagit Creek ranged from 20-28 cm fork length (Figure 3). Ripe spawners were captured at the end of May at Site 9 in Ta1, and kelts were sampled in mid-June through early July in Tagit Creek upstream from Chisholm Lake (Sites 1 and 5).

Cutthroat trout in Tagit Creek achieve a larger size than in the other systems and are presumably part of the Chisholm Lake population that achieve a similar size (DeGisi and Schell 1997).

No cutthroat larger than 20 cm were captured in the other tributary streams (Figure 3). We suspect these other populations are a mix of stream and small lake residents.

Table 2. Fish Species Composition by Study Stream.

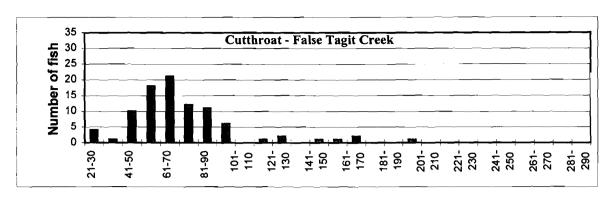
Stream		Cutthroat	Rainbow	Dolly Varden	Coho	Longnose Dace <sup>3</sup>	Sculpin sp.4	Pacific lamprey	TOTAL
False Tagit	# %	90 85.7	10 9.5	1 1.0	0 0.0	2 1.9	0 0.0	2 1.9	105
Tagit	# %	122 72.2	33 19.5	4 2.4	1 0.6	8 4.7	1 0.6	Present	169
O'Dine	# %	40 93.0	2 4.7	0 0.0	1 2.3	0 0.0	0 0.0		43
Swamp	# %	4 33.3	0 0.0	0 0.0	8 66.7	0 0.0	0 0.0		12
TOTAL	# %	256 78.3	45 13.8	5 1.5	10 3.1	10 3.1	1 0.3		327

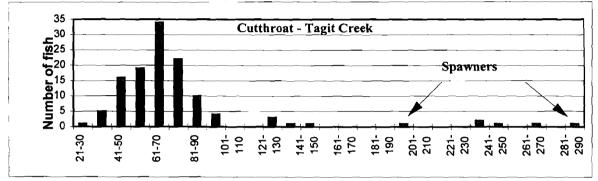
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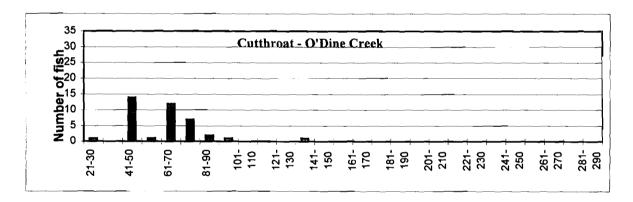
<sup>&</sup>lt;sup>3</sup> Rhinichthys cataractae

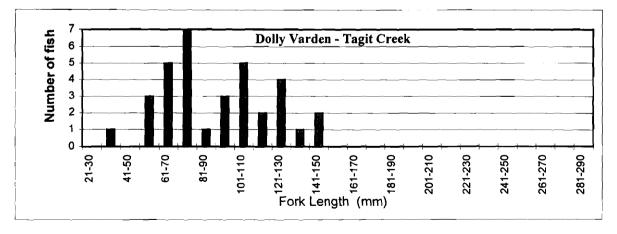
<sup>&</sup>lt;sup>4</sup> Cottus asper

Figure 3. Length Frequency of Cutthroat and Dolly Varden Sampled in Study Streams.









Cutthroat spawning appeared to be widespread throughout the study streams based on the presence of fry at many of the sample site locations. Spawners or newly-emerged fry were noted in the mainstem Tagit Creek for at least 5 km upstream from Chisholm Lake, and the lower ends of Ta1 and Ta7. Newly-emerged cutthroat fry were also identified in False Tagit Creek in the vicinity of Site 4 (downstream from lake).

Cutthroat trout were sampled at sites with gradients ranging from 0.5 to 10% (Table 3). The mean channel width of cutthroat trout sample sites was 2.9 m.

Table 3. Slope and Channel Width Characteristics of Sample Sites with Fish Species Present Combined for the Five Study Streams.

	Slop	oe (%)	Channel V	Width (m)
	Cutthroat	<b>Dolly Varden</b>	Cutthroat	Dolly Varden
Mean	3.3	4.8	2.9	4.1
Number	30	10	30	10
Maximum	10.0	11.0	6.6	6.6
Minimum	0.5	2.0	0.8	0.5

## 1.3.1.2 Dolly Varden

Dolly Varden were present at 10 sites, mostly in Tagit Creek. A single char fry (assumed to be Dolly Varden) was sampled at the lower site in False Tagit Creek. It is interesting to note that the main area for Dolly Varden use was in the mainstem of Tagit Creek upstream from Chisholm Lake and in a large headwater tributary (Ta9).

Dolly Varden were present at sites up to 11% slope and with a mean channel width of 4.1 m. This summary suggests that Dolly Varden were utilizing steeper and wider channel sections than cutthroat (Table 3).

The stream sections utilized by Dolly Varden were draining moderately steep higher elevation sites with minimal wetland and lake habitat. We suspect water temperatures remain relatively low in these areas during the late summer compared to lake-headed or wetland dominated areas.

The Dolly Varden sampled in this study are assumed to be stream residents that mature at a very small size. The largest Dolly Varden sampled in this study was 15 cm fork length (Figure 3). This is similar to observations of Dolly Varden in adjacent streams tributary to the Thautil River, where only 3 fish of 316 sampled exceeded 15 cm fork length (Bustard 1997).

#### 1.3.1.3 Coho Salmon

Coho were present at three sites in the lower accessible sections of Tagit, O'Dine, and Swamp creeks. Abundance in these systems was very low, and only single coho (yearlings) were captured in Tagit and O'Dine creeks. Coho are also known to utilize lower False Tagit Creek based on historical data (Envirocon 1984; Morris and Eccles 1975).

The sites sampled in this study tended to be at the upper extent of coho distribution in these systems, and we suspect that abundances would be higher at sites closer to the Morice River, especially during years of better spawner recruitment than in the past decade. High stream discharges during the fall spawning period are probably important, since this would enable adult spawners to gain better access farther upstream.

The lower sections of the four main study streams with either historical or existing coho use should be considered the most important fisheries habitat in the study area. Although numbers are not high at present, these sites offer potential habitat. Estimates conducted during 1979 (Envirocon 1984) suggested that False Tagit and Tagit creeks accounted for 3.4% and 0.1% of the overall coho fry production for all Morice River tributaries combined for that year.

#### 1.3.1.4 Steelhead Trout

Rainbow juveniles (suspected to be the progeny of steelhead) were sampled at three locations in lower Tagit, False Tagit and O'Dine creeks. The lower ends of these creeks are directly accessible from the Morice River, and we suspect steelhead are able to access these tributaries for spawning during high flows in the late April and May spawning period. No resident rainbow trout were captured in these tributaries.

Similar to coho, the sample sites were located near the upper extent of steelhead access and potential use, and abundance estimates would probably be higher at locations closer to the Morice River. Small tributary streams contribute to the very important Morice River steelhead fishery, and should be considered important habitats. For example, estimates conducted during 1979 suggested that Tagit and False Tagit creeks together accounted for between 3 and 5% of the overall steelhead fry and parr production for Morice River tributary streams (Envirocon 1984).

#### 1.3.2 AMPHIBIAN OBSERVATIONS

Observations of all amphibians encountered during the surveys were recorded and are summarized in Section 2 Table 2. The data indicate that amphibian observations were relatively infrequent in the study streams. In all, there were three observations of Spotted Frogs (*Rana pretiosa*) and three observations of Westerns Toads (*Bufo boreas*). The observations were scattered throughout the three larger study streams.

No salmanders were captured at the minnow trap sites in ponded areas. As well, no tailed frogs (*Ascaphus truei*) were observed during the surveys.

#### 1.3.3 STREAM CROSSINGS - POTENTIAL RESTORATION SITES

Fish passage difficulties were identified at three locations in the study area. These sites should be assessed to determine whether the culverts can be removed or replaced with structures that allow for fish access.

## **Tagit Creek**

Site 7 in Reach 6. There is a culvert impassable to fish upstream movement at this location. The culvert is 12.2 m long by 1.8 m diameter and is installed at a 10% slope. Dolly Varden were present downstream from this culvert, but were not captured upstream. The stream is accessible to an impassable chute located approximately 600 m upstream.

Sites 18 and 19 in Trib Ta7. This stream had newly-emerged cutthroat fry present above and below the crossing site. We assume it is not a total barrier to adults moving upstream, but high water velocities will restrict movements. The culvert is 12 m long by 1 m diameter with 2.5 m fill. There is approximately 500 m of potential fish habitat upstream from the crossing.

## **False Tagit Creek**

Site 3 Reach 4. A large oval culvert 18 m long and 1.5 m in diameter with a 3 m fill is present at this site. This culvert is installed at a 6% slope with a 15 cm drop at the outlet. We suspect that this culvert restricts cutthroat movements upstream in this section of False Tagit Creek. It should be noted that there are several small bedrock chutes approximately 1 km upstream that also restrict movements between the lake and this section of stream.

# 1.4 CONCLUSIONS

The fish distribution and riparian classification based on the surveys are presented on the 1:20,000 maps accompanying this report. These surveys were done throughout most of the reaches in the five study streams with potential fish use. Some extrapolation of the upper extent of fish distribution was made, particularly in O'Dine Creek, but most of the information should provide a good estimate of fish distribution by species.

The most significant fisheries values were associated with Tagit Creek between Chisholm Lake and the Morice River, the lower 4 km of False Tagit Creek, and the lower sections of O'Dine and Swamp creeks. These areas are accessible from the Morice River and are utilized by coho and steelhead. Small tribuataries such as these provide important rearing and possibly spawning areas for these species.

Tagit Creek and accessible tributaries upstream from Chisholm Lake provides important spawning and rearing habitat for the lake population of cutthroat. Establishing riparian areas along streams in the upper Tagit Watershed are probably important for keeping water temperatures cool enough to continue to support the only char rearing areas occurring in the five study streams.

Several locations where culvert placements on fish streams restrict upstream fish movements were identified in these studies. Since fish use is occurring at stream gradients up to at least 11% in this study area, care must be taken to locate crossing sites that do not lead to passage difficulty. Problem culverts should be removed as soon as possible, particularly at those sites where significant lengths of potential fish habitat are inaccessible due to culverts.

# 1.5 LITERATURE CITED

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SECTION 2 - FISH SUMMARIES AND STREAM SURVEY FORMS



Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area (m*m)	Water Temp (°C)	Capture Method	Pass/ Trap#	Spp.	FL (mm)	Activity	Comments
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	11	312.0	12	EL_	1	CT	59	R	Lower net.
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	60	_ R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	62	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	11_	CT	66	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	66	R	<u> </u>
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	66	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	11	312.0	12	EL	1	CT	66	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	67	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1_	312.0	12	EL	11	CT	68	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	11	312.0	12	EL	11	СТ	70	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT_	72	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL_	1	CT	72	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	СТ	78	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	79	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	82	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	83	R_	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	83	R	<u></u>
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	87	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	90	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	11	СТ	93	R	
False Tagit C	460-6006-407-000-000-000	97/06/11	2	11	312.0	12	EL	1	CT	93	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	96	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	CT	112	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	11	СТ	122	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	1	TR	66	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2_	1	312.0	12	EL	1	TR	27	R	Many fry were observed which were still in
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	11	312.0	12	EL	1	DV	38	R_	the gravel.
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	1	RB	55	R	No access problems from main river to
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	_12	EL	11	RB	60	R	R2; suspect RB may be progeny of SST.
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	_1_	312.0	12	EL_	11	RB	63	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	RB	68	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	1	RB	72	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL_	1	RB	88	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL_	1	RB	113	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	2	1	312.0	12	EL	1	RB	122	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	11	RB	129	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	2	1	312.0	12	EL	1	RB	133	R_	<u> </u>
False Tagit C.	460-6006-407-000-000-000	97/06/12	3	2	102.0	13	EL	1	CT	60	R	No lower net. 4 other juv.'s were observed.
False Tagit C.	460-6006-407-000-000-000-000	97/06/12	3	2	102.0	13	EL	11	PL	лт	S	PL pair appeared to be making a redd.
False Tagit C.	460-6006-407-000-000-000-000	97/06/12	3	2	102.0	13	<u>EL</u>	1	PL	nm	S	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	43	R	Lower net. Also electrofished 10 m section
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	СТ	52	R	above the culvert; 4 fish were observed.
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	52	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	СТ	52	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	СТ	58	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	59	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	62	R	

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area	Water	Capture	Pass/	Spp.	FL (mm)	Activity	Comments
iadine			"	#	(m*m)	Temp ( <sup>0</sup> C)	Method	Trap#		(mm)		}
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	66	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	68	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	68	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	71	R	Mort.
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92,4	15	EL	1	CT	72	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	72	R	<del></del>
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92,4	15	EL	1	CT	79	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	79	R	·
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL		CT	81	R	
False Tagit C.	460-6006-407-000-000-000-000	97/06/11	4	3	92.4	15	EL		CT	87	R	
False Tagit C.	460-6006-407-000-000-000	97/06/11	4	3	92.4	15	EL	1	CT	199	R	<del></del>
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	CT	28	R	Spot shocked. Observed numerous fry
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	CT	28	R	<del>                                     </del>
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17_	EL	1-1	CT	28	R	near lake outlet.
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	CT	60	R	<del> </del>
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL_	1	CT		R	<del> </del>
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL_	1	CT	66 67	R	
False Tagit C.	460-6006-407-000-000-000-000	<del></del>						· ·				<del> </del>
False Tagit C.		97/07/08	4	4	57.0	17	EL	1	CT	72	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	CT	77	R	
	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL _	1	СТ	78	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL_	1	СТ	83	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	СТ	84	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	CT	91	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	11	CT	96	R	<u> </u>
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	4	4	57.0	17	EL	1	LNC	86	R	
False Tagit C.	460-6006-407-000-000-000	97/07/08	4	4	57.0	17	EL	11	LNC	120	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL	11	СТ	40	R	No lower net.
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL	1_	СТ	41	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL	1	CT_	42	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL_	1	CT	42	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL	1	СТ	43_	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	<u>EL</u>	1	CT	43	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL	1	СТ	43	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL	1	СТ	45	R	
False Tagit C.	460-6006-407-000-000-000-000	97/07/08	6	5	70.0	8	EL,	1 [	CT	52	R	
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	11	СТ	53	R	No lower net; silt bed material affected
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	1	СТ	58	R_	visibility during shocking. 4 CT were
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	1	CT	65	R	observed but not caught.
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	1	CT	66	R	
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	1	CT	67	<u>R</u>	
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	1	CT	81	R	
False Tagit C. Trib. FTa4	460-6006-407-FTa-4 -000-000	97/06/12	1	9	49.5	11.5	EL	1	CT	82	R	
False Tagit C. Trib. FTa5	460-6006-407-481-000-000-000	97/06/11	2	12	nm	14	MT	nm	СТ	63	R	Fish caught in the 4 traps set below the BD.
False Tagit C. Trib. FTa5	460-6006-407-481-000-000-000	97/06/11	2	12	nm	14	MT	nm	CT	65	R	
False Tagit C. Trib. FTa5	460-6006-407-481-000-000-000	97/06/11	2	12	nm	14	MT	nm	CT	74	R	
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/06/11	_ 1 _	15	90.0	11	EL	11	CT	50	R	No lower net.
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/06/11	1	15	90.0	11	EL :	1 1	CT	52	R	

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area (m*m)	Water Temp ( <sup>0</sup> C)	Capture Method	Pass/ Trap#	Spp.	FL (mm)	Activity	Comments
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/06/11	1	15	90.0	11	EL.	1	CT	53	R	
False Tagit C. Trib. FTa5,1	460-6006-407-481-221-000-000	97/06/11	1	15	90.0	11	EL	1	CT	55	R	
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/06/11	1 1	15	90.0	11	EL	1	CT	56	R	
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/06/11	1	15	90.0	11	EL	1	CT	57	R	Mort.
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/07/08	2	16	37.4	8	EL.	1	CT	46	R	Lower net. CT with heavy spotting;
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/07/08	2	16	37,4	8	EL.	1	CT	92	R	suspect CT are stream residents.
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/07/08	2	16	37,4	8	EL	1	CT	127	R	odopot o raid ottorni rodani.
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/07/08	2	16	37.4	8	EL	1	CT	144	R	
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/07/08	2	16	37.4	8	EL	1	CT.	162	R	· ·
False Tagit C. Trib. FTa5.1	460-6006-407-481-221-000-000	97/07/08	2	16	37.4	8	 EL	1	CT	168	R	
False Tagit C. Trib. FTa5.4	460-6006-407-481-FTa-5,4-000	97/07/08	1	19	36.0	10	EL	1	CT	69	R	No lower net.
False Tagit C. Trib. FTa5.4	460-6006-407-481-FTa-5.4-000	97/07/08	1	20	55.0	10	EL	1	CT	60	R	No lower net.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	80	R	10.000
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	81	- 'R'	<del> </del>
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	81	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	87	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	88	R	<del>                                     </del>
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	96	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	_ i -	CT	113	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	127	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	CT	233	S/M	Spawned-out male.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	RB	79	R	Lower net. Suspect RB are SST.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	RB	92	R	No slash, full margin on the adipose fin.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1 1	129.5	16	EL	1	RB	98	R	No slash - RB characteristic.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	RB	117	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	_1	129.5	16	EL	1	RB	122	R	No slash - RB characteristic.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	RB	133	R	,
Tagit C.	460-6006-445-000-000-000-000	97/07/02	11	_ 1	129.5	16	EL	1	RB	143	R	No slash - RB characteristic.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	_1	129.5	16	EL	1	RB	145	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	11	1	129.5	16	EL	1	RB	181	R	No hyoid teeth present.
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL_	1	CO		R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02_	11	1	129.5	16	EL	1	LNC	87	R	<u></u>
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	LNC	88	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	LNC	88	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1 1	LNC	93	R	<u> </u>
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1 . ,	129.5	16	EL	1	LNC	100	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	LNC	110	R	<u></u>
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	LNC	112	R	<del>                                     </del>
Tagit C.	460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	11	LNC	127	R_	
Tagit C.	460-6006-445-000-000-000-000 460-6006-445-000-000-000-000	97/07/02	1	1	129.5	16	EL	1	PL	nm	R	Observed several lamprey ammoecetes.
Tagit C. Tagit C.	460-6006-445-000-000-000-000	97/07/03 97/07/03	4_	_2	90.0	8.5	EL	1	CT	42	R	Lower net.
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	CT	43	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	CT	49	Ř	<del></del>
Tagit C.	460-6006-445-000-000-000-000	97/07/03		2 2	90.0	8.5	EL	1	CT	50	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	-2	90.0 90.0	8.5 8.5	EL	1	CT CT	51 71	R R	
	700700007443=UUU-UUU-UUU-UUU-UU	M//D//DIS	4		MULL	85	F1	1 1	1:1	/1	L L	

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream	Watershed Code	Date	Reach	Site	Area	Water	Capture	Pass/	Spp.	FL	Activity	Comments
Name		]	#	#	(m*m)	Temp	Method	Trap#		(mm)	_	
	1		ľ			(°C)						i
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	CT	75	Ŕ	
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	CT	76	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	СТ	80	R	
Tagit C.	460-6006-445-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	CT	90	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	DV	58	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	DV	59	R	
Tagit C.	460-6006-445-000-000-000	97/07/03	4	2	90.0	8.5	EL	1	CAS	58	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	41	R	Lower net.
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	СТ	43	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	43	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	44	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	44	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	46	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	67	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	75	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	75	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	78	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	78	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	79	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	СТ	79	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	80	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	81	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	СТ	82	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	87	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	CT	95	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	4	3	132.8	13	EL	1	DV	91	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL	1	CT	67	R	Lower net.
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL	1	CT	67	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL	1	CT	68	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL	1	СТ	73	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL	1	CT	133	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL	1	DV	75	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	4	4	308.0	9	EL.	1	DV	100	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	62	R	Lower net.
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	62	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	63	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	63	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	63	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	71	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	240	S/M	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	СТ	250	S/M	Spawned-out male.
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	CT	270	S/M	Spawned-out male.
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	DV	69	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	DV	74	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	DV	74	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	DV	74	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1	DV	103	R	

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area (m*m)	Water Temp (°C)	Capture Method	Pass/ Trap#	Spp.	FL (mm)	Activity	Comments
Tagit C.	460-6006-445-000-000-000-000	97/06/18	5	5	232.0	7	EL	1 _	DV	126	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	6	6	265.2	7	EL	1	CT	65	R	Lower net.
Tagit C.	460-6006-445-000-000-000-000	97/06/18	6	6	265.2	7	EL	1	CT	68	R	4 fish were observed but not caught; high
Tagit C.	460-6006-445-000-000-000-000	97/06/18	6	6	265.2	7	EL	1	СТ	69	R	water velocities.
Tagit C.	460-6006-445-000-000-000-000	97/06/18	_ 6	6	265.2	7	EL	1	CT	77	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	6	6	265.2	7	EL	1	CT	121	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	6	6	265.2	7	EL	1	DV	103	R	
Tagit C.	460-6006-445-000-000-000-000	97/06/18	6	6	265.2	7	EL	1	DV	117	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	6	7	273.3	9	EL	1	DV	106	R	Lower net.
Tagit C.	460-6006-445-000-000-000-000	97/07/01	6	7	273.3	9	EL	1	DV	114	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	6	7	273.3	9	EL	1	DV	129	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	6	7	273.3	9	EL	1	DV	130	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	6	7	273.3	9	EL	1	DV	133	R	
Tagit C.	460-6006-445-000-000-000-000	97/07/01	6	7	273.3	9	EL	1	DV	145	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	СТ	40	R	Lower net. High flows. A small section u/s
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	СТ	47	R	from the bridge was sampled. Site length
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT	48	R	was not measured.
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	СТ	49	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT	52	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT	53	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT	54	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT	56	R	<u> </u>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT	196	S/M	Ripe male. Scales samples were taken.
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/28	1	9	nm	8.5	EL	1	CT CT	281	S/M	Ripe male. Scales samples were taken.
Tagit C. Trib,Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	28	R	This site was re-sampled at lower flows;
Tagit C. Trib,Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	58	<u>,                                   </u>	no lower net.
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	59	R	THO TOWER FIEL.
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	60	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	60	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	62	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	62	R	<u> </u>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	62	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	63	R	<del>                                     </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	65	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	65	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	65	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	66	R	<del>                                     </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	66	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	67	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT CT	67	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	68	R	<u> </u>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	68	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	68	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	68	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL		CT	68	R	†
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	68	R	<del> </del>
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	69	R	<del></del>

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area (m*m)	Water Temp (°C)	Capture Method	Pass/ Trap#	Spp.	FL (mm)	Activity	Comments
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	_ 1	9	143.1	nm	EL	1	СТ	70	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	70	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	70	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	70	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	72	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	СТ	73	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	73	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	79	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	СТ	79	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	81	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/07/09	1	9	143.1	nm	EL	1	CT	83	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/29	2	11	202.7	7.5	EL	1	СТ	51	R	No lower net.
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/29	2	11	202.7	7.5	EL	1	CT	52	R	6 other CT were observed but not caught.
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/29	2	11	202.7	7.5	EL	1	CT	53	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/29	2	11	202.7	7.5	EL	1	CT	55	R	
Tagit C. Trib.Ta1	460-6006-445-112-000-000-000	97/05/29	2	11	202.7	7.5	EL	1	CT	58	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/05/29	1	18	160.0	6	ĘL	1	CT	33	Ř	Lower net.
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/05/29	1	18	160.0	6	EL	1	СТ	35	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/05/29	1	18	160.0	6	EL	1	CT	37	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/05/29	1	18	160.0	6	EL	1	CT	39	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/05/29	1	18	160.0	6	EL	1	СТ	50	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/07/02	2	19	80.6	11	EL	1	CT	44	R	No lower net. 5 other CT were observed
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/07/02	2	19	80.6	11	EL	1	CT	47	R	but not caught.
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/07/02	2	19	80.6	11	EL	1	СТ	52	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/07/02	2	19	80.6	11	EL	1	CT	53	R	
Tagit C. Trib.Ta7	460-6006-445-389-000-000-000	97/07/02	2	19	80.6	11	EL	1	CT	57	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	СТ	51	R	Lower net.
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	СТ	57	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	DV	58	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	DV	63	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	DV	69	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	DV	69	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/01	1	22	~166	10.5	EL	1	DV	73	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	130	R	No lower net. 10 other CT were observed
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	91	R	but not caught.
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	110	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	67	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	80	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	77	R	
Tagit C. Trib.Ta9	460-6006-445-Ta9-000-000-000	97/07/03	2	23	180.0	11	EL	1	DV	103	R	
Tagit C. Trib.Ta9.2	460-6006-445-Ta92 -000-000	97/07/03	1	26	40.0	10	EL	1	DV	87	R	Lower net.
Tagit C. Trib.Ta9.2	460-6006-445-Ta92 -000-000	97/07/03	1	26	40.0	10	EL	1	DV	117	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CO	104	R	No lower net.
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CT	62	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CT	63	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CT	64	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	<u>-</u>	CT	71	R	

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area (m*m)	Water Temp	Capture Method	Pass/ Trap #	Spp.	FL (mm)	Activity	Comments
 						(°C)				Ĺ		
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CT	73	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CT	91	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	CT	96	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	RB	71	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	1	1	38.2	11	EL	1	RB	154	R	
O'Dine C.	460-6006-474-000-000-000-000	97/05/29	2	2	na	6	MT	na	CT	66	R	Set 10 traps overnight.
O'Dine C	460-6006-474-000-000-000-000	97/05/29	2	2	na	6	MT	na	CT	136	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	СТ	41	R	Lower net.
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	41	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	СТ	41	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	42	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	42	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	42	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	43	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	43	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	45	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	46	R	<del> </del>
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	47	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT CT	47	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	- <del>i</del> -+	CT	48	R	<del> </del>
O'Dine C	460-6006-474-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	49	R	
O'Dine C.	460-6006-474-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	51	R	
O'Dine C.	460-6006-474-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	63	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	63	R	
O'Dine C.	460-6006-474-000-000-000	97/07/03	3	3	73.5	7.9	EL	<u> </u>	CT	64	R	<del> </del>
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	66	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	68	R	<del> </del>
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	69	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	70	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	71	R	
O'Dine C.	460-6006-474-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	72	R	<del></del>
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	73	R	<del> </del>
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	1	CT	78	R	
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL	<del>'</del>	CT	79	R	<del> </del>
O'Dine C.	460-6006-474-000-000-000-000	97/07/03	3	3	73.5	7.9	EL		CT	83	R	<del></del>
O'Dine C. Trib. O'D1	460-6006-474-O'D-1 -000-000	97/10/22	2	5	54.0	3	EL	1	CT	33	R	No lower set
O'Dine C. Trib. O'D1	460-6006-474-O'D-1 -000-000	97/10/22	2	5	54.0	3	EL	1	CT	69	R	No lower net.
O'Dine C. Trib. O'D1	460-6006-474-O'D-1 -000-000	97/10/22	2	5	54.0	3	EL					<u> </u>
Swamp C.	460-6006-481-000-000-000	97/10/22						1	CT	83	R	I amenda
Swamp C.	460-6006-481-000-000-000-000		1		40.3	11	EL	_1	CT	124	R	Lower net.
Swamp C.		97/07/03	1	1	40.3	11	EL		CO	47	R	<del> </del>
	460-6006-481-000-000-000-000	97/07/03	!	1	40,3	11	EL		СО	49	R	
Swamp C.	460-6006-481-000-000-000-000	97/07/03		1	40.3	11	EL	1	CO	58	R	
Swamp C.	460-6006-481-000-000-000-000	97/07/03	1	1	40.3	11	EL _	1	CO	58	R	
Swamp C.	460-6006-481-000-000-000	97/07/03	1	!	40.3	11	EL	1	co	61	R	
Swamp C.	460-6006-481-000-000-000-000	97/07/03	1	1	40.3	11	EL	1	co	62	R	
Swamp C.	460-6006-481-000-000-000-000	97/07/03	1	1	40.3	11	EL	1	co	71	R	
Swamp C	460-6006-481-000-000-000-000	97/07/03	1	1	40.3	11	EL	1	co	80	R	

Table 1. Tagit Creek and Adjacent Tributaries Fish Collection Data Form - 1997

Stream Name	Watershed Code	Date	Reach #	Site #	Area (m*m)	Water Temp (°C)	Capture Method	Pass/ Trap#	Spp.	FL (mm)	Activity	Comments
Swamp C.	460-6006-481-000-000-000-000	97/07/03	1	1	40.3	11	EL	1	CO	83	R	
Swamp C.	460-6006-481-000-000-000-000	97/07/02	3	2	65.3	11	EL	1	CT	104	R	No lower net.
Swamp C.	460-6006-481-000-000-000-000	97/07/02	3	2	65.3	11	EL.	1	CT	110	R	
Swamp C.	460-6006-481-000-000-000-000	97/07/02	3	2	65.3	11	EL	1	CT	113	R	

Notes: - Sampling was conducted by Dave Bustard and Associates (C87).

- nm = not measured

- Area sampled was not available for the minnow trapping sites.

Crew Summary:

Dave Bustard
Rob Dams
Catherine Portman
Jordan Beblow
lan Fuhr

Table 2. Summary of Tagit Creek and Adjacent Tributaries Amphibian Observations, May - July, 1997.

Stream Name	Date	Reach #	Site #	Species	Number	Comments
False Tagit Creek	12/06/97	3	2	Western Toad	1	Observed on creek bank.
False Tagit C. Tributary FTa5	08/07/97	3	13	Western Spotted Frog	1	Located within sample site.
False Tagit C. Tributary FTa5.4	08/07/97	1	20	Western Spotted Frog	1	Located in side tributary to FTa5.4.
Tagit C. Tributary Ta9	01/07/97	1	22	Western Toad	1	Located within sample site.
Tagit C. Tributary Ta9	08/07/97	3	24	Western Toad	1	Observed in swamp near creek.
O'Dine Creek	10/09/97	1_	6	Western Spotted Frog	1	Located within sample site.





# Stream Survey Forms - Explanatory Notes

Data entry of the Stream Survey Cards required certain modifications in order for the data to be explanatory and to correct for inconsistencies between the hard copy and the disk copy. The following is a list of the modifications and some points which are important to note:

- Many of the smaller tributaries which were surveyed have no official watershed
  codes. All tributaries were assigned alphanumeric codes, including those tributaries
  that do not have watershed codes. In order for the entry of each stream survey form
  into the program and to distinguish between each tributary, it was necessary to
  identify each tributary lacking a watershed code by INCORPORATING THE
  ALPHANUMERIC CODE INTO THE WATERSHED CODE.
- POOL DEPTH METHOD was entered on each stream survey form and is present on the disk copy. The program MISPRINTS this value on the hard copy, PRINTING OUT THE MAXIMUM RIFFLE DEPTH VALUE IN PLACE OF THE POOL DEPTH METHOD.
- When the percentage riffle is entered as 100%, the program prints out this value as 02. In cases WHERE THE PERCENTAGE RIFFLE IS 100%, IT IS ENTERED AS 99% to avoid the printing error.
- DEBRIS AREA is divided into categories of 0%, 0-5%, 5-15%, and >15% and the data is entered appropriately into each of these categories. WHEN THE STREAM SURVEY FORMS ARE PRINTED OUT, THE CATEGORIES ARE MISPRINTED AS 0%, 0-10%, 10-40%, AND >40%.
- In the 'Cover' section of the stream survey form, the PERCENTAGE COVER BY BOULDER IS REPRESENTATIVE OF THE PERCENTAGE COVER BY BOULDER/COBBLE. This is due to the importance of cobble cover for the rearing of juveniles.
- BED MATERIAL ENTERED AS HIGH COMPACTION ON THE DISK COPY PRINTS OUT ON THE HARD COPY AS LOW COMPACTION AND VICE VERSA.
- For D90 values which are less than 1 cm, the program prints out this value as zero.
- In the 'Banks' section, the METHODS CM, PH and TC were added to the list. CM represents a CONDUCTIVITY METER, PH represents a pH METER, and TC represents a HAND-HELD THERMOMETER.

- The majority of the tributaries were given a TURBIDITY VALUE OF 200 CM. This
  value was not quantitatively measured but was a SET VALUE USED TO
  REPRESENT GIN CLEAR WATER which was visually observed.
- CREEKS WHICH HAD A TRICKLE FLOW DISCHARGE WERE GIVEN A MINIMUM DISCHARGE VALUE OF 0.01 M<sup>3</sup>/S even though the flow was presumably less than this value. This was done to prevent a null value when some flow was, indeed, present.
- The majority of the discharge values were visually estimated by experienced field persons. THE METHOD OF DISCHARGE WAS ENTERED IN THE METHOD OF WATER VELOCITY CATEGORY because this was the only place the program would allow the appropriate method, VO (visual observation), to be entered.
- In the Reach Symbol, the FISH SPECIES ABBREVIATIONS WHICH ARE IN BRACKETS ARE ONLY SUSPECTED TO BE PRESENT based on other sampling data or other research previously conducted in the area. NO SAMPLING WAS PERFORMED THAT CONFIRMS THAT THESE SPECIES ARE PRESENT.
- In the Reach Symbol, the abbreviations NS and NF in the fish species section stand for 'NOT SAMPLED' and 'NO FISH' respectively.
- In the Reach Symbol, the average stream channel width is rounded off to the nearest 1 m. IF THE AVERAGE STREAM CHANNEL WIDTH IS LESS THAN 0.5 M, IT IS GIVEN A VALUE OF ZERO.
- Stream/Valley Cross-Sections were not entered onto the disk copy; if needed, they can be found on the original stream survey cards.
- The 'Obstructions' section rounds off the obstruction location to 0.1 km from the mouth and the obstruction height to 1 m. Obstructions less than 1 m are important to fish distribution on smaller systems and are specified in the comment section.

Stream: UNNAMED C. 11-Sep-98

Watershed Code:

Header Info	rmatie									<u> </u>			
Stream Name:	UNNAI			Stream	"Local":	UNI	NAMED C.				Access:		V2
Watershed Code:	460-600	6-397-	000-000-000-000-000-000-000-000						Reach No.:	2	Reach Length (km):	5.1 Method:	MW
Location:	SURVE	YED I	00 m BELOW THE ROAD, ~1.4 km U/S	Map #:	093 <b>L</b> 0	25			Site No.:	1	Length surveyed (m):	100.0 Method:	HC
	FROM	MOUT	H.	U.T.M.	: 9.621	2 .60056			Fish Card:	N	Field: Yes	Historical:	No
Date: 04/06/97	Tim	ie: 12:	OO Agency: C87 Survey	Crew: CP \R	D\ \ \ \	1 1 1			Photos:	A2/2, 3	Air Photos:	BCB 91	
Channel Cha	racte	risti	cs			Specific	Data		Bed Material				
Av. Chan. Width (m)	:	4.3	Method Av. Chan. Width (m):	T 4.:	3 3,6	5.1	4.7	3.9	% Fines (<2mm):	90	% Fines (<2mm):		90
Av. Wet. Width (m):		1.0	Method Av. Wet. Width (m):	Т					% Gravels:	10	Small (2-16mm):		10
Av. Max. Rif. Depth	(cm):	9	Av. Max. Riffle Depth (cm): M	S 7	9	11			Ju Glaveis.	10	Large (16-64mm):		0
Av. Max. Pool Depth	(cm):	16	Av. Max. Pool Depth (cm):	9 10	18	15	21			_			·
Gradient (%):		4.0	Method Gradient: C	L					% Larges:	0	Small cobble (64-128mm):		0
% Pool: 30	% Riff	le: 10	% Run: 60 % Other:	0 Meth	od: GE						Large cobble (128-256mm	•	0
% Side Channel:		>40	Method Side Channel: He	C							Boulder cobble (>256mm)	:	0
% Debris Area:	30		Method Debris Area: G	Е					% Bedrock:	0	% Bedrock:		0
Cover	_	-			_				D90 (cm):		Compaction:		High
Cover Total % :		40	Method Cover Total %: G	E					Banks				
Dp Pool: 10 L	.O.D.:	80	Boulder: 0 In Veg.: 0	Over V	eg: 10	Cutl	oank:		Dunks				
Crown Closure %:		30	Method Crown Closure: G	E Aspect	: S	Metl	hod Aspect	: М	W Height (m):	0.5	% Unstable:		0
			<del></del>						Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge									Confinement:	3	-		
· ·						Specific 1	)ata 		Valley: Chan. Ratio:	2			
Wetted Width (m):			Method Wetted Width (m):						Stage:	М			
Mean Depth (m):			Method Mean Depth (m):						Flood Signs Ht(m):	0.1	Method Flood Signs:		MS
Mean Velocity (m/s)			Method Mean Velocity (m/s V	0					Braided;	Y	Method Braided:		GE
Discharge (m3/s):		10.0	Method Discharge (m3/s):						Bars (%):	20	Method Bars:		GE
Danah Cumh	al.								pH:	8.3	Method pH:		PH
Reach Symb	Ul		(Fish	)					02 (ppm):	-10	Method Dissolved Oxyger	) <b>:</b>	
			NF						Water Temp. (°C):	13.0	Method Temperature:		TC
			4 B 4,0 9	2100	_				Turb. (cm):	200	Method Turbidity:		GE
			1.	Bed Materia	n				Cond. (µmhos):	90	Method Conductivity:		CM

Stream: UNNAMED C.

Watershed Code:

# 

Stream/Valley Cross-Section

11-Sep-98

ary Obstructions
Electrofished 78 m length of stream for 700 s, with no lower net. No fish were caught/observed.
Water is tannic in colour. Air Temp.: 16.5 C
Low gradient with trickle flow discharge. Ponded for short distance above the road. Swampy seepage below the road. Dewaters in the summer/winter.
Channel was incorrectly mapped at the road crossing. See map for revised form.
This creek is classed as suspected S3 habitat to the top of R1 at 300 m. U/S to 3800 m is class S5 and u/s from 3800 m is class S6.

11-Sep-98

Stream: FALSE TAGIT C.

Watershed Code:

Header Info	rmatic	n			<u> </u>									
Stream Name:	FALSE	TAGIT	C.	Stream "Lo	Stream "Local": FALSE TAGIT C.						Access:			
Watershed Code:	460-600	6-407-	000-000-000-000-000-000-000							Reach No.:	2	Reach Length (km):	1.3 Method:	MW
Location:	MAIN I	IAUL F	OAD BRIDGE CROSSING, ~2.5 km U	/S	Map#:	093L025	5			Site No.:	1	Length surveyed (m):	100.0 Method:	HC
	FROM	MOUTI	<b>I</b> .		U.T.M. :	9 .6192	.60061			Fish Card:	Υ	Field: Yes	Historical:	No
Date: 11/06/97	Tim	e: 12:	00 Agency: C87 Surv	ey Cre	ew:RD\\\	111	\ \			Photos:	A3/2, 3	Air Photos:	BCB 91	179:35
Channel Ch	cs				Specific D	Data		Bed Mate	rial					
Av. Chan. Width (m	ı):	4.8	Method Av. Chan. Width (m):	T	4.6	4.4	5.1	5.8	4.3	% Fines (<2mm	): 5	% Fines (<2mm):		5
Av. Wet. Width (m):	:	3.9	Method Av. Wet. Width (m):	T						% Gravels:	30	Small (2-16mm):		10
Av. Max. Rif. Depth	(cm):	15	Av. Max. Riffle Depth (cm):	MS	18	15	12			76 Graveis.	30	Large (16-64mm):		20
Av. Max. Pool Depti	h (cm):	44	Av. Max. Pool Depth (cm):	15	55	37	40							
Gradient (%):		2.5	Method Gradient:	CL				_		□	65	Small cobble (64-128mm)		35
% Pool: 30	% Riff	le: 40	% Run: 30 % Other:	0	Method:	GE						Large cobble (128-256mm	•	25
% Side Channel:		0-10	Method Side Channel:	GE								Boulder cobble (>256mm)	):	5
% Debris Area:	10		Method Debris Area:	GE						% Bedrock:	0	% Bedrock:		0
Cover		_								D90 (cm):	18	Compaction:	<b>N</b>	Medium
Cover Total %:		70	Method Cover Total %:	GE						Banks				
Dp Pool: 30 I	L.O.D.:	10	Boulder: 40 In Veg.:	0	Over Veg:	10	Cutba	nk:	i					
Crown Closure %:		45	Method Crown Closure:	GE	Aspect :	sw	Metho	d Aspect:	M	W Height (m):	1.5	% Unstable:		5
										Textures Fines	: Yes	Gravel: Yes Larges	No Bedrock:	No
Discharge							ecific Da	nta		Confinement:	4			
Wetted Width (m):			Method Wetted Width (m):							Valley: Chan, 1	Ratio: 3			
` ,			` '							Stage:	М			
Mean Depth (m):			Method Mean Depth (m):	VO						Flood Signs Ht	t(m): 0.7	Method Flood Signs:		MS
Mean Velocity (m/s)	, .	0.24	Method Mean Velocity (m/s Method Discharge (m3/s):	vo						Braided:	N	Method Braided:		GE
Discharge (m3/s) :	_	0.24								Bars (%):	10	Method Bars:		GE
Reach Symb	bol									рН:	7.0	Method pH:		PH
			`	ish)						02 (ppm):		Method Dissolved Oxyge	n:	
			CT* RB(*) (	SST) D	V(*) PL					Water Temp. (	(°C): 12.0	Method Temperature:		TC
			5 C 2.5	1270	0					Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bec	l Material)					Cond. (µmhos)	): 30	Method Conductivity:		CM

Watershed Code:

# **Stream Survey Report**

460-6006-407-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

# Fish Summary

10-Feb-98

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	24	59-122	J	R			EL
RB	10	55-133	J	R			EL
TR	1	27	F	R			EL
TR	1	66	J	R			EL
DV	_ 1	38	F	R			EL

Stream: FALSE TAGIT C.

# **Obstructions**

# **Comments**

- C1 Electrofished 80 m length of stream for 770 s. RB, CT, and DV were caught. Assume CT spawn here due to the presence of trout fry still in the gravel; an attempt was made to avoid shocking/harming these small fry.
- C2 Nice creek with stable banks; pockets of suitable trout spawning habitat are present. Easy fish movement within this reach. No access problems to R2 based on the air observations; therefore, the RB caught at this site may be SST.
- C3 This site was minnow trapped in '96; no coho were caught at that time either. Envirocon (Kemano Completion Report, 1984) suggested coho can be present during some years.

Watershed Code:

Header Inform	nation														
Stream Name:	FALSE TAGE	C. 000-000-000-000-000-000-00	0-000-000	S	ream "Lo	ocal":	FALSI	E TAGIT	C.		Reach No.:	3	Access: Reach Length (km):	2.2 Method:	FT MW
		OM FTa4 CONFLUENCE;		IN M	ap #;	093L025	i				Site No.:	2	Length surveyed (m):	200.0 Method:	
	R3.	,			•	9 .6192					Fish Card:	N	Field: Yes	Historical:	No
Date: 12/06/97	Time: 11:	00 Agency: C8	37 Surve	y Crew:	CP VB \						Photos:	B1/13, 14	Air Photos:	BCB 91	179:110
Channel Char	racteristi	cs				S	Specific D	ata			Bed Material	-			
Av. Chan. Width (m):	4.5	Method Av. Chan. Width	n (m):	T	4.1	6.3	5.4	2.8	4.7	3.5	% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):	3,4	Method Av. Wet. Width	(m):	T	2.3	5.6	4.3	2.2	3,2	2.6	% Gravels:	60	Small (2-16mm):		20
Av. Max. Rif. Depth (cr	m): 18	Av. Max. Riffle Depth (ci	m): 1	MS	15	20	19				76 Graveis.	00	Large (16-64mm):		40
Av. Max. Pool Depth (c	m): 43	Av. Max. Pool Depth (cm	ı):	18	30	35	65								
Gradient (%):	4.0	Method Gradient:		CL							% Larges:	30	Small cobble (64-128mm	•	30
% Pool: 20	% Riffle: 40	% Run: 40	% Other:	-	Method:	GE					<u> </u>		Large cobble (128-256m		0
% Side Channel:	10-40	Method Side Channel:		GE									Boulder cobble (>256mi	n):	U
% Debris Area:	10-40	Method Debris Area:	1	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):	10	Compaction:		High —
Cover Total % :	70	Method Cover Total %:		GE							Banks				
Dp Pool: 10 L.O.	.D.: 15	Boulder: 55 1	n Veg.:	0 O	ver Veg:	5	Cutba	nk:		15	Dunks				
Crown Closure % :	10	Method Crown Closure:		GE A	spect :	s	Metho	d Aspect	:	MW	Height (m):	1.2	% Unstable:		5
	<del></del>		-								Textures Fines:	Yes	Gravel: Yes Large	s: Yes Bedrock:	No
Discharge							ecific Da				Confinement:	4			
Wetted Width (m):		Method Wetted Width (m)	١.	-			ecyse Da				Valley: Chan. Ratio:	2			
Mean Depth (m):		Method Mean Depth (m):									Stage:	M			
Mean Velocity (m/s):		Method Mean Velocity (m.		vo						}	Flood Signs Ht(m):	0.9	Method Flood Signs:		MS
Discharge (m3/s):	0.50	Method Discharge (m3/s):		,,							Braided:	N	Method Braided:		GE
									===		Bars (%):	20	Method Bars:		GE
Reach Symbol	l		(F:	.L.\							pH:	7.0	Method pH:		PH
-			(Fis PL* (	•							02 (ppm):		Method Dissolved Oxyg	en:	
				<del></del>							Water Temp. (°C):	13.0	Method Temperature:		TC
l			B 4.0	1630							Turb. (cm):	200	Method Turbidity:		GE
l		(Width, Valley: Chan	nel, Slope)	(Bed M	aterial)						Cond. (µmhos):	50	Method Conductivity:		CM

Stream: FALSE TAGIT C.

Watershed Code:

### **Stream Survey Report**

460-6006-407-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

10-Feb-98

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	5	60	J	R			EL
PL	2		Α	S			vo

#### **Obstructions**

- C1 Electrofished 30 m length of stream for 300 s. with no lower net. 1 CT was caught and 4 CT were observed. A pair of PL were observed at the base of the sample site; they appear to be making a redd (photo B1/15).
- C2 Water is slightly tannic in colour.
- C3 Lower R3 consists of a series of BD's and ponds just above the cutblock.
- C4 Dynamic creek with good cobble habitat for rearing, good potential spawning habitat in sections, and abundant LOD providing cover.
- C5 Observed a Western Toad on the creek bank.
- C6 R3 is classed as S3 habitat.

11-Sep-98 Stream: FALSE TAGIT C.

Watershed Code:

Header Info	matio	n					_				<del>-</del>				
Stream Name:	FALSE T	AGIT	C.		Stream "L	ocal":	FALSE	TAGIT	<b>.</b>				Access:		V2
Watershed Code:	460-6006	-407-0	00-000-000-000-000-000-000-0	00							Reach No.:	4	Reach Length (km):	1.8 Method:	MW
Location:	LOWER	NET~	78 m D/S FROM ROAD CULVERT	, ~450 m	Map #:	093L02	5				Site No.:	3	Length surveyed (m):	100.0 Method:	HC
	U/S IN R	4.			U.T.M. :	9 .6192	.60061				Fish Card:	N	Field: Yes	Historical:	No
Date: 11/06/97	Time	: 12:3	0 Agency: C87	urvey Cr	ew: CP \JB \	111	١١				Photos:	B1/1, 2	Air Photos:	BCB 911	179:110
Channel Cha	racter	istic	es				Specific Di	nta			Bed Material				
Av. Chan. Width (m)	:	3.3	Method Av. Chan. Width (m):	Т	3.8	3.9	3.6	2.5	2.7	_	% Fines (<2mm):	5	% Fines (<2mm):		5
Av. Wet. Width (m):		3.3	Method Av. Wet. Width (m):	Ť	3,8	3.9	3.6	2.5	2.7	1	1				
Av. Max. Rif. Depth (	cm):	8	Av. Max. Riffle Depth (cm):	MS	7	10	7				% Gravels:	10	Small (2-16mm): Large (16-64mm):		5
Av. Max. Pool Depth	(cm):	26	Av. Max. Pool Depth (cm):	8	38	22	19						,		
Gradient (%):		6.0	Method Gradient:	CL							% Larges:	85	Small cobble (64-128mm)		30
% Pool: 20	% Riffle	: 75	% Run: 5 % Oth	er: 0	Method:	GE							Large cobble (128-256mm		45
% Side Channel:		0-10	Method Side Channel:	GE							1		Boulder cobble (>256mm	):	10
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover						_					D90 (cm):	23	Compaction:	N	Medium
Cover Total % :		70	Method Cover Total %:	GE							Banks				
Dp Pool: 10 L.	O.D.:	20	Boulder: 50 In Veg.:	0	Over Veg:	10	Cutbar	k:		10	Danies				
Crown Closure %:		15	Method Crown Closure:	GE	Aspect :	E	Method	l Aspect:		MW	Height (m):	1.2	% Unstable:		5
											Textures Fines:	Yes	Gravel: Yes Larges	: No Bedrock:	No
Discharge							pecific Day				Confinement:	4			
Wetted Width (m) :			Method Wetted Width (m):				pecyle Bal				Valley: Chan. Ratio:	3			
Mean Depth (m):			Method Mean Depth (m):								Stage:	M			
Mean Velocity (m/s):			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):		Method Flood Signs:		
Discharge (m3/s):		0.23	Method Discharge (m3/s):	10							Braided:	N	Method Braided:		GE
Discharge (mo/s) .											Bars (%):	5	Method Bars:		GE
Reach Symbo	ol										pH:	7.0	Method pH:		PH
				(Fish)							02 (ppm):		Method Dissolved Oxyge	n:	
				СТ							Water Temp. (°C):	15.0	Method Temperature:		TC
			3 C	019	0						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slo	pe) (Be	d Material)						Cond. (µmhos):	40	Method Conductivity:		CM

Stream Survey Report

Stream: FALSE TAGIT C.

Watershed Code:

460-6006-407-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 18 52-199 J R EL

#### **Obstructions**

#### **Comments**

11-Sep-98

- C1 Electrofished 28 m length of stream d/s from the culvert for 440 s, with a lower net. CT were caught. Electrofished ~10 m length of stream above the culvert with no lower net; 4 fish were observed.
- C2 Steep creek with large angular bed material. Very limited potential spawning habitat. Excellent parr rearing habitat.
- C3 Problem culvert at road: 18 m long x 1.5 m diameter (oval) with a 15 cm drop at the outlet and ~6% gradient (photo B1/16).
- C4 R4 is classed as S4 habitat.

11-Sep-98

Stream: FALSE TAGIT C.

Watershed Code:

Header Info	rmatio	n									<del></del>				
Stream Name:	FALSE		C.		Stream "Lo	ocal":	FALSE	TAGIT	C.				Access:		Н
Watershed Code:	460-600	6-407-0	00-000-000-000-000-000-000-000								Reach No.;	4	Reach Length (km):	1.8 Method:	. MW
Location:	~200 m	D/S FR	OM LAKE OUTLET.		Map#:	093L025	i				Site No.:	4		300.0 Method:	: нс
					U.T.M. :	9 ,6192	.60061				Fish Card:	N	Field: Yes	listorical:	No
Date: 08/07/97	Tim	e: 12:	O Agency: C87 Surv	ey Cre	w: RD \IF\	1111	١ ١				Photos:	A10/1, 2	Air Photos:	BCB 91	179:110
Channel Ch	aracte	risti	es				Specific De	ata			Bed Material		<del>-</del> -		
Av. Chan. Width (m	):	2.8	Method Av. Chan. Width (m):	T	1.6	2.8	3.2	3.1	2.9	3.2	   % Fines (<2mm):	5	% Fines (<2mm):		5
Av. Wet. Width (m):	:	1.9	Method Av. Wet. Width (m):	T	1.4	2.4	2.5	3.1	0.8	0.9	1 ' '	20	, ,		5
Av. Max. Rif. Depth	(cm):	7	Av. Max. Riffle Depth (cm):	MS	5	6	9				% Gravels:	20	Small (2-16mm):		
Av. Max. Pool Depth	1 (cm):	35	Av. Max. Pool Depth (cm):	7	52	21	32						Large (16-64mm):		15
Gradient (%):		4.0	Method Gradient:	CL							% Larges:	60	Small cobble (64-128mm):		20
% Pool: 20	% Riff	e: 70	% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm):		30
% Side Channel:		0	Method Side Channel:	GE							1		Boulder cobble (>256mm):		10
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	15	% Bedrock:		15
Cover											D90 (cm):	28	Compaction:	1	Medium
Cover Total % :		75	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L	O.D.:	10	Boulder: 60 In Veg.:	0	Over Veg:	5	Cutbar	ık:		5					
Crown Closure %:			Method Crown Closure:		Aspect:	SE	Method	d Aspect:		MW	Height (m):	3.5	% Unstable:		0
							_		_		Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	Yes
Discharge							ecific Dat		-		Confinement:	1			
			N. d. 130 o. 130 d. ( )		<u> </u>		ecijit Dai				Valley: Chan. Ratio:	1			
Wetted Width (m):			Method Wetted Width (m):								Stage:	L			
Mean Depth (m):			Method Mean Depth (m):								Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Mean Velocity (m/s)	:		Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):		0.04	Method Discharge (m3/s):				_ <u>-</u>				Bars (%):	25	Method Bars:		GE
Reach Symb	nol				<u>-</u>						pH:	7.2	Method pH:		PH
Secuen Byino			•	ish)							02 (ppm):		Method Dissolved Oxygen:		
			CT*	LNC							Water Temp. (°C):	17.0	Method Temperature:		TC
			3 A 4.0	1261							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	Material)						Cond. (µmhos):	50	Method Conductivity:		CM

460-6006-407-000-000-000-000-000-000-000-000

11-Sep-98

Watershed Code:

### Stream/Valley Cross-Section

### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	10	60-96	J	R			EL
СТ	3	28	F	R			EL
LNC	2	86-120	J	R			EL

Stream: FALSE TAGIT C.

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
1	F	6.8
1	BD	7.0
1	BD	7.0

- C1 Spot shocked 30 m length of stream with no lower net. CT and LNC were caught. The CT fry were newly-emerged; suspect due to the warm lake outlet temperatures. Observed numerous fry further u/s near the lake outlet.
- Small, very warm creek. Some bedrock with several small short chutes are present; they are restrictions to CT in low flows. 0.8 m high falls over bedrock is located in this section. Two 0.5 m high BD's are present at the lake outlet; CT from the lake spawn in this creek but the BD's are restrictions for fish trying to return to the lake; suspect during high flows they are passable.
- C3 Bed material is mainly flat and angular but short sections with excellent potential spawning gravels are present.
- C4 R4 is classed as S4 habitat.

Stream: FALSE TAGIT C. 11-Sep-98

Watershed Code:

Header Informati	on						_							
•	TAGIT	c.		Stream "L	ocal":	FALS	E TAGIT	C.				Access:		Н
Watershed Code: 460-60	06-407-0	00-000-000-000-000-000-000-0	000							Reach No.:	6	Reach Length (km):	1.0 Method:	: MW
		IEADOW ABOVE LARGE LAKE	; 900 m	Map #:	093L025	5				Site No.:	5	Length surveyed (m):	100.0 Method:	: HC
U/S IN	Ko.			U.T.M.:	9 ,6192	.60061				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97 Tim	ne: 9:30	Agency: C87	Survey C	Crew: DB \CP \	1 1 1 1	. \ \				Photos:	B2/17, 18	Air Photos:	BCB 911	179:210
Channel Characte	eristi e	es .		[		Specific D	ata			Bed Material				
Av. Chan. Width (m):	1.1	Method Av. Chan. Width (m):	Т	1.1	1.8	0.7	1.2	1.2	0.8	% Fines (<2mm):	90	% Fines (<2mm):		90
Av. Wet. Width (m):	1.1	Method Av. Wet. Width (m):	T	1.1	1.8	0.7	1.2	1,0	0.8	% Gravels:	10	, ,		_
Av. Max. Rif. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS	3	4	8				% Graveis:	10	Small (2-16mm):		5
Av. Max. Pool Depth (cm):	30	Av. Max. Pool Depth (cm):	5	22	30	38						Large (16-64mm):		5
Gradient (%):	1.0	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 40 % Rif	fle: 10	% Run: 50 % Oth	ner: 0	Method:	GE							Large cobble (128-256mm)	:	0
% Side Channel:	0	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	>40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover							<del></del>		_	D90 (cm):	1	Compaction:		High
Cover Total % :	95	Method Cover Total %:	GE							Banks				
Dp Pool: 0 L.O.D.:	50	Boulder: 0 In Veg.:	: 0	Over Veg:	40	Cutba	nk:		10	Dunks				
Crown Closure % :	5	Method Crown Closure:	GE	Aspect :	sw	Metho	d Aspect:		MW	Height (m):	0.4	% Unstable:		0
						_				Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						i G - D -	.4-			Confinement:	5			
o .						pecific Da	ia			Valley: Chan, Ratio:	4			
Wetted Width (m):		Method Wetted Width (m):								Stage:	М			
Mean Depth (m):		Method Mean Depth (m):								Flood Signs Ht(m):	0.25	Method Flood Signs:		MS
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.01	Method Discharge (m3/s):		<u> </u>						Bars (%):	5	Method Bars:		GE
Reach Symbol	_				Ť					pH:		Method pH:		
icach Symoot			(Fish)							02 (ppm):		Method Dissolved Oxygen:		
			CT							Water Temp. (°C):	8.0	Method Temperature:		TC
		1 D	1.0 91	00						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slo	ppe) (B	ed Material)						Cond. (µmhos):	40	Method Conductivity:		СМ

Watershed Code:

11-Sep-98 Stream: FALSE TAGIT C.

Watershed Code.

### Stream/Valley Cross-Section

### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	9	40-52	J	R			EL

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
	BD	7.9

- C1 Electrofished 70 m length of stream for 780 s, with no lower net. CT fry were caught. R6 is classed as S4 habitat.
- C2 There are at least 4 beaver dams are present between the lake and this site that are restrictions to fish (see map). Photo B2/15: lake d/s.
- C3 Moose signs were observed in the meadow.
- C4 Channel is very stable in this section of creek.
- C5 Hiked over to tributary FTa5.1.1 from Site 5; There is no evidence of surface water. No defined channel wet meadow but not a creek.

# DFO/MoELP Stream Survey Form 11-Sep-98 Stream: FALSE TAGIT C.

Watershed Code:

Header Infor	mation														
Stream Name:	FALSE TAGIT				Stream "Lo	cal":	FALSE	TAGIT	C.				Access:		Н
Watershed Code:		000-000-000-000-000-000-									Reach No.:	7	Reach Length (km):	2.1 Method:	
Location:	I.7 km U/S IN LAKE.	R7; ~1.4 km D/S FROM F	HEADWATER		Map #:	093L025					Site No.:	6	Length surveyed (m):	80.0 Method:	
	LAKE.					6192. 9					Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97	Time: 16:	00 Agency:	C87 Surv	ey Cro	ew: RD \IF \	111	1 1				Photos:	A10/7, 8	Air Photos:	BCB 911	179:211
Channel Cha	racteristi	cs					Specific Da	ıta			Bed Material				
Av. Chan. Width (m):	1.0	Method Av. Chan. Wic	dth (m):	T	1.0	1.3	0.9	0.8	0.9	1.1	% Fines (<2mm):	90	% Fines (<2mm):		90
Av. Wet. Width (m):	0.6		, ,	T	0.2	1.1					   % Gravels:	10	Small (2-16mm):		10
Av. Max. Rif. Depth (		Av. Max. Riffle Depth	` '	MS									Large (16-64mm):		0
Av. Max. Pool Depth	` '	Av. Max. Pool Depth (	•	1	32	27	19		_		9/ 1	0	,		0
Gradient (%):	7.0			CL							% Larges:	0	Small cobble (64-128mm)		0
% Pool: 40	% Riffle: 60		% Other:	0	Method:	GE							Large cobble (128-256mm		0
% Side Channel:	0	Method Side Channel:		GE									Boulder cobble (>256mm)	•	U
% Debris Area:	0-10	Method Debris Area:		GE							% Bedrock:	0	% Bedrock:		0
Cover			_								D90 (cm):		Compaction:		High
Cover Total % :	10	Method Cover Total %	<b>,</b> :	GE							Banks				
Dp Pool: 60 L.	O.D.: 20	Boulder: 0	In Veg.:	0	Over Veg:	10	Cutban	k:		10	Dunks				
Crown Closure %:	30	Method Crown Closur	re:	GE	Aspect :	SE	Method	Aspect:		MW	Height (m):	0.9	% Unstable:		0
		<del>-</del>									Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						Sr	ecific Date		-		Confinement:	3			
Wetted Width (m):		Method Wetted Width (	m) ·								Valley: Chan. Ratio:	2			
Mean Depth (m):		Method Mean Depth (m									Stage:	L			
Mean Velocity (m/s) :		Method Mean Velocity (	•	vo							Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Discharge (m3/s):	0.01	Method Discharge (m3/s	•	••							Braided:	N	Method Braided:		GE
					<u></u>						Bars (%):	60	Method Bars:		GE
Reach Symbo	ol										рН:	8.1	Method pH:		PH
, ,			•	ish)							02 (ppm):		Method Dissolved Oxyger	n:	
				VF							Water Temp. (°C):	12.0	Method Temperature:		TC
			l B 7.0	910	0						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Ch	annel, Slope)	(Bec	d Material)						Cond. (µmhos):		Method Conductivity:		

11-Sep-98 Stream: FALSE TAGIT C.

Watershed Code:

# **Stream Survey Report**

460-6006-407-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Sumn	oary Obstructions
Comments	
CI	Electrofished 80 m length of stream. No fish were caught/observed.
C2	Very little water in creek - barely shockable. D/S the channel is dry with an 8% gradient.
C3	Mud/moss bed material; not fish habitat.
C4	Abundant alder overstory covering the channel.
C5	R7 is classed as S6 habitat.

10-Feb-98 Stream: FALSE TAGIT C.

Watershed Code:

**Stream Survey Report** 

460-6006-407-000-000-000-000-000-000-000-000

Header Infor	 matio	n									_					
Stream Name: Watershed Code:	FALSE '	TAGIT		OR DOG GOO DOG GOO		Stream "Lo	ocal":	FALS	E TAGIT	C.		B 1 N		Access:	O O Mada la	Н
Location:		D OF R		00-000-000-000-000 OM HEADWATER	LAKE	Map #: U.T.M. :	093L025 9 .6192					Reach No.: Site No.: Fish Card:	8 7 N		0.9 Method: 100.0 Method: Historical:	MW HC No
Date: 08/07/97	Time	e: 10:0	0 Age	ncy: C87 Su	vey Cre	ew: RD \IF \	, , , ,	\ \				Photos:	A9/22, 23	Air Photos:	BCB 911	179:211
Channel Cha	racte	ristic	es -					Specific D	Data			Bed Material				
Av. Chan. Width (m): Av. Wet. Width (m): Av. Max. Rif. Depth (		0.9 0.5 2	Method Av. Cha Method Av. Wet Av. Max. Riffle	t. Width (m):	T T MS	1.3 0.4 1	0.6 0.6 3	0.9 0.7 2	0.6	1.2	0.7	% Fines (<2mm): % Gravels:	70 15	% Fines (<2mm): Small (2-16mm):		70 5
Av. Max. Pool Depth ( Gradient (%): % Pool: 10	(cm): % RiM		Av. Max. Pool D Method Gradien % Run: 60	nt: % Other:		12 Method:	45 GE	24				% Larges:	15	Large (16-64mm):  Small cobble (64-128mm):  Large cobble (128-256mm):  Boulder cobble (>256mm):		10 10 5
% Side Channel: % Debris Area:  Cover	-	0-10	Method Side Ch		GE GE							% Bedrock: D90 (cm):	0	% Bedrock: Compaction:		0 High
Cover Total %: Dp Pool: 10 L. Crown Closure %:	O.D.:	50 15	Method Cover T Boulder: 5 Method Crown	In Veg.:	GE 0	Over Veg: Aspect :	40 SE	Cutba Metho	nk: od Aspect:		30 <b>MW</b>	Banks Height (m):	0.9	% Unstable:		0
Discharge Wetted Width (m):			Method Wetted V	Vidth (m) :			Sp	pecific Da	nta			Textures Fines: Confinement: Valley: Chan. Ratio: Stage:	Yes 4 3 L	Gravel: No Larges:	No Bedrock:	No
Mean Depth (m):  Mean Velocity (m/s):  Discharge (m3/s):		0.01	Method Mean De Method Mean Ve Method Discharg	locity (m/s	vo							Flood Signs Ht(m):  Braided:  Bars (%):	0.3 N	Method Flood Signs: Method Braided: Method Bars:		MS GE
Reach Symbo	ol			(	Fish) NF		_					pH: 02 (ppm): Water Temp. (°C):	7.6 12.0	Method pH:  Method Dissolved Oxygen:  Method Temperature:		PH TC
			(Width, Vall	l C 4.0	7120	) I Material)						Water Temp. (*C.):  Turb. (cm):  Cond. (μmhos):	200 60	Method Turbidity: Method Conductivity:		GE CM

11-Sep-98 Stream: FALSE TAGIT C.

Watershed Code:

### **Stream Survey Report**

460-6006-407-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
	BD	11.1

- Cl Electrofished 100 m length of stream with no lower net. No fish were caught/observed.
- C2 Very small, stable creek with trickle flow discharge. Two large, old beaver dams are located at the lake outlet.
- C3 Outlet channel has a black mud bottom with no spawning potential. Some gravel is present in the pool areas.
- C4 No fish potential; creek is too small and the channel flows subsurface (under moss) in sections.
- C5 R8 is classed as S6 habitat.

Stream: FALSE TAGIT C. TRIBUTARY 10-Feb-98

Watershed Code:

Stream Survey Report 460-6006-407-FTa-1 -000-000-000-000-000-000-000-000

Header Infor	mation													
Stream Name:	FALSE TAGIT	C. TRIBUTARY		Stream "Lo	cal":	FTal						Access:		V2
Watershed Code:	460-6006-407-	FTa-1 -000-000-000-000-000-000								Reach No.:	2	Reach Length (km):	2.9 Method:	MW
Location:		00 m BELOW THE ROAD, ~1.8 km U/S	;	Map #:	093L025					Site No.:	8	Length surveyed (m):	100.0 Method:	: НС
	FROM THE M	OUTH.		U.T.M.:	9 .6194	.60066				Fish Card:	N	Field: Yes	Historical:	No
Date: 04/06/97	Time: 13:	00 Agency: C87 Surv	vey Cre	ew: RD\CP\	111	\ \				Photos:	A2/4, 5	Air Photos:	BCB 91	1179:35
Channel Cha	racteristi	cs				Specific De	nta			Bed Material				
Av. Chan. Width (m):	0.9	Method Av. Chan. Width (m):	T	0.5	0.8	1.1	1.3	0.9		% Fines (<2mm):	90	% Fines (<2mm):		90
Av. Wet. Width (m):	0.9	Method Av. Wet. Width (m):	T	0.5	0.8	1.1	1.3	0.9		1 ' '		, ,		0
Av. Max. Rif. Depth (c	em): 15	Av. Max. Riffle Depth (cm):	MS	12	18	15				% Gravels:	0	Small (2-16mm):		0
Av. Max. Pool Depth (	cm): 20	Av. Max. Pool Depth (cm):	15	20	18	22						Large (16-64mm):		
Gradient (%):	3.5	Method Gradient:	CL							% Larges:	10	Small cobble (64-128mm):		5
% Pool: 10	% Riffle: 20	% Run: 70 % Other:	0	Method:	GE							Large cobble (128-256mm)		5
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	>40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover	<del></del>	<del> </del>				_	_			D90 (cm):	6	Compaction:		High
Cover Total % :	95	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.C	<b>D.D.:</b> 30	Boulder: 0 In Veg.:	0	Over Veg:	45	Cutbar	k:		5					
Crown Closure % :	80	Method Crown Closure:	GE	Aspect :	SW	Method	Aspect	:	MW	Height (m):	0.4	% Unstable:		5
		<del></del>								Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						ecific Dat				Confinement:	5			
Wetted Width (m):		Mach ad Wasserd Wildels (-)				ecyle Dai				Valley: Chan. Ratio:	4			
Mean Depth (m):		Method Wetted Width (m):  Method Mean Depth (m):								Stage:	Н			
Mean Velocity (m/s):		• ` ′	vo	}						Flood Signs Ht(m):	0.4	Method Flood Signs:		MS
Discharge (m3/s):	0.08	Method Mean Velocity (m/s  Method Discharge (m3/s):	VU							Braided:	N	Method Braided:		GE
Discussing (1112/2):		Menior Discharge (m3/5) :		<u></u>						Bars (%):	0	Method Bars:		GE
Reach Symbo	l									рН:	8.3	Method pH:		PH
		,	ish)							02 (ppm):		Method Dissolved Oxygen:		
			NF							Water Temp. (°C):	7.5	Method Temperature:		TC
		1 D 3.5	9010	0						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	d Material)						Cond. (µmhos):	30	Method Conductivity:		CM

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

# Stream Survey Report

460-6006-407-FTa-1 -000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

#### **Obstructions**

Obstruction Ht(m)	Type	Location
0	X	1.8

- C1 Electrofished 75 m length of stream below the road. No fish were caught/observed.
- C2 Water is tannic in colour. Air Temp.: 16.5 C
- C3 Overgrown, small channel meanders d/s at a moderate gradient. U/S appears to be steeper.
- C4 No potential spawning habitat present.
- C5 R1 was observed by air; it was difficult to see the channel due to the heavy alder swales lining the creek. R1 is classed as suspected S6 habitat and R2 is classed as S6 habitat.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

(Width, Valley: Channel, Slope) (Bed Material)

Watershed Code:

Cond. (µmhos):

Stream Survey Report 460-6006-407-FTa-4 -000-000-000-000-000-000-000-000

Header Information Stream Name: FALSE TAGIT C. TRIBUTARY Stream "Local": FTa4 FT Access: Watershed Code: 460-6006-407-FTa-4 -000-000-000-000-000-000 0.2 Method: MW Reach No .: Reach Length (km): ~100 m U/S FROM THE MOUTH. Location: Map#: 093L025 Site No.: Length surveyed (m): 200.0 Method: HC U.T.M.: 9.6202 .60094 Fish Card: N Field: Yes Historical: No Survey Crew: CP \JB \ \ \ \ \ \ Date: 12/06/97 Time: 10:00 Agency: C87 Photos: B1/11, 12 Air Photos: BCB 91179:111 **Channel Characteristics Bed Material** Specific Data Av. Chan. Width (m): Method Av. Chan. Width (m): T 0.9 1.0 1.0 1.2 0.8 0.7 % Fines (<2mm): % Fines (<2mm): 60 Av. Wet. Width (m): Method Av. Wet. Width (m): T 0.4 0.5 0.4 0.8 0.7 0.2 % Gravels: Small (2-16mm): 15 25 Av. Max. Rif. Depth (cm): Av. Max. Riffle Depth (cm): MS 12 10 10 Large (16-64mm): 10 Av. Max. Pool Depth (cm): Av. Max. Pool Depth (cm): 11 20 24 23 24 Small cobble (64-128mm): 15 % Larges: 2.5 Method Gradient: CL Gradient (%): Large cobble (128-256mm): 0 % Pool: 30 % Riffle: 20 50 % Run: % Other: 0 Method: GE Boulder cobble (>256mm): 0 % Side Channel: Method Side Channel: GE 0-10 % Debris Area: >40 Method Debris Area: GE % Bedrock: 0 % Bedrock: 0 D90 (cm): Compaction: High Cover Cover Total %: Method Cover Total %: GE Banks 15 L.O.D.: 20 0 Over Veg: Dp Pool: Boulder: 10 In Veg.: 50 Cutbank: 5 Crown Closure %: 60 Method Crown Closure: GE SW Method Aspect: MW Aspect: Height (m): % Unstable: 5 **Textures Fines:** Yes Gravel: No Larges: No Bedrock: No Discharge Confinement: 5 Specific Data Valley: Chan. Ratio: 4 Wetted Width (m): Method Wetted Width (m): M Stage: Mean Depth (m) : Method Mean Depth (m): Flood Signs Ht(m): Method Flood Signs: MS 0,3 Mean Velocity (m/s): Method Mean Velocity (m/s VO GE Braided: Method Braided: Discharge (m3/s): 0.03 Method Discharge (m3/s): GE Bars (%): Method Bars: pH: 7.0 Method pH: PH Reach Symbol (Fish) Method Dissolved Oxygen: 02 (ppm): CT TC Water Temp, (°C): 11.5 Method Temperature: 6220 1 D 2.5 GE Turb. (cm): 200 Method Turbidity:

CM

Method Conductivity:

Watershed Code:

460-6006-407-FTa-4 -000-000-000-000-000-000

Stream/Valley Cross-Section

### Fish Summary

11-Sep-98

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	- 11	53-82	J	R			EL

Stream: FALSE TAGIT C. TRIBUTARY

#### **Obstructions**

Obstruction Ht(m)	Type	Location
1	BD	0.2
	BD	0.2

- C1 Electrofished 50 m length of stream for 550 s, with no lower net. CT were caught.
- C2 Water is tannic in colour. Silt bed material affected the water clarity during shocking; 4 of the 11 CT were observed but not caught.
- R2 was surveyed and consists of braided and ponded sections with a series of beaver dams. The 1.2 m high drop over a BD at the R1-R2 reach break is temporarily a barrier to fish. Spot shocked ~100 m in R2 and no fish were observed/caught.
- C4 2 Canada Geese were observed on the pond at base of R2.
- C5 Set 10 traps overnight in large wetland; No fish were caught. Numerous invertebrates and water beetles were observed.
- C6 R1 is classed as S4 habitat.

11-Sep-98

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-407-FTa-4 -000-000-000-000-000-000

												_			
Header Info	rmatio	n													
Stream Name:	FALSE T	AGIT	C. TRIBUTARY		Stream "Lo	cal":	FTa4						Access:		V2
Watershed Code:	460-6006	-407-F	Ta-4 -000-000-000-000-000-000								Reach No.:	2	Reach Length (km):	1.9 Method:	MW
Location:	SAMPLE	D ALC	ONG ROAD 100 m D/S FROM CULV	ERT;	Map #:	093L02	5				Site No.:	10	Length surveyed (m):	100.0 Method:	HC
	~1.8 km (	J/S FR	OM MOUTH.		U.T.M.:	9 .6202	.60094				Fish Card:	N	Field: Yes	Historical:	No
Date: 04/06/97	Time	: 14:0	O Agency: C87 Su	rvey Cr	ew: RD \CP \	1 1 1 1	. \ \				Photos:	A2/6, 7	Air Photos:	BCB 911	179:111
Channel Cha	aracter	istic					Specific L	Data			Bed Material				
Av. Chan. Width (m)	:	1.3	Method Av. Chan. Width (m):	Т	1.2	1.6	0.9	1.1	1.6		   % Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):		1.3	Method Av. Wet. Width (m):	Т	1.2	1.6	0.9	1.1	1.6				, ,		
Av. Max. Rif. Depth	(cm):	9	Av. Max. Riffle Depth (cm):	MS	7	8	11				% Gravels:	0	Small (2-16mm):		0
Av. Max. Pool Depth	(cm):	16	Av. Max. Pool Depth (cm):	9	22	14	12						Large (16-64mm):		0
Gradient (%):		2.5	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 10	% Riffle	: 20	% Run: 70 % Other	: 0	Method:	GE							Large cobble (128-256mm)	:	0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:		>40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):		Compaction:		High
Cover Total % :		30	Method Cover Total %:	GE							Banks	•			
Dp Pool: 10 L	.O.D.:	40	Boulder: 0 In Veg.:	0	Over Veg:	50	Cutba	nk:		0	Dunks				
Crown Closure %:		30	Method Crown Closure:	GE	Aspect :	SW	Metho	d Aspect	:	MW	Height (m):	0.2	% Unstable:		0
			<del></del>							_	Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge							pecific Da				Confinement:	5			
Wetted Width (m) :			Method Wetted Width (m):								Valley: Chan. Ratio:	4			
Mean Depth (m):			Method Mean Depth (m):								Stage:	M			
Mean Velocity (m/s)			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.1	Method Flood Signs:		MS
Discharge (m3/s):		0.01	Method Discharge (m3/s):	*0						1	Braided:	Y	Method Braided:		GE
					<u></u>				===		Bars (%):	10	Method Bars:		GE
Reach Symb	ol										pH:	8.2	Method pH:		PH
				(Fish)							02 (ppm):		Method Dissolved Oxygen		
			<del></del>	NF							Water Temp. (°C):	11.0	Method Temperature:		TC
			1 D 2.5	F							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope	) (Be	d Material)						Cond. (µmhos):	30	Method Conductivity:		CM

Stream: FALSE TAGIT C. TRIBUTARY

**Stream Survey Report** 

Watershed Code:

460-6006-407-FTa-4 -000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

11-Sep-98

#### **Obstructions**

Obstruction Ht(m)	Type	Location
1	BD	0.2
	BD	0.2

- C1 Electrofished 78 m length of stream for 600 s. No fish were caught/observed.
- C2 Very small seepage channel with sand/silt bed material and abundant alder overstory. No fish potential. Channel was very stagnant and nearly dry on June 11/97.
- C3 A small seepage with no defined channel was observed just over on the road which is assumed to be part of the same drainage.
- C4 Surveyed the lower section of R2; see R1 site card. R2 is classed as S6 habitat.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-407-481-000-000-000-000-000-000-000

Header Infor	rmati	on													
Stream Name:	FALSE	TAGIT	C. TRIBUTARY		Stream "Lo	cal":	FTa5						Access:		V2
Watershed Code:	460-60	6-407-	81-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.8 Method:	MW
Location:			BRIDGE CROSSING AT BLOCK 621	#1;	Мар #:	093L025	;				Site No.:	11	Length surveyed (m):	100.0 Method:	HC
	~400 m	U/S FR	OM THE MOUTH.		U.T.M. :	6204. 9	.60104				Fish Card:	N	Field: Yes	Historical:	No
Date: 11/06/97	Tin	e: 16:0	Agency: C87 Sur	vey Cre	w: RD\\\	1 1 1 1	١١				Photos:	A3/6, 7	Air Photos:	BCB 911	179:111
Channel Cha	racte	risti	cs -			S	Specific L	Pata			Bed Material				
Av. Chan. Width (m):	:	1.9	Method Av. Chan. Width (m):	Т	2.2	2.0	1.6	1.8	1.8		% Fines (<2mm):	40	% Fines (<2mm):		40
Av. Wet. Width (m):		1.9	Method Av. Wet. Width (m):	Т	2.2	2.0	1.6	1.8	1.8		` ′		• •		
Av. Max. Rif. Depth (	cm):	28	Av. Max. Riffle Depth (cm):	MS	27	21	36				% Gravels:	40	Small (2-16mm):		30
Av. Max. Pool Depth	(cm):	51	Av. Max. Pool Depth (cm):	28	55	47							Large (16-64mm):		10
Gradient (%):		1.0	Method Gradient:	CL							% Larges:	20	Small cobble (64-128mm):		20
% Pool: 20	% Riff	le: 10	% Run: 70 % Other:	0	Method:	GE							Large cobble (128-256mm)	:	0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	20		Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										-	D90 (cm):	7	Compaction:		High
Cover Total % :		60	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.	O.D.:	20	Boulder: 10 In Veg.:	0	Over Veg:	30	Cutba	nk:		20	<b>During</b>				
Crown Closure %:		30	Method Crown Closure:	GE	Aspect:	sw	Metho	d Aspect:		MW	Height (m):	0.8	% Unstable:		0
								_			Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						Ç-	ecific Da				Confinement:	5			
W-44-3 W:34- () .			Made J Wasser Wilder ()				ecylc Du				Valley: Chan. Ratio:	4			
Wetted Width (m):			Method Wetted Width (m):								Stage:	M			
Mean Velocity (m/s)			Method Mean Depth (m):	vo							Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Mean Velocity (m/s): Discharge (m3/s):		0.25	Method Mean Velocity (m/s Method Discharge (m3/s):	VU							Braided:	N	Method Braided:		GE
Discharge (m3/s):		0.23									Bars (%):	0	Method Bars:		GE
Reach Symbo	ol .										рН:	7.0	Method pH:		PH
	-		`	(ish							02 (ppm):		Method Dissolved Oxygen:		
				CT							Water Temp. (°C):	14.0	Method Temperature:		TC
			2 D 1.0	4420	)						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	40	Method Conductivity:		CM

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

### **Stream Survey Report**

460-6006-407-481-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

11-Sep-98

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 1 J R VO

#### **Obstructions**

- C1 There is no 1997 sample site in this reach. See RD/DA sample data from 1996 (Bustard, 1996): CT were caught. 1 CT juvenile was visually observed in a pool when this site card was filled out. R1 is classed as S3 habitat.
- Was Initia Out, Iti is viassed a
- C2 Air Temp.: 22 C
- C3 Low gradient meandering creek with very limited potential spawning habitat. Good rearing in the low velocity run habitat.
- C4 Brush overstory is present.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-407-481-000-000-000-000-000-000-000

Header Info			-												
_		`IT (	TDIDLETADA		C+ P*	100 -	ETC. 6						<b>.</b>		1-1
Stream Name:			7. TRIBUTARY 1-000-000-000-000-000-000-000-000		Stream "Lo	cal":	FTa5				Decil Me	2	Access:	1.4 M-4-3-	FT MW
Watershed Code:			15; ~300 m U/S FROM FTa5.1		Map #;	093L025					Reach No.: Site No.:	2	Reach Length (km):	1.4 Method: 200.0 Method:	
Location:	CONFLUE		5, ~300 III 0/3 FROM F145.1		•	9 .6204					Fish Card:	12 N	Length surveyed (m): Field: Yes	Historical:	No
Date: 11/06/97	Time:	15:30	Agency: C87 Surve		v: CP \JB \ \						Photos:	B1/5, 6	Air Photos:	BCB 911	
Channel Ch								_			Dad Madawial				
Cnannei Cni	iracieris	iic.	<b>S</b>	L		S	pecific D	ata			Bed Material				
Av. Chan. Width (m)	:	2.6	Method Av. Chan. Width (m):	T	2.1	3.2	2.4	3.0	0.9	4.1	% Fines (<2mm):	50	% Fines (<2mm):		50
Av. Wet. Width (m):	;	2.6	Method Av. Wet. Width (m):	T	2.1	3.2	2.4	3.0	0.9	4.1	% Gravels:	50	Small (2-16mm):		40
Av. Max. Rif. Depth	(cm):		. , ,	MS							76 Glaveis.	50	Large (16-64mm):		10
Av. Max. Pool Depth	(cm): 1	23	Av. Max. Pool Depth (cm):		120	100	150								
Gradient (%):		0.5	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm)		0
<b>% Pool</b> : 60		5	% Run: 40 % Other:	0	Method:	GE							Large cobble (128-256mm		0
% Side Channel:	10-			GE									Boulder cobble (>256mm)	•	•
% Debris Area:	0-	10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover					_						D90 (cm):	3	Compaction:		High
Cover Total % :	;	80	Method Cover Total %:	GE							Banks				
Dp Pool: 40 L	O.D.:	0	Boulder: 0 In Veg.:	40	Over Veg:	0	Cutba	nk:		20	Duning				
Crown Closure %:		5	Method Crown Closure:	GE	Aspect:	sw	Metho	d Aspect:		MW	Height (m):	0.3	% Unstable:		0
i										_	Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						Çn	ecific Da	ta			Confinement:	5			
Wetted Width (m):		,	Method Wetted Width (m) :			ы	ccijic Du				Valley: Chan. Ratio:	4			
Mean Depth (m):			Method Mean Depth (m):								Stage:	M			
Mean Velocity (m/s):			- , ,	vo							Flood Signs Ht(m):		Method Flood Signs:		
Discharge (m3/s):	0.0		Method Discharge (m3/s):	.							Braided:	Y	Method Braided:		GE
				L							Bars (%):	0	Method Bars:		GE
Reach Symbo	ol		4004								pH:	7.0	Method pH:		PH
•			(Fis								02 (ppm):		Method Dissolved Oxyger	:	
											Water Temp. (°C):	14.0	Method Temperature:		TC
			2 D 0.5	5500							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed !	Material)						Cond. (µmhos):	60	Method Conductivity:		CM

460-6006-407-481-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	3	63-74	1	R			MT

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
	BD	1.5
	BD	1.7
	BD	2.0

- C1 Set 6 traps above the road overnight; no catch. set 4 traps below the road overnight; 3 CT were caught. A 2 m high impassable BD is present within this site; the CT were caught below the BD.
- C2 Water is tannic in colour.
- C3 Reach consists of a large swamp with a series of BD drops up to 0.6 m high with the largest BD drop 2 m high (see comment 1). Grasses/wiilows are abundant.
- C4 R2 is classed as S3 habitat.
- C5 CT were caught further u/s in trib. FTa5.4, R1, Site 19.

11-Sep-98

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report 460-6006-407-481-000-000-000-000-000-000-000-000-000

Header Infor	matio	n										-		-	
Stream Name:	FALSE T	ragit	C. TRIBUTARY		Stream "Lo	cal":	FTa5						Access:		н
Watershed Code:	460-6006	5-407-4	81-000-000-000-000-000-000								Reach No.:	3	Reach Length (km):	2.5 Method:	MW
Location:	~100 m U	J/S FR	OM FTa5.4 CONFLUENCE.		Map #:	093L025	5				Site No.:	13	Length surveyed (m):	150.0 Method:	HC
					U.T.M.:	9 .6204	.60104				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97	Time	: 14:0	0 Agency: C87 Surv	vey Cre	ew: CP \DB \	·	\ \				Photos:	B2/23, 24	Air Photos:	BCB 911	179:112
Channel Cha	ıractei	ristic	es ·				Specific D	ata			Bed Material				
Av. Chan. Width (m);		0.8	Method Av. Chan. Width (m):	T	0.5	0.4	0.8	1.2	1.3		% Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):		0.8	Method Av. Wet. Width (m):	T	0.5	0.4	0.8	1.2	1.3		% Gravels:	0	Small (2-16mm):		0
Av. Max. Rif. Depth (	cm):		Av. Max. Riffle Depth (cm):	MS							, Graveis.	Ü	Large (16-64mm):		0
Av. Max. Pool Depth (	(cm):	53	Av. Max. Pool Depth (cm):		47	54	58					•	,		•
Gradient (%):		1.5	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 90	% Riffle		% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm)		0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):		U
% Debris Area:		10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):		Compaction:		High
Cover Total % :		80	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.	O.D.:	20	Boulder: 0 In Veg.:	25	Over Veg:	20	Cutba	nk:		15	Duning				
Crown Closure %:		5	Method Crown Closure:	GE	Aspect:	sw	Metho	d Aspect:		MW	Height (m):	0.3	% Unstable:		0
			<del>-</del>								Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge							ecific Da				Confinement:	5			
Wetted Width (m):			Method Wetted Width (m):		<del></del>		ecijic Du				Valley: Chan. Ratio:	4			
Mean Depth (m):			Method Mean Depth (m):								Stage:	M			
Mean Velocity (m/s):			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Discharge (m3/s):		0.01	Method Discharge (m3/s):	10							Braided:	N	Method Braided:		GE
		0.01			L		<u>-</u>				Bars (%):	0	Method Bars:		GE
Reach Symbo	ol		_								pH:		Method pH:		
			,	ish)							0 <b>2 (ppm)</b> :		Method Dissolved Oxygen	:	
				NF ——							Water Temp. (°C):	11.5	Method Temperature:		TC
			1 D 1.5	F							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	i Material)						Cond. (µmhos):	70	Method Conductivity:		CM

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report 460-6006-407-481-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

### Fish Summary

11-Sep-98

#### **Obstructions**

Obstruction Ht(m)	Type	Location
	BD	4.4
	BD	4.5
2	BD	4.6

- Cl Electrofished 85 m length of stream for 550 s, with no lower net. U/S of 85 m the channel disappears into the weeds and flow is subsurface. No fish were caught/observed.
- C2 Observed a Western Spotted Frog.
- C3 Mapped as suspected fish use for 800 m above the FTa5.4 confluence in R3 (class S4) and as S6 habitat u/s from this point.

Stream: FALSE TAGIT C. TRIBUTARY 11-Sep-98

Watershed Code:

Stream Survey Report 460-6006-407-481-000-000-000-000-000-000-000-000-000

Header Infor	mation		_					-						
Stream Name:		C. TRIBUTARY		Stream "Lo	cai":	FTa5						Access:		Н
Watershed Code:	460-6006-407-	481-000-000-000-000-000-000-000								Reach No.:	5	Reach Length (km):	1.0 Method:	MW
Location:	100 m U/S ON	LAKE INLET CHANNEL.		Map #:	093L025	;				Site No.:	14	Length surveyed (m):	100.0 Method:	нС
				U.T.M.:	9 .6204	.60104				Fish Card:	N	Field: Yes	Historical:	No
Date: 06/07/97	Time: 16	30 Agency: C87 Surv	ey Cre	w: RD\IF\	111	١١		_		Photos:	A10/9, 10	Air Photos:	BCB 911	179:208
Channel Cha	racterist	cs				Specific D	ata			Bed Material				
Av. Chan. Width (m):	0.5	Method Av. Chan. Width (m):	T	0.4	0.3	0.5	0.6	0.8		% Fines (<2mm):	95	% Fines (<2mm):		95
Av. Wet. Width (m):	0.2	Method Av. Wet. Width (m):	Т	0.1	0.1	0.3				% Gravels:	5	Small (2-16mm):		5
Av. Max. Rif. Depth (c	cm):	Av. Max. Riffle Depth (cm):								70 Graveis.	,	Large (16-64mm):		0
Av. Max. Pool Depth (	(cm):	Av. Max. Pool Depth (cm):									_	_		
Gradient (%):	1.0	Method Gradient:	CL	_						% Larges:	0	Small cobble (64-128mm):		0
% Pool: IO	% Riffle: 10	% Run: 80 % Other:	0	Method:	GE							Large cobble (128-256mm):		0
% Side Channel:	O	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):		Compaction:		High
Cover Total % :	60	Method Cover Total %:	GE							Banks				
Dp Pool: 10 L.0	O.D.: 5	Boulder: 0 In Veg.:	70	Over Veg:	15	Cutba	nk:		0	Dunks				
Crown Closure %:	15	Method Crown Closure:	GE	Aspect :	S	Metho	d Aspect:	:	MW	Height (m):	0.3	% Unstable:		0
										Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge			1			pecific Da				Confinement:	4			
117-44 - 1 117 141 () .		B. C. A. B. W. C. A. B. W. C. A. C. C. C.				recyte Da				Valley: Chan. Ratio:	3			
Wetted Width (m):		Method Wetted Width (m):								Stage:	L			
Mean Depth (m):		Method Mean Depth (m):	VO							Flood Signs Ht(m):	0.1	Method Flood Signs:		MS
Mean Velocity (m/s):	0.01	Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0,01	Method Discharge (m3/s) :								Bars (%):	5	Method Bars:		GE
Reach Symbo	o/									pH:	7.8	Method pH:		PH
Symbo	•		ish)							02 (ppm):		Method Dissolved Oxygen:		
			NF							Water Temp. (°C):	12.0	Method Temperature:		TC
		1 C 1.0	9100	·	_					Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	Material)						Cond. (µmhos):		Method Conductivity:		

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-407-481-000-000-000-000-000-000-000

Stream/Valley Cross-Section

### Fish Summary

#### **Obstructions**

Obstruction Ht(m)	Type	Location
2	BD	4.6

- C1 Electrofished 50 m length of stream within the inlet seepage; no fish were caught.
- C2 Inlet seepage: very small with sand/silt bed material. No potential spawning. A shallow wetland is located 50 m u/s which is poor fish habitat. Instream grass is abundant throughout most of the channel.
- C3 Outlet seepage: consists of a series of small ponds; very difficult to see a continuous channel joining them. Several large BD's at the lake outlet appear to be impassable by fish. No potential spawning habitat present at the lake outlet.
- C4 R5 is classed as S6 habitat.

11-Sep-98

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report 460-6006-407-481-221-000-000-000-000-000-000-000

Header Inform	mation				_			-			-		
Stream Name:	FALSE TAGI	C. TRIBUTARY	Stream "Le	cal":	FTa5.1						Access:		FT
Watershed Code:	460-6006-407	481-221-000-000-000-000-000-000							Reach No.:	1	Reach Length (km):	0.6 Method:	MW
Location:	LOCATED ~1	00 m U/S FROM MOUTH.	Map #:	093L02	5				Site No.:	15	Length surveyed (m):	100.0 Method:	HC
			U.T.M.:	9 .6211	.60112				Fish Card:	N	Field: Yes	Historical:	No
Date: 11/06/97	Time: 14	45 Agency: C87 Survey Cr	ew: CP\JB \	111	١١				Photos:	B1/3, 4	Air Photos:	BCB 911	179:111
Channel Chai	racterist	ics			Specific De	ata			Bed Material				
Av. Chan. Width (m):	1.2	Method Av. Chan. Width (m):	1.4	1.1	1.0	1.5	1.1	0.9	% Fines (<2mm):	5	% Fines (<2mm):		5
Av. Wet. Width (m):	1.2		1.4	1.1	1.0	1.5	1.1	0.9	% Gravels:	40	Small (2-16mm):		10
Av. Max. Rif. Depth (c	•	• ` '	11	9	12						Large (16-64mm):		30
Av. Max. Pool Depth (c	•	Av. Max. Pool Depth (cm):	10	15	16				% Larges:	55	Small cobble (64-128mm):		40
Gradient (%):	5.0								76 Larges.	33	Large cobble (128-256mm)		15
% Pool: 10	% Riffle: 70		Method:	GE							Boulder cobble (>256mm):		0
% Side Channel:	0.10	Method Side Channel: GE							A/ Policy I	0			^
% Debris Area:	0-10	Method Debris Area: GE							% Bedrock:	0	% Bedrock:		0
Cover									D90 (cm):	15	Compaction:		High
Cover Total %:	80	Method Cover Total %: GE							Banks				
Dp Pool: 0 L.O	<b>D.D.:</b> 5	Boulder: 55 In Veg.: 0	Over Veg:	30	Cutbar	ık:		10					
Crown Closure %:	40	Method Crown Closure: GE	Aspect :	S	Method	d Aspect:		MW	Height (m):	0.7	% Unstable:		5
									Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge					pecific Dai				Confinement:	4			
Wetted Width (m):		Method Wetted Width (m):			ecijie Dili				Valley: Chan. Ratio:	2			
Mean Depth (m):		Method Mean Depth (m):							Stage:	M			
Mean Velocity (m/s):		Method Mean Velocity (m/s VO							Flood Signs Ht(m):	0.6	Method Flood Signs:		MS
Discharge (m3/s):	0.17	Method Discharge (m3/s):							Braided:	N	Method Braided:		GE
			<u> </u>						Bars (%):	0	Method Bars:		GE
Reach Symbol	l	/Fi-la							pH:	7.0	Method pH:		PH
-		(Fish) CT							02 (ppm):		Method Dissolved Oxygen	:	
				—					Water Temp. (°C):	11.0	Method Temperature:		TC
		1 B 5.0 145							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope) (Be	d Material)						Cond. (µmhos):	60	Method Conductivity:		CM

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-407-481-221-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	6	50-57	J	R			EL

### **Obstructions**

Obstruction Ht(m)	Type	Location
	BD	0.2

- C1 Electrofished 75 m length of stream for 1541 s. with no lower net. CT were caught.
- C2 Water is tannic in colour.
- C3 Nice creek with sections of potential spawning gravels. The cobble/boulder sections are good for juvenile rearing. Primarily riffle/cobble habitat in this section of creek.
- C4 R1 is classed as S4 habitat.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 460-6006-407-481-221-000-000-000-000-000-000-000-000

Header Information Stream Name: FALSE TAGIT C. TRIBUTARY Stream "Local": FTa5.1 Access: Н Watershed Code: 460-6006-407-481-221-000-000-000-000-000-000 Reach No .: Reach Length (km): 1.2 Method: MW Location: ~1.2 km U/S FROM MOUTH; SECTION ADJACENT TO 093L025 Site No.: Length surveyed (m): 34.0 Method: HC Map #: WILLOW MEADOW. U.T.M.: 9.6211 .60112 Fish Card: Field: Yes Historical: No Date: 08/07/97 Time: 12:30 Agency: C87 Survey Crew: CP\DB \ \ \ \ \ \ Photos: B2/21, 22 Air Photos: BCB 91179:210 **Channel Characteristics Bed Material** Specific Data Av. Chan. Width (m): Method Av. Chan. Width (m): T 1.1 0.9 2.0 1.4 1.8 % Fines (<2mm): 50 % Fines (<2mm): Av. Wet. Width (m): Method Av. Wet. Width (m): T 1.2 1.4 0.9 0.8 0.8 % Gravels: Small (2-16mm): 30 Av. Max. Rif. Depth (cm): Av. Max. Riffle Depth (cm): MS 8 5 5 Large (16-64mm): 10 Av. Max. Pool Depth (cm): Av. Max. Pool Depth (cm): 6 20 12 15 % Larges: Small cobble (64-128mm): 10 Gradient (%): 3.0 Method Gradient: CL Large cobble (128-256mm): 0 % Pool: 80 % Run: % Other: % Riffle: 10 10 0 Method: GE Boulder cobble (>256mm): 0 GE % Side Channel: Method Side Channel: GE % Debris Area: Method Debris Area: % Bedrock: % Bedrock: 0 High D90 (cm): Compaction: Cover Cover Total %: Method Cover Total %: GE Banks Dp Pool : 0 L.O.D.: Boulder: Over Veg: Cutbank: 20 Crown Closure %: Method Crown Closure: GE SE Method Aspect: MW Aspect: Height (m): % Unstable: 0 **Textures Fines:** Larges: No Bedrock: No Gravel: No Discharge Confinement: 5 Specific Data Valley: Chan. Ratio: Wetted Width (m) : Method Wetted Width (m): Stage: Mean Depth (m): Method Mean Depth (m): Flood Signs Ht(m): Method Flood Signs: Mean Velocity (m/s): Method Mean Velocity (m/s VO GE Braided: Method Braided: Discharge (m3/s): 0.01 Method Discharge (m3/s): GE Bars (%): 10 Method Bars: pH: Method pH: Reach Symbol (Fish) Method Dissolved Oxygen: 02 (ppm): CT Water Temp. (°C): TC Method Temperature: 3.0 1 D 5410 GE Turb. (cm): 200 Method Turbidity: (Width, Valley: Channel, Slope) (Bed Material) CM Cond. (µmhos): 70 Method Conductivity:

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 460-6006-407-481-221-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
СТ	6	46-168	J	R			EL

#### **Obstructions**

- C1 Electrofished 34 m length of stream for 320 s. The CT that were captured are suspected to be stream residents based on their heavy spotting, the fact that mature-size fish are present in July, and the small size of the creek.
- C2 The BD d/s in R1 restricts easy movement by fish.
- C3 Assume CT are present to the top of R2. R3 is intermittent and stagnant with sections with no defined channel. Bed material is 100% sand/silt. Suspect creek dewaters in the
  - summer and there is no fish use potential.
- C4 R2 is classed as S4 habitat.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-407-481-295-000-000-000-000-000-000

Header Info	rmatio	n													
Stream Name:	FALSE 1	ragit	C. TRIBUTARY		Stream "Lo	cal":	FTa5.2	2					Access:		FT
Watershed Code:	460-600	6-407-4	81-295-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.6 Method:	MW
Location:	LOCATI	ED ~10	0 m U/S FROM THE MOUTH.		Map#:	093L025	;				Site No.:	17	Length surveyed (m): 20	0.0 Method:	HC
					U.T.M. :	9 .6215	.60113				Fish Card:	N	Field: Yes His	torical:	No
Date: 11/06/97	Time	: 16:3	O Agency: C87 Surv	ey Cre	ew: CP\JB \ \	111	\ \				Photos:	B1/7, 8	Air Photos:	BCB 911	.79:112
Channel Cha	aracte	risti	es				Specific D	ata			Bed Material				
Av. Chan. Width (m)	:	0.8	Method Av. Chan. Width (m):	T	0.7	0.9	0.9	0.7	1.0	0.6	% Fines (<2mm):	20	% Fines (<2mm):		20
Av. Wet. Width (m):		0.4	Method Av. Wet. Width (m):	T	0.5	0.3	0.3	0.3	0.8	0.5	·		, ,		
Av. Max. Rif. Depth	(cm):	4	Av. Max. Riffle Depth (cm):	MS	3	4	4				% Gravels:	55	Small (2-16mm):		30
Av. Max. Pool Depth	(cm):	16	Av. Max. Pool Depth (cm):	4	9	17	23						Large (16-64mm):		25
Gradient (%):		2.5	Method Gradient:	CL							% Larges:	25	Small cobble (64-128mm):		15
% Pool: 30	% RiM	e: 10	% Run: 60 % Other:	0	Method:	GE							Large cobble (128-256mm):		10
% Side Channel:		0	Method Side Channel:	GE							 		Boulder cobble (>256mm):		0
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover	_										D90 (cm):	15	Compaction:	M	Medium
Cover Total % :		40	Method Cover Total %:	GE							Banks				
Dp Pool: 0 L	.O.D.:	10	Boulder: 20 In Veg.:	0	Over Veg:	70	Cutba	nk:		0	Dunns				
Crown Closure %:		85	Method Crown Closure:	GE	Aspect:	N	Metho	d Aspect:		MW	Height (m):	0.5	% Unstable:		0
											Textures Fines:	Yes	Gravel: No Larges: No	Bedrock:	No
Discharge					, ——		ecific Da	•			Confinement:	5			
J			15.0 150 0 150 10 10 10 10 10 10 10 10 10 10 10 10 10				ecijic Du	10			Valley: Chan. Ratio:	4			
Wetted Width (m):			Method Wetted Width (m):								Stage:	M			
Mean Depth (m):			Method Mean Depth (m):								Flood Signs Ht(m):	0.25	Method Flood Signs:		MS
Mean Velocity (m/s)		0.01	Method Mean Velocity (m/s	VO							Braided:	N	Method Braided:		GE
Discharge (m3/s) :		0.01	Method Discharge (m3/s):								Bars (%):	10	Method Bars:		GE
Reach Symb	ol .									_	pH:	7.0	Method pH:		PH
reach Symb	vi		(F	ish)							02 (ppm):		Method Dissolved Oxygen:		
			1	NF							Water Temp. (°C):	14.0	Method Temperature:		TC
			1 D 2.5	2530	)						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	60	Method Conductivity:		CM

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

**Stream Survey Report** 

Watershed Code:

460-6006-407-481-295-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Summ	Dary Obstructions
Comments	
C1	Electrofished 100 m length of stream with no lower net. No fish were caught/observed. Also set 9 traps in lake near the outlet; no catch.
C2	Small creek with trickle flow discharge and very limited potential spawning. Suspect dewaters during low flow periods.
C3	Surveyed lake outlet; outlet creek has no visible flow with mud bed material, tannic-coloured water, and an average channel width of 30 cm. Suspect lake is barren (photo A3/4, 5).
C4	Observed 2 loons on the lake.

Stream Survey Report 460-6006-407-481-FTa-5.3-000-000-000-000-000-000

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY Watershed Code:

Header Information	!												
	GIT C. TRIBUTARY	000-000-000	Stream "L	ocal":	FTa5.	3			Reach No.:	1	Access:	1.6 Method:	FT MW
	~70 m U/S FROM MOUTH.		Man #	093L02					Site No.:	18	Reach Length (km):		
Location: Located	~10 III O/3 FROM MOUTH.		Map #: U.T.M. :	9.6216					Fish Card:	16 N	Length surveyed (m): Field: Yes	150.0 Method: Historical:	HC No
Date: 11/06/97 Time:	17:00 Agency:	C97 Survey	Crew: CP\JB\R						Photos:	B1/9, 10	Air Photos:	BCB 911	
		Car Survey		<u> </u>	- ' '				rnotos:	B1/9, 10	AIF PROTOS:	BCB 911	179:112
Channel Characteri	stics				Specific L	ata			Bed Material				
Av. Chan. Width (m):	1.0 Method Av. Chan, Wi	idth (m):	0.9	1.1	1.8	0.9	0.7	0.6	   % Fines (<2mm):	40	% Fines (<2mm):		40
Av. Wet. Width (m):	1.0 Method Av. Wet. Wid	lth (m):	0.9	1.1	1.8	0.9	0.7	0.6	}		, ,		••
Av. Max. Rif. Depth (cm):	5 Av. Max. Riffle Depth	ı (cm): MS	6	5	5				% Gravels:	40	Small (2-16mm):		
Av. Max. Pool Depth (cm):	20 Av. Max. Pool Depth	(cm): 5	23	12	24			ì			Large (16-64mm):		
Gradient (%):	3.0 Method Gradient:	CI	,						% Larges:	20	Small cobble (64-128mm):		
% Pool: 20 % Riffle:	40 % Run: 40	% Other:	Method:	GE					l		Large cobble (128-256mm	):	
% Side Channel:	0 Method Side Channel	: GE	3						<u> </u>		Boulder cobble (>256mm)	:	
% Debris Area:	>40 Method Debris Area:	GE	3						% Bedrock:	0	% Bedrock:		0
Cover			· · · ·						D90 (cm):	8	Compaction:		High
Cover Total % :	60 Method Cover Total ?	%: GE	3						Banks				
Dp Pool: 5 L.O.D.:	30 Boulder: 15	In Veg.: 0	Over Veg:	20	Cutba	nk:		30					
Crown Closure %:	50 Method Crown Closus	re: GI	Aspect:	S	Metho	d Aspect:	;	MW	Height (m):	0,6	% Unstable:		0
									Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge					necific Da				Confinement:	4			
	N. (1. 1917 at 1917 ha				recijic Du				Valley: Chan. Ratio:	3			
Wetted Width (m):	Method Wetted Width	` '							Stage:	М			
Mean Depth (m):	Method Mean Depth (n	•						)	Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s):	Method Mean Velocity	•	,						Braided:	N	Method Braided:		GE
Discharge (m3/s): 0.	03 Method Discharge (m3/	/s):							Bars (%):	0	Method Bars:		GE
Reach Symbol									рН:	7.0	Method pH:		PH
Actual Syllibor		(Fish)							02 (ppm):		Method Dissolved Oxygen	:	
		NF							Water Temp. (°C):	7.0	Method Temperature:		TC
1		1 C 3.0 4	420						Turb. (cm):	200	Method Turbidity:		GE
	(Width, Valley: Ch	hannel, Slope) (1	Bed Material)						Cond. (µmhos):	50	Method Conductivity:		СМ

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-407-481-FTa-5.3-000-000-000-000-000

### Stream/Valley Cross-Section

11-Sep-98

Fish Summ	ary Obstructions
Comments	
Cl	Electrofished 80 m length of stream with no lower net; no fish were caught/observed.
C2	3 BD drops are located on FTa5.0 between FTa5.2 and FTa5.3 confluences; they may cause fish access problems.
C3	Small, stable creek (moss-covered instream boulders) with gradient increasing going w/s. Defined channel becomes intermittent w/s. Accessible in the lower 30 m of stream if fish can get through beaver dams on main channel (FTa5.0). Classed as S6 habitat.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

# Stream Survey Report 460-6006-407-481-FTa-5.4-000-000-000-000-000-000

Header Informat	ion					_										
Stream Name: FALS	E TAGIT	C. TRIBUTAI	RY			Stream "Lo	cal":	FTa5.4						Access:		Н
Watershed Code: 460-6	006-407-4	81-FTa-5,4-00	00-000-000-	-000-000-000								Reach No.:	1	Reach Length (km):	2.0 Method:	MW
Location: LOCA	TED 100	m U/S FROM	THE MOU	UTH.		Map #:	093L02	5				Site No.:	19	Length surveyed (m):	200.0 Method:	GE
						U.T.M.:	9 .6222	.60118				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97 T	me: 15:0	0	Agency:	C87 Sui	vey Cre	ew: DB \CP \	1 1 1 1	. 1 1				Photos:	B2/25; B3/1	Air Photos:	BCB 911	179:209
Channel Charact	teristi	cs						Specific Da	ıta			Bed Material				
Av. Chan. Width (m):	0.8	Method Av.	. Chan. Wi	idth (m):	T	0.3	0.6	0.4	0.4	1.2	1.8	A/ Ein (-2).	100	9/ E: (/]):		100
Av. Wet. Width (m):	0.8	Method Av.		` '	Т	0.3	0.6	0.4	0.4	1.2	1.8	% Fines (<2mm):	100	% Fines (<2mm):		100
Av. Max. Rif. Depth (cm):		Av. Max. R	Liffle Depth	ı (cm):	MS	}						% Gravels:	0	Small (2-16mm):		0
Av. Max. Pool Depth (cm):	27	Av. Max. P	_	• •		21	24	35				1		Large (16-64mm):		0
Gradient (%):	1.5	Method Gra	-	` ,	CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 60 % R	ffle: 5	% Run:	35	% Other:	0	Method:	GE					1		Large cobble (128-256mm	):	0
% Side Channel:	0	Method Sid	e Channel:	:	GE							}		Boulder cobble (>256mm)		0
% Debris Area:	10-40	Method Del	bris Area:		GE							% Bedrock:	0	% Bedrock:		0
												D90 (cm):		Compaction:		High
Cover												<u> </u>				
Cover Total %:	90	Method Cov	ver Total %	<b>/</b> e:	GE							Banks				
Dp Pool: 5 L.O.D.:	10	Boulder:	0	In Veg.:	0	Over Veg:	45	Cutban	k:		40	Junas				
Crown Closure %:	40	Method Cro	own Closus	re:	GE	Aspect:	S	Method	Aspect:		MW	Height (m):	0.8	% Unstable:		0
												Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge								iG- Dat				Confinement:	5			
9		36.4 337.4						pecific Date				Valley: Chan. Ratio:	4			
Wetted Width (m):		Method Wett		` '		1						Stage:	L			
Mean Depth (m):		Method Mea	• ,	•							Ì	Flood Signs Ht(m):	0.5	Method Flood Signs:		MS
Mean Velocity (m/s):		Method Mea	•	,	vo	}						Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.01	Method Disc	:harge (m.3/	/s): 		<u> </u>						Bars (%):	0	Method Bars:		GE
Reach Symbol									_			pH:		Method pH:		
icach Dynioot				(	Fish)							02 (ppm):		Method Dissolved Oxygen	:	
					CT							Water Temp. (°C):	10.0	Method Temperature:		TC
				1 D 1.5	F							Turb. (cm):	200	Method Turbidity:		GE
		(Width,	Valley: Ch	hannel, Slope	(Bed	d Material)						Cond. (µmhos):	40	Method Conductivity:		СМ

10-Feb-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-407-481-FTa-5.4-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

 Species
 Number
 Size Range (mm)
 Life Phase
 Use 1
 Use 2
 Use 3
 Method/Reference

 CT
 I 69
 J
 R
 EL

#### **Obstructions**

- C1 Electrofished 45 m length of stream with no lower net. 1 CT was caught.
- C2 Majority of the channel is incised. Bed material consists of fines and is mixed with an abundant amount of small woody debris.
- C3 R1 is classed as S4 habitat.

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-407-481-FTa-5.4-000-000-000-000-000

Header Infor	matio	<u> </u>								_						
Stream Name:	FALSE T	AGIT (	C. TRIBUTARY			Stream "Lo	cal":	FTa5.	4					Access:		Н
Watershed Code:	460-6006	407-4	81-FTa-5.4-000-000-	000-000-000								Reach No.:	1	Reach Length (km):	2.0 Method:	MW
Location:			THE SOUTHERN BO			Map #:	093L025	;				Site No.:	20	Length surveyed (m):	100.0 Method:	HC
	PROPOSI	ED BL	OCK; ~750 m U/S F	ком моитн.		U.T.M.:	9 .6222	.60118				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97	Time:	17:0	) Agenc	y: C87 Sur	ey Cr	ew: DB \CP \	1111	1.1				Photos:	B3/4, 5	Air Photos:	BCB 911	179:209
Channel Cha	racter	istic	es .					Specific L	)ata			Bed Material				
Av. Chan. Width (m):		1.0	Method Av. Chan.	. Width (m):	Т	0.8	0.7	1.0	0.8	1.4	1.5	% Fines (<2mm):	85	% Fines (<2mm):		85
Av. Wet. Width (m):		1.0	Method Av. Wet.	Width (m):	T	0.8	0.7	0.1	0.8	1.4	1.5	% Gravels:	15	Small (2-16mm):		5
Av. Max. Rif. Depth (	cm):		Av. Max. Riffle De	epth (cm):	MS	1						76 Graveis.	13	Large (16-64mm):		10
Av. Max. Pool Depth (	(cm):	22	Av. Max. Pool Dep	oth (cm):		27	15	23					•			
Gradient (%):		1.5	Method Gradient:		CL					_		% Larges:	0	Small cobble (64-128mm):		0
% Pool: 80	% Riffle	. 0	% Run: 20	% Other:	0	Method:	GE							Large cobble (128-256mm		0
% Side Channel:		0	Method Side Chan		GE									Boulder cobble (>256mm)	•	U
% Debris Area:		>40	Method Debris Ar	ea:	GE							% Bedrock:	0	% Bedrock:		0
Cover											<del>-</del>	D90 (cm):	2	Compaction:		High
Cover Total % :		100	Method Cover Tot	al %:	GE							Banks				
Dp Pool: 0 L.	O. <b>D</b> .:	25	Boulder: 0	In Veg.:	0	Over Veg:	70	Cutba	nk:		5					
Crown Closure %:		100	Method Crown Cl	osure:	GE	Aspect:	S	Metho	d Aspect:		MW	Height (m):	0.7	% Unstable:		0
												Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge							Sn	ecific Da				Confinement:	5			
Wetted Width (m):			Method Wetted Wie	dth (m) ·				cenjie De				Valley: Chan. Ratio:	4			
Mean Depth (m):			Method Mean Dept									Stage:	L			
Mean Velocity (m/s) :			Method Mean Veloc	• •	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Discharge (m3/s):	(		Method Discharge (	• •	. •							Braided:	N	Method Braided:		GE
								===		===		Bars (%):	0	Method Bars:		GE
Reach Symbo	ol											pH:		Method pH:		
•				,	ish)							02 (ppm):		Method Dissolved Oxygen	:	
					CT							Water Temp. (°C):	10.0	Method Temperature:		TC
l				1 D 1.5	1							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley	: Channel, Slope)	(Be	d Material)						Cond. (µmhos):	60	Method Conductivity:		CM

Watershed Code:

460-6006-407-481-FTa-5,4-000-000-000-000-000

## Stream/Valley Cross-Section

## Fish Summary

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 1 60 J R EL

Stream: FALSE TAGIT C. TRIBUTARY

#### **Obstructions**

#### **Comments**

11-Sep-98

- C1 Electrofished 55 m length of stream for 300 s, with no lower net. 1 CT was caught.
- C2 Hiked across to FTa5.4 from small meadow. Located within a pine/spruce stand with alder understory. Small side tributary to FTa5.4 was observed.
- C3 Mature Western Spotted Frog was observed in the side tributary.
- C R1 is classed as S4 habitat.

Stream: FALSE TAGIT C. TRIBUTARY 11-Sep-98

Watershed Code:

Stream Survey Report 460-6006-407-481-FTa-5.4-000-000-000-000-000-000

Header Info	rmation														
Stream Name:	FALSE TAC	it C	. TRIBUTARY		Stream "Lo	cal":	FTa5.4	4					Access:		Н
Watershed Code:	460-6006-40	7-48	1-FTa-5.4-000-000-000-000-000								Reach No.:	1	Reach Length (km):	2.0 Method:	MW
Location:	WALKED 8	0 m I	D/S FROM LARGE MEADOW; LOC	CATED	Map #:	093L025					Site No.:	21	Length surveyed (m):	55.0 Method:	HC
	1.9 km U/S I	RON	M THE MOUTH.		U.T.M. :	9 .6222	.60118				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97	Time:	6:00	Agency: C87 Sur	vey Cr	ew: DB \CP \	\ \ \ \	1.1				Photos:	B3/2, 3	Air Photos:	BCB 911	179:209
Channel Cha	aracteris	tics	S				Specific D	ata			Bed Material				
Av. Chan. Width (m)	; 0	.9	Method Av. Chan. Width (m):	Т	0.8	0.6	0.8	1.0	1.0	1.0	% Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):	(	8.0	Method Av. Wet. Width (m):	T	0.8	0.6	8.0	1.0	1.0	0.9			•		
Av. Max. Rif. Depth (	(cm):	7	Av. Max. Riffle Depth (cm):	MS	5	5	10				% Gravels:	0	Small (2-16mm):		0
Av. Max. Pool Depth	(cm):	7	Av. Max. Pool Depth (cm):	7	15	20	15			İ			Large (16-64mm):		0
Gradient (%):	2	2.0	Method Gradient:	CL	<u> </u>						% Larges:	0	Small cobble (64-128mm):		0
% Pool: 95	% Riffle:	5	% Run: 0 % Other:	0	Method:	GE					1		Large cobble (128-256mm)		0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	0-	10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):		Compaction:		High
Cover Total % :	10	00	Method Cover Total %:	GE							Banks				
Dp Pool: 0 L.	.O.D.:	0	Boulder: 0 In Veg.:	10	Over Veg:	90	Cutba	nk:		0	Dunks				
Crown Closure % :	10	00	Method Crown Closure:	GE	Aspect:	SE	Metho	d Aspect:		MW	Height (m):	0.3	% Unstable:		0
<del></del>											Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge							ecific Da				Confinement:	2	_		
						<i>Sp</i>	ecijic Da	ia			Valley: Chan. Ratio:	1			
Wetted Width (m):			Method Wetted Width (m):							}	Stage:	L			
Mean Depth (m):			Method Mean Depth (m):								Flood Signs Ht(m):		Method Flood Signs:		
Mean Velocity (m/s):			Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.0	1 1	Method Discharge (m3/s) :								Bars (%):	0	Method Bars:		GE
Reach Symbo	ol										pH:		Method pH:		
icach bymo			·	Fish)							02 (ppm):		Method Dissolved Oxygen:		
				NF							Water Temp. (°C):	15.0	Method Temperature:		TC
			1 A 2.0	F		_					Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bec	l Material)						Cond. (µmhos):	80	Method Conductivity:		СМ

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-407-481-FTa-5.4-000-000-000-000-000

## Stream/Valley Cross-Section

Fish Summ	onary Obstruc	tions
Comments	7	
Cl	Electrofished a large section of stream for 715 s. No fish were caught/observed.	
C2	Below the meadow, the creek becomes more confined by gradual sloping valley walls.	
C3	Understory is alder within a pine and spruce mix stand.	
C4	R1 is classed as S6 habitat.	

Stream: FALSE TAGIT C. TRIBUTARY 11-Sep-98

Watershed Code:

# 

Header Information													
Stream Name: FALSE TAGIT C	C. TRIBUTARY 0-000-000-000-000-000-000-000	Stre	am "Local"	<b>':</b>	FTa6				Reach No.:	ī	Access: Reach Length (km):	0.6 Method:	H MW
	HE CONFLUENCE OF FTa6 AND FTa	6.1. <b>Ma</b>	n#: 093	L025					Site No.:	22	Length surveyed (m):	100.0 Method:	
2001122111			,	194 .60	0119				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97 Time: 14:00	Agency: C87 Surve		)\IF\ \ \						Photos:	A10/3, 4	Air Photos:	BCB 911	
Channel Characteristic	5			Spe	cific Da	ıta			Bed Material				
Av. Chan. Width (m): 1.1	Method Av. Chan. Width (m):	Υ	1.2 0.	9	0.8	1.3	1.2		% Fines (<2mm):	15	% Fines (<2mm):		15
Av. Wet. Width (m): 0.8	Method Av. Wet. Width (m):	T	0.8 0	.9	0.8	0.4	0.9		% Gravels:	85	Small (2-16mm):		70
Av. Max. Rif. Depth (cm):	Av. Max. Riffle Depth (cm):	MS							oraveis.	05	Large (16-64mm):		15
Av. Max. Pool Depth (cm): 14	Av. Max. Pool Depth (cm):	1	12 1	8	11				n/ T	^			
,		CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 30 % Riffle: 40	% Run: 30 % Other:		lethod: GE								Large cobble (128-256mm)  Boulder cobble (>256mm):		0
% Side Channel: 0-10		GE											·
% Debris Area: 0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover									D90 (cm):	2	Compaction:		High
Cover Total %: 40	Method Cover Total %:	GE							Banks				
<b>Dp Pool</b> : 40 L.O.D.: 10	Boulder: 0 In Veg.:	0 <b>Ove</b>	er Veg:	30	Cutban	k:		20	2411115				
Crown Closure %: 20	Method Crown Closure:	GE Asp	ect :	SE	Method	Aspect	:	MW	Height (m):	0.4	% Unstable:		0
<del></del>									Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge		í –		Cnaa	ific Date				Confinement:	4			
Wetted Width (m):	Method Wetted Width (m) :	<u> </u>		Брес	yic Dui	<u>.                                    </u>			Valley: Chan. Ratio:	3			
, ,	` '								Stage:	L			
• • •	Method Mean Depth (m) : Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
• ` '	Method Discharge (m3/s):	VO							Braided:	N	Method Braided:		GE
					_=				Bars (%):	10	Method Bars:		GE
Reach Symbol									pH:	8.0	Method pH:		PH
	(Fi	•							02 (ppm):		Method Dissolved Oxygen	i	
	N			_					Water Temp. (°C):	11.0	Method Temperature:		TC
	1 C 5.0	1900							Turb. (cm):	200	Method Turbidity:		GE
	(Width, Valley: Channel, Slope)	(Bed Mat	erial)						Cond. (µmhos):		Method Conductivity:		

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-407-660-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

11-Sep-98

Fish Summ	ary Obstructions
Comments	
Cl	Electrofished 100 m length of stream; no fish were caught/observed.
C2	Silt/fine gravel bed material. Alder swales line the channel.
С3	Small, stable creek that may dewater during dry periods.
C4	Lower R1 was surveyed by air: easy access at the mouth; classed as suspected S4 habitat due to the potential fish habitat present in R1.

Stream Survey Report 460-6006-407-660-FTa-6.1-000-000-000-000-000-000

11-Sep-98 Stream: FALSE TAGIT C. TRIBUTARY Watershed Code:

Header Informa	tion	<del>-                                    </del>				_			· · · · · · ·		· · ·		
-		C. TRIBUTARY		Stream "Le	real".	FTa6	1				Access:		н
		660-FTa-6.1-000-000-000-000-000		Sticani D	cai .	1140	.'		Reach No.:	1	Reach Length (km):	0.8 Method:	
		) m U/S FROM THE MOUTH.		Мар#:	093L025	;			Site No.:	23	Length surveyed (m):	200.0 Method:	
Edution: 20				•	9.6195				Fish Card:	N N	Field: Yes	Historical:	No
Date: 08/07/97	Γime: 14	30 Agency: C87 Surv	ey Cr	ew: RD \IF\					Photos:	A10/5, 6	Air Photos:	BCB 911	
Channel Chara	cteristi	 ics				Specific	Data		Bed Material			<del></del>	
Av. Chan. Width (m):	0.8	Method Av. Chan. Width (m):	т	0.5	0.5	1.0	1.3		   % Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):	0.5	Method Av. Wet. Width (m):	T	0.5	0.5				[ ` ´ ´		, ,		
Av. Max. Rif. Depth (cm):		Av. Max. Riffle Depth (cm):							% Gravels:	0	Small (2-16mm): Large (16-64mm):		0
Av. Max. Pool Depth (cm)		Av. Max. Pool Depth (cm):							0/ 1	0			0
Gradient (%):	3.0		CL						% Larges:	0	Small cobble (64-128mm):		0
	Riffle: 0		0	Method:	GE						Large cobble (128-256mm Boulder cobble (>256mm)		0
% Side Channel:	0	Method Side Channel:	GE								• •	•	_
% Debris Area:	0	Method Debris Area:	GE						% Bedrock:	0	% Bedrock:		0
Cover						_			D90 (cm):		Compaction:		High
Cover Total % :	10	Method Cover Total %:	GE						Banks				-
Dp Pool: 70 L.O.D.	0	Boulder: 0 In Veg.:	30	Over Veg:	0	Cutb	ank:	0					
Crown Closure %:	5	Method Crown Closure:	GE	Aspect :	SW	Meth	od Aspect:	MW	Height (m):	0.2	% Unstable:		0
							<del></del>		Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						pecific D			Confinement:	5			
31/-44-3 33// tal ()		Made 188 ma 288 24 (a)				recgic D			Valley: Chan. Ratio:	4			
Wetted Width (m):		Method Wetted Width (m):							Stage:	L			
Mean Depth (m):		Method Mean Depth (m):		}				-	Flood Signs Ht(m):		Method Flood Signs:		
Mean Velocity (m/s):		Method Mean Velocity (m/s	VO	1					Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.01	Method Discharge (m3/s):		<u></u>					Bars (%):		Method Bars:		
Reach Symbol									pH:	7.5	Method pH:		PH
icach Dymoot		•	ish)						02 (ppm):		Method Dissolved Oxygen	:	
		1	NF						Water Temp. (°C):	11.0	Method Temperature:		TC
		1 D 3.0	F						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bec	d Material)					Cond. (µmhos):	80	Method Conductivity:		СМ

Stream: FALSE TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-407-660-FTa-6.1-000-000-000-000-000

## Stream/Valley Cross-Section

11-Sep-98

Fish Summ	ary Obstructions
Comments	
CI	Creek was too small to sample; not fish habitat. No fish were caught in the site just d/s on FTa6.
C2	Small seepage originating from bog area. Sections have no defined channel. Iron leaching is prevalent.
С3	No gravel bed material.
C4	Tributary FTa6.1 is classed as S6 habitat.

10-Feb-98

Stream: TAGIT C.

Watershed Code:

**Stream Survey Report** 

460-6006-445-000-000-000-000-000-000-000-000

Header Info	rmatio	n						-							
Stream Name:	TAGIT C	<b>:</b> .			Stream "Le	cal":	TAGI	r C.					Access:		FT
Watershed Code:	460-6006	5-445-0	00-000-000-000-000-000-000-000								Reach No.:	2	Reach Length (km):	Method:	MW
Location:			HISHOLM LAKE; LAKE SURVEY DA	ΙTΑ	Map #:	93/L3					Site No.:	0	Length surveyed (m):	630.0 Method:	HC
'	(SEE CO	MMEN	IT 1), SITE LS1.		U.T.M.:	09.6159	50.600801	7			Fish Card:	N	Field: Yes	Historical:	No
Date: 27/09/96	Time	: 17:1	4 Agency: C58 Surv	ey Cre	ew: JD \JL\ \	111	\ \				Photos:		Air Photos:		
Channel Cha	aractei	ristic	<b>2</b> S				Specific D	ata			Bed Material				
Av. Chan. Width (m)	:	11.2	Method Av. Chan. Width (m):	T	12.6	12.6	12.0	9.7	10.3	10.1	% Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):		9.6	Method Av. Wet. Width (m):	T	11.2	11.1	10.8	7.9	8.7	8.1	% Gravels:	0	Small (2-16mm):		0
Av. Max. Rif. Depth	(cm):		Av. Max. Riffle Depth (cm):	MS							% Graveis.	U	Large (16-64mm):		0
Av. Max. Pool Depth	(cm):	1	Av. Max. Pool Depth (cm):								_		,		
Gradient (%):		0.1	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mn		0
% Pool: 100	% Riffle	e: 0	% Run: 0 % Other:	0	Method:	GE							Large cobble (128-256m	•	0
% Side Channel:		0-10	Method Side Channel:	GE									Boulder cobble (>256mi	n):	0
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):		Compaction:		Low
Cover Total % :		30	Method Cover Total %:	GE							Banks				
Dp Pool: 0 L	.O.D.:	0	Boulder: 0 In Veg.:	100	Over Veg:	0	Cutbai	nk:		0					
Crown Closure %:		0	Method Crown Closure:	GE	Aspect:	sw	Metho	d Aspect:		GE	Height (m):		% Unstable:		0
<del></del>											Textures Fines:	Yes	Gravel: No Large	s: No Bedrock:	No
Discharge						St	ecific Da	ta			Confinement:	5			
Wetted Width (m) :		3.8	Method Wetted Width (m):	Т							Valley: Chan. Ratio:	4			
Mean Depth (m):			Method Mean Depth (m):	MS	0.0	0.3	0.3	0.5	0.5		Stage:	M			
Mean Velocity (m/s)		0.18	Method Mean Velocity (m/s	F		0.5	0.5	0.5	0.5	-	Flood Signs Ht(m):		Method Flood Signs:		
Discharge (m3/s):			Method Discharge (m3/s):	F							Braided:	N	Method Braided:		GE
					<del></del>		===				Bars (%):	10	Method Bars:		
Reach Symb	ol		œ	tale)							pH:	7.5	Method pH:		
- 1			(F	ish)							02 (ppm):		Method Dissolved Oxyg	en:	
											Water Temp. (°C):	13.0	Method Temperature:		
<b>l</b> i											Turb. (cm):		Method Turbidity:		
			(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	36	Method Conductivity:		

**Stream Survey Report** 

Watershed Code:

29-May-98 Stream: TAGIT C.

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

#### Fish Summary

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference RSC 2 65-80 J R MT WSU 1 70 J R MT

#### **Obstructions**

- C1 This data was derived from the Chisholm Lake Survey Report (DeGisi, Schell, 1997).
- C2 Discharge was estimated at the reach break (~630 m d/s of the lake); d/s of the reach break (a very old, breached beaver dam), the channel contains some riffles with salmonid spawning habitat (gravel/cobble substrate, good flow). The channel showed very low but discernible flow throughout.
- C3 There are many species of lentic macrophytes growing in the channel: Nuphar polysepalum, Potemageton epihydrus, burr-reeds, Hippuris vulgaris.
- C4 The entire reach consists of one long continuous pool.
- The minnow traps (3) were fished overnight (set: 1750, hauled the next day at 0915). Only one minnow trap (#3) yielded any fish: 2 RSC, and 1 WSU. Hundreds of RCS, between 50-90 cm, were visually observed in the channel.
- C6 R2 classed as S2 habitat.

10-Feb-98

Stream: TAGIT C.

Watershed Code:

Header Infor	matio.	n																
Stream Name:	TAGIT C						Stream "Le	ocal":	TAGI	T <b>C</b> .					Access:			FT
Watershed Code:	460-6006	-445-00	00-000-000-	-000-000-00	0-000-000-000								Reach No.:	2	Reach Length (km):	:	Method:	MW
Location:					OLM LAKE;	AKE	Map #:	93/L3					Site No.:	0	Length surveyed (m	ı): 500.6	Method:	HC
	SURVEY	DATA	(SEE CON	MMENT 1),	SITE LS2.		-	09.61587	75.60082:	34			Fish Card:	N	Field: Yes	-	rical:	No
Date: 28/09/96	Time	10:0	7	Agency:	C58 Su	rvey Cro	ew:JD\JL\	1111	\_\			_	Photos:		Air Photos:			
Channel Cha	racter	istic	S						Specific D	ata			Bed Material					
Av. Chan. Width (m):		5.0	Method A	Av. Chan. V	Vidth (m):	MS	6.0	5.0	4.5	5.5	5.0	4.2	% Fines (<2mm):	10	% Fines (<2mm):			10
Av. Wet. Width (m):		3.0	Method A	Av. Wet. Wi	idth (m):	MS	2.9	3.5	2.8	2.2	3.3	3.1	% Gravels:		, ,			
Av. Max. Rif. Depth (	cm):	11	Av. Max.	Riffle Dept	th (cm):	MS	7	9	13	14	12	13	% Graveis:	45	Small (2-16mm):			15
Av. Max. Pool Depth (	(cm):	58	Av. Max.	Pool Depth	(cm):	11	65	57	44	74	58	52			Large (16-64mm):			30
Gradient (%):		2.0	Method G	radient:		CL	L						% Larges:	45	Small cobble (64-12	8mm):		25
% Pool: 15	% Riffle	: 40	% Run:	45	% Other	: 0	Method:	GE							Large cobble (128-2	256mm):		15
% Side Channel:		0-10	Method S	ide Channe	el:	GE									Boulder cobble (>25	56mm):		5
% Debris Area:		0-10	Method D	Debris Area	:	GE							% Bedrock:	0	% Bedrock:			0
Cover													D90 (cm):		Compaction:		М	Medium
Cover Total % :		15	Method C	Cover Total	%:	GE							Banks					
Dp Pool: 40 L.0	O.D.:	35	Boulder:	5	In Veg.:	0	Over Veg:	10	Cutba	nk:		10	200000					
Crown Closure %:		45	Method C	Crown Close	ure:	GE	Aspect:	SE	Metho	d Aspect:		GE	Height (m):	0.7	% Unstable:			30
													Textures Fines:	Yes	Gravel: Yes L	arges: Yes	Bedrock:	No
Discharge								Se	ecific Da	uta			Confinement:	4				
Wetted Width (m):			Mathad W	etted Widtl	h (ma) a		<del> </del>						Valley: Chan. Ratio:	3				
Mean Depth (m):				ean Depth (									Stage:	M				
Mean Velocity (m/s):				ean Depuit ean Velocit	• •							}	Flood Signs Ht(m):	1.3	Method Flood Signs	s:		
Discharge (m3/s):				scharge (m								\	Braided:	N	Method Braided:			
			Wiethou Di				<u></u>						Bars (%):	45	Method Bars:			
Reach Symbo	ol .												pH:	7.1	Method pH:			
						Fish)							0 <b>2 (ppm)</b> :		Method Dissolved C	)xygen:		
													Water Temp. (°C):	7.7	Method Temperatu	re:		
													Turb. (cm):		Method Turbidity:			
			(Widt	h, Valley: (	Channel, Slope	) (Be	l Material)						Cond. (µmhos):	50	Method Conductivi	ty:		

29-May-98 Stream: TAGIT C.

Watershed Code:

## **Stream Survey Report**

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

## Fish Summary

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 2 70-110 J R MT CT 20 35 F R VO

#### **Obstructions**

- C1 This data was derived from the Chisholm Lake Survey Report (DeGisi, Schell, 1997).
- C2 All minnow traps (3) set @ 1900, hauled @ 1005 the next day; traps yielded two (2) CT, ranging from 70-110 mm.
- C3 The channel offers very good salmonid spawning potential, and fair to good rearing potential.
- C4 In many places, bank height on both sides of the channel is greater than 1.5 m. Site location: 200 m u/s of Chisholm Lake.

10-Feb-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-445-Ta5-000-000-000-000-000-000-000

Header Info	rmati	on .					-		-					
Stream Name:	TAGIT	C. TRI	BUTARY		Stream "Lo	cal":	Ta5						Access:	FT
Watershed Code:	460-60	06-445-	Ta5-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km): Method	: MW
Location:	INFLO	w to N	ORTH SHORE OF CHISHOLM LAKE	Ē;	Map #:	93/L3					Site No.:	0	Length surveyed (m): 45.0 Method	: HC
	LAKE	SURVE	Y DATA (SEE COMMENT 1), SITE L	S3.	U.T.M.:	09.6163	50.60087	75			Fish Card:	N	Field: Yes Historical:	No
Date: 28/09/96	Tin	ne: 15:	0 Agency: C58 Sui	vey Cr	ew:JD\JL\\	1 1 1	\ \				Photos:		Air Photos:	
Channel Cha	aracte	eristi	cs		_		Specific I	Data			Bed Material			
Av. Chan. Width (m)	:	1.0	Method Av. Chan. Width (m):	MS	0.8	0.9	1.2	1.2	1.1	1.0	% Fines (<2mm):	100	% Fines (<2mm):	100
Av. Wet. Width (m):		1.0	Method Av. Wet. Width (m):	MS	0.7	0.9	1.1	1.2	1.0	1.0	, , ,		,	
Av. Max. Rif. Depth	(cm):	4	Av. Max. Riffle Depth (cm):	MS	6	2	3	5	2		% Gravels:	0	Small (2-16mm):	0
Av. Max. Pool Depth	(cm):	17	Av. Max. Pool Depth (cm):	4	20	17	17	20	13				Large (16-64mm):	v
Gradient (%):		2.5	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):	0
% Pool: 5	% Riff	Пе: 15	% Run: 80 % Other:	0	Method:	GE							Large cobble (128-256mm):	0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):	0
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:	0
Cover	_										D90 (cm):		Compaction:	Low
Cover Total %:		10	Method Cover Total %:	GE							Banks		<u> </u>	
Dp Pool: 50 L	.O.D.:	40	Boulder: 0 In Veg.:	10	Over Veg:	0	Cutba	nk:		0	Duning			
Crown Closure % :		0	Method Crown Closure:	GE	Aspect:	S	Metho	od Aspect:		GE	Height (m):	0.1	% Unstable:	0
										_	Textures Fines:	Yes	Gravel: No Larges: No Bedrock:	No
Discharge							pecific Da	ata .			Confinement:	5		
_		0.2	Maked Ward Wild ( )	1.00	-		pecific Di				Valley: Chan. Ratio:	4		
Wetted Width (m):		0.3	Method Wetted Width (m):	MS	0.1	0.1	0.1	0.0			Stage:	М		
Mean Depth (m):	-	0.1 0.25	Method Mean Depth (m):	MS	0.1	0.1	0.1	0.0			Flood Signs Ht(m):	0.08	Method Flood Signs:	
Mean Velocity (m/s)	i		Method Mean Velocity (m/s	F							Braided:	N	Method Braided:	
Discharge (m3/s) :		0.01	Method Discharge (m3/s):	F				_			Bars (%):	5	Method Bars:	
Reach Symbo	ol										рН:	7.3	Method pH:	
			(	Fish)							02 (ppm):		Method Dissolved Oxygen:	
1											Water Temp. (°C):	10.8	Method Temperature:	
											Turb. (cm):		Method Turbidity:	
			(Width, Valley: Channel, Slope)	(Be	d Material)						Cond. (µmhos):	75	Method Conductivity:	

Watershed Code:

460-6006-445-Ta5-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

## Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT		25	F				DN

This data was derived from the Chisholm Lake Survey Report (DeGisi, Schell, 1997).

Stream: TAGIT C. TRIBUTARY

#### **Obstructions**

Obstruction Ht(m)	Type	Location
	BD	0.1

#### **Comments**

C1

29-May-98

- The channel traverses a muddy wetland which was formerly flooded by Chisholm Lake; the reach break is a 45 m u/s from the lake; the site location was 30 m u/s from the lake.

  The total length of the channel surveyed (R1 and R2) was 113 m. At 62 m u/s from the lake, a 1.5 m high beaver dam impounds a pond, with flow that goes over and then through the dam; this would not likely be passable by fish.

  C4

  R2 consists of a series of stepped pools. CT were visually observed at 55 m.
- C5 Tributary is classed as S4 u/s to 62 m and suspected S6 above 62 m.

10-Feb-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-445-214-000-000-000-000-000-000-000

Header Info	 rmation											
Stream Name:	TAGIT C. TI	IBUTARY	Stream '	'Local":	Ta4						Access:	FT
Watershed Code:	460-6006-44	-214-000-000-000-000-000-000-000							Reach No.:	1	Reach Length (km): Met	thod: MW
Location:		CHISHOLM LAKE; LAKE SURVEY DATA	A Map#:	93/L3					Site No.:	0	Length surveyed (m): 350.0 Met	thod: HC
	(SEE COMM	ENT 1), SITE LS4.	U.T.M.	09.6173	800.60083	25			Fish Card:	N	Field: Yes Historical:	No
Date: 28/09/96	Time: 1	5:27 Agency: C58 Survey	Crew: JD \JL		\ \				Photos:		Air Photos:	
Channel Cha	aracteris:	ics			Specific 1	Data			Bed Material			_
Av. Chan. Width (m)	: 1	9 Method Av. Chan. Width (m): M	IS 1.3	1.2	1.4	2.0	3.1	2.2	% Fines (<2mm):	85	% Fines (<2mm):	85
Av. Wet. Width (m):	1	2 Method Av. Wet. Width (m): M	IS 1.2	1.2	1.4	1.1	1.2	1.3			` ,	
Av. Max. Rif. Depth (	(cm):	5 Av. Max. Riffle Depth (cm): M	S 4	6	4				% Gravels:	10	Small (2-16mm):	5
Av. Max. Pool Depth	(cm): 3	3 Av. Max. Pool Depth (cm):	5 15	28	37	47	41	60			Large (16-64mm):	5
Gradient (%):	0	5 Method Gradient: C	L						% Larges:	5	Small cobble (64-128mm):	5
% Pool: 85	% Riffle:	5 % Run: 10 % Other:	0 Metho	d: GE							Large cobble (128-256mm):	0
% Side Channel:	0-1	Method Side Channel: G	E								Boulder cobble (>256mm):	0
% Debris Area:	>4	Method Debris Area: G	E						% Bedrock:	0	% Bedrock:	0
Cover		-	-						D90 (cm):		Compaction:	Medium
Cover Total %:		Method Cover Total %:							Banks			
Dp Pool: L.	O.D.:	Boulder: In Veg.:	Over Ve	g:	Cutba	ınk:			Dunks			
Crown Closure %:	3	Method Crown Closure: G	E Aspect:	E	Metho	od Aspect	:	GE	Height (m):	0.3	% Unstable:	0
									Textures Fines:	Yes	Gravel: No Larges: No Bedr	ock: No
Discharge					pecific Da				Confinement:	6		
	0.4	Mode of Words J Wilds ()			pecijic Di	114			Valley: Chan. Ratio:	5		
Wetted Width (m): Mean Depth (m):	0.5 0.1	Method Wetted Width (m): M  Method Mean Depth (m): M		0.1	0.1				Stage:	М		
Mean Velocity (m/s):		• , ,	F 0.1	0.1	0.1				Flood Signs Ht(m):	0.26	Method Flood Signs:	
Discharge (m3/s):	0.21	• •	F						Braided:	N	Method Braided:	
Discharge (m3/s):	0.01	Method Discharge (m3/s):	<u> </u>						Bars (%):	45	Method Bars:	
Reach Symbo	ol								pH:	7.1	Method pH:	
		(Fish	)						02 (ppm):		Method Dissolved Oxygen:	
									Water Temp. (°C):	7.7	Method Temperature:	
									Turb. (cm):		Method Turbidity:	
		(Width, Valley: Channel, Slope)	(Bed Material)						Cond. (µmhos):	47	Method Conductivity:	

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 460-6006-445-214-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

## Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	2	25-30	F				vo

#### **Obstructions**

Obstruction Ht(m)	Type	Location
I	BD	0.1

#### Comments

C4

C1 This data was derived from the Chisholm Lake Survey Report (DeGisi, Schell, 1997).

C2 Much of the channel is stagnant or has very little discernible flow as well as being somewhat impounded.

C3 Site location: 220 m u/s from Chisholm Lake.

Poor spawning potential due to lack of suitable substrate; bed material is organic/fines.

10-Feb-98 Stream: TAGIT C.

Watershed Code:

Stream Survey Report

460-6006-445-000-000-000-000-000-000-000-000

Header Informa	tion		_						_					
Stream Name: TAG	IT C.			Stream "Lo	cal":	TAGI	TC.					Access:		FΓ
Watershed Code: 460-	5006-445-0	00-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	1.4 Method:	MW
Location: SAM	PLED U/S	FROM MAIN ROAD BRIDGE FOR 33	5 m.	Map#:	093L024	;				Site No.:	1	Length surveyed (m):	00.0 Method:	HC
				U.T.M. ;	9.6148	,60066				Fish Card:	N	Field: Yes H	istorical:	No
Date: 02/07/97	ime: 14:	0 Agency: C87 Sur	vey Cr	ew: CP \RD \II	. / / /:	1 1 1				Photos:	A8/16, 17, 19	Air Photos:	BCB 91	. 179:32
Channel Charac	teristi	es e				Specific D	ata			Bed Material				
Av. Chan, Width (m):	4.5	Method Av. Chan. Width (m):	Т	4.3	5.3	4.5	4.5	2.9	5.4	% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):	3.7	Method Av. Wet. Width (m):	Т	4.3	3.5	4.2	4.5	2.9	2.7	, ,		,		
Av. Max. Rif. Depth (cm):	22	Av. Max. Riffle Depth (cm):	MS	21	25	21				% Gravels:	20	Small (2-16mm):		10
Av. Max. Pool Depth (cm):	75	Av. Max. Pool Depth (cm):	22	80	70	75						Large (16-64mm):		10
Gradient (%):	2.5	Method Gradient:	CL							% Larges:	70	Small cobble (64-128mm):		25
% Pool: 20 % F	iffle: 40	% Run: 40 % Other:	0	Method:	GE							Large cobble (128-256mm):		25
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		20
% Debris Area:	10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):	30	Compaction:	N	Medium
Cover Total % :	20	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.O.D.:	10	Boulder: 55 In Veg.:	0	Over Veg:	5	Cutba	nk:		10	Bunks				
Crown Closure %:	10	Method Crown Closure:	GE	Aspect:	S	Metho	d Aspect	:	MW	Height (m):	0.8	% Unstable:		10
<u> </u>										Textures Fines:	Yes	Gravel: No Larges: Yo	s Bedrock:	No
Discharge						ecific Da				Confinement:	3			
Ŭ						ecijic Da	···			Valley: Chan. Ratio:	2			
Wetted Width (m):		Method Wetted Width (m):								Stage:	М			
Mean Depth (m):		Method Mean Depth (m):	110							Flood Signs Ht(m):	0.5	Method Flood Signs:		MS
Mean Velocity (m/s):	0.42	Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.42	Method Discharge (m3/s):		L						Bars (%):	5	Method Bars:		GE
Reach Symbol										pH:	7.8	Method pH:		PH
icach Symboli		•	Fish)							02 (ppm):		Method Dissolved Oxygen:		
		CO(*) RB(SST)	CT(*)	LNC PL(*)						Water Temp. (°C):	16.0	Method Temperature:		TC
		5 B 2.5	127	)						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Be	l Material)						Cond. (µmhos):	30	Method Conductivity:		CM

Stream: TAGIT C.

Watershed Code:

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

#### Fish Summary

10-Feb-98

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	8	80-127	J	R		_	EL
CT	1	233	Α	M	S		EL
RB	9	79-181	J	R			EL
co	1	77	J	R			EL
LNC	8	87-127	J	R			EL
PL			J	R			VO

#### **Obstructions**

- C1 Electrofished 35 m length of stream with a lower net. The 233 mm CT was identified as a spawned-out male. CO present; therefore this creek must be accessible d/s from the main river, which was confirmed through air observations. Suspect RB are SST. Pockets of good potential spawning present in this section; suspect all species caught are spawning in this section.
- C2 Stable creek with moss-covered banks and instream boulders. ~150 m u/s from bridge, sections of low gradient run/pond habitat are present with abundant instream vegtetation and LOD, and fines/gravel bed material. ~50 m d/s from the bridge, the creek begins to steepen.
- C3 Several BD's are located w/s in R2 (see Site LS1); suspect CO and SST do not access the lake. See the lake survey report (DeGisi, Schell, 1997) for catch data on Chisholm Lake: CT, RSC, LSU, PCC and CAS are present in the lake.
- C4 R1 is classed as S2 habitat since the channel width is so close to 5 m and R2 was reported to have an 11 m channel width.

10-Feb-98

Stream: TAGIT C.

Watershed Code:

Stream Survey Report

460-6006-445-000-000-000-000-000-000-000-000

Header Infor	mation						_			_						_
Stream Name:	TAGIT C.					Stream "Lo	cal":	TAGII	<b>'C</b> .					Access:		Н
Watershed Code:	460-6006-445	-000-000-000-00	00-000-000-000-000	-000								Reach No.:	4	Reach Length (km):	3.9 Method:	: MW
Location:		50-400 m U/S F	ROM INLET TO C	HISHO	LM	Мар #:	093L024	1				Site No.:	2	Length surveyed (m):	100.0 Method:	: HC
	LAKE.					U.T.M. :	9.6148	.60066				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Time: 9:	30	Agency: C87	Surve	y Crew	:: DB \CP \	1111	1.1				Photos:	B2/1, 2	Air Photos:	BCB 91	1179:32
Channel Cha	racterisi	ics			Г			Specific De	nta			Bed Material				
Av. Chan, Width (m):	5.	Method Av.	. Chan. Width (m):	:	T	7.1	6.1	6.0	5.4	4.1	3.6	% Fines (<2mm):	0	% Fines (<2mm):		0
Av. Wet. Width (m):	3.	Method Av.	Wet. Width (m):		T	3.9	2.9	4.0	3.7	3.7	3.6	% Gravels:	85	Small (2-16mm):		45
Av. Max. Rif. Depth (	cm): 1	3 Av. Max. Ri	iffle Depth (cm):	N	AS	12	12	14				76 GIAVEIS.	83	Large (16-64mm):		40
Av. Max. Pool Depth (	(cm): 34	Av. Max. Po	ool Depth (cm):		13	28	41	34				1		,		
Gradient (%):	3.	Method Gra	adient:	•	CL							% Larges:	15	Small cobble (64-128m		10
% Pool: 20	% Riffle: 5			ther:	0	Method:	GE							Large cobble (128-256	-	5
% Side Channel:		Method Side	e Channel:		GE									Boulder cobble (>256n	ım):	0
% Debris Area:	10-4	Method Deb	oris Area:	(	GE							% Bedrock:	0	% Bedrock:		0
Cover										_		D90 (cm):	10	Compaction:	N	Medium
Cover Total % :	70	Method Cov	ver Total %:	(	GE							Banks				
Dp Pool: 0 L.0	O.D.: 60	Boulder:	10 In Veg	<b>z.:</b>	0	Over Veg:	30	Cutbar	ık:		0	Dunns				
Crown Closure %:	20	Method Cro	own Closure:	(	GE .	Aspect :	SE	Method	i Aspect	:	MW	Height (m):	1.0	% Unstable:		0
<del></del>									_			Textures Fines:	Yes	Gravel: Yes Lar	ges: No Bedrock:	No
Discharge							Sr	ecific Dat				Confinement:	5			
Wetted Width (m):		Mathad Watt	ted Width (m):					etijit Dai				Valley: Chan. Ratio:	4			
Mean Depth (m):			n Depth (m):									Stage:	L			
Mean Velocity (m/s):			n Velocity (m/s	,	vo						1	Flood Signs Ht(m):	0.5	Method Flood Signs:		MS
Discharge (m3/s):	0.17		harge (m3/s) :		, ,							Braided:	N	Method Braided:		GE
		- Method Disci								_		Bars (%):	30	Method Bars:		GE
Reach Symbo	ol											pH:		Method pH:		
				(Fis	,							02 (ppm):		Method Dissolved Oxy	gen:	
				CT DV	CAS							Water Temp. (°C):	8.5	Method Temperature:		TC
			5 D	3.0	0820							Turb. (cm):	200	Method Turbidity:		GE
		(Width,	Valley: Channel, S	lope)	(Bed !	Material)						Cond. (µmhos):	40	Method Conductivity:		CM

10-Feb-98 Stream: TAGIT C.

Watershed Code:

Stream Survey Report

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

## Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	11	42-90	J	R			EL
CAS	1	58	J	R			EL
DV	2	58-59	J	R			EL

#### **Obstructions**

- C1 Electrofished 25 m length of stream for 446 s. with a lower net.
- C2 Log stepping occurs in creek. Evidence of small debris movement. Big timber is lining the creek.
- Although some compaction in sections, areas of potential spawning are present; excellent section just above the lake. Photo B2/3: gravel fan inlet of Chisholm Lake. Photo B2/4: outlet from Chishom Lake.
- C4 R4 is classed as S2 habitat.

# DFO/MoELP Stream Survey Form 10-Feb-98 Stream: TAGIT C.

Watershed Code:

Stream Survey Report

460-6006-445-000-000-000-000-000-000-000-000

Header Info	rmatio	n				_					<del></del>	_			
Stream Name:	TAGIT				Stream "Lo	cal":	TAGI	TC.					Access:		FT
Watershed Code:	460-600	6-445-0	000-000-000-000-000-000-000-000								Reach No.:	4	Reach Length (km):	3.9 Method:	MW
Location:	LOWER	TAGI	CC.; 800 m D/S FROM THE BRIDGE.		Map #:	093L024	,				Site No.:	3	Length surveyed (m):	1000.0 Method:	НС
					U.T.M. :	9.6148	.60066				Fish Card:	N	Field: Yes	Historical:	No
Date: 01/07/97	Tim	e: 16:0	00 Agency: C87 Sur	vey Cre	ew: RD \CP \	, , , ,	\ \				Photos:	A8/8, 9	Air Photos:	BCB 91	179:32
Channel Ch	aracte	risti	cs -			S	Specific L	Data			Bed Material				
Av. Chan. Width (m	1):	4.9	Method Av. Chan. Width (m):	Т	5.5	6.6	3.7	3.9	4.3	5.3	% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m)	:	3.3	Method Av. Wet. Width (m):	T	3.4	3.8	3.4	3.2	3.0	3.1	% Gravels:	25	Small (2-16mm):		10
Av. Max. Rif. Depth	ı (cm):	18	Av. Max. Riffle Depth (cm):	MS	20	18	15				76 GIAVEIS.	23	Large (16-64mm):		15
Av. Max. Pool Dept	h (cm):	40	Av. Max. Pool Depth (cm):	18	42	40	37								
Gradient (%):		2.0	Method Gradient:	CL					-		% Larges:	65	Small cobble (64-128mm):		25
% Pool: 25	% Riff	le: 55	% Run: 20 % Other:	0	Method:	GE							Large cobble (128-256mm		30
% Side Channel:		0-10	Method Side Channel:	GE									Boulder cobble (>256mm)	1	10
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):	21	Compaction:	N	Medium
Cover Total % :		70	Method Cover Total %:	GE							Banks				
Dp Pool: 15	L.O.D.:	20	Boulder: 40 In Veg.:	0	Over Veg:	10	Cutba	nk:		15	Banks				
Crown Closure %:		10	Method Crown Closure:	GE	Aspect :	SE	Metho	od Aspect:		MW	Height (m):	1.0	% Unstable:		0
											Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						Cn	ecific De	ata			Confinement:	4			
			N. (1. 130) (c. 1337) (d. ( )			Sp	- Di				Valley: Chan. Ratio:	3			
Wetted Width (m):			Method Wetted Width (m):		İ						Stage:	L			
Mean Depth (m):			Method Mean Depth (m):	110							Flood Signs Ht(m):	0.4	Method Flood Signs:		MS
Mean Velocity (m/s)	):	0.00	Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :		0.28	Method Discharge (m3/s) :								Bars (%):	10	Method Bars:		GE
Reach Syml	hal										рН:	8.3	Method pH:		PH
Sicuen Syme	,,,		(1	Fish)							02 (ppm):		Method Dissolved Oxygen	:	
			CT	(*) DV							Water Temp. (°C):	13.0	Method Temperature:		TC
			5 C 2.0	1270	0	-					Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	d Material)						Cond. (µmhos):	20	Method Conductivity:		CM

10-Feb-98 Stream: TAGIT C.

Watershed Code:

Stream Survey Report

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

## Fish Summary

 Species
 Number
 Size Range (mm)
 Life Phase
 Use 1
 Use 2
 Use 3
 Method/Reference

 CT
 18 41-95
 J
 R
 EL

 DV
 1 91
 J
 R
 EL

#### **Obstructions**

- C1 Electrofished 40 m length of stream with a lower net. CT and DV were caught. Suspect some CT spawning occurs in this reach.
- C2 Low gradient, single channel creek. Cobble bed material with sections of suitable spawning substrate. Alder overstory. Some LOD present.
- C3 R4 is classed as S2 habitat.
- Hiked u/s from sample site: observed an 8' CT kelt in pool 200 m u/s; tributary Ta7 confluence is located at 1000 m; observed several CT fry and juveniles and potential CT spawning at the pool outlets and along some margins.

29-May-98

Stream: TAGIT C.

Watershed Code:

**Stream Survey Report** 

460-6006-445-000-000-000-000-000-000-000-000

Header Info	rmatio	on										_			
Stream Name:	TAGIT	C.			Stream "Lo	cal":	TAGIT	ГС.					Access:		V2
Watershed Code:	460-600	06-445-0	000-000-000-000-000-000-000								Reach No.:	4	Reach Length (km):	3.9 Method:	MW
Location:	SAMPL	ED JUS	T U/S FROM ACCESS BRIDGE CRO	SSING	Map #:	093L024	ļ.				Site No.:	4	Length surveyed (m):	100.0 Method:	HC
	TO BLO	OCK 62	5 #2.		U.T.M.:	9.6148	.60066				Fish Card:	N	Field: Yes	Historical:	No
Date: 18/06/97	Tim	i <b>e:</b> 16:	OO Agency: C87 Sur	vey Cre	ew: RD \CP \JI	3\\\	\ \ <u>\</u>				Photos:	A7/21, 22	Air Photos:	BCB 911	179:107
Channel Ch	aracte	eristi	cs				Specific De	ata			Bed Material			· · ·	_
Av. Chan. Width (m)	):	5.9	Method Av. Chan. Width (m):	T	3.7	5.8	7.1	5.9	6.8		% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):		4.4	Method Av. Wet. Width (m):	T	3.7	5.1					, ,		, ,		
Av. Max. Rif. Depth	(cm):	18	Av. Max. Riffle Depth (cm):	MS	18	22	15				% Gravels:	35	Small (2-16mm):		15
Av. Max. Pool Depth	(cm):	37	Av. Max. Pool Depth (cm):	18	37	45	30			-			Large (16-64mm):		20
Gradient (%):		2.0	Method Gradient:	CL				•			% Larges:	55	Small cobble (64-128mm):		30
% Pool: 20	% Riff	Ne: 70	% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm		15
% Side Channel:			Method Side Channel:	GE									Boulder cobble (>256mm)	:	10
% Debris Area:	8		Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):	18	Compaction:	1	Medium
Cover Total %:		75	Method Cover Total %:	GE							Banks				
Dp Pool: 30 L	.O.D.:	10	Boulder: 45 In Veg.:	0	Over Veg:	5	Cutbar	ık:		10	Duning				
Crown Closure %:		15	Method Crown Closure:	GE	Aspect :	sw	Method	d Aspect:	: 1	ww	Height (m):	1.0	% Unstable:		0
					· · · · · ·				_	-	Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						Sn	ecific Dat	ta .		$\neg 1$	Confinement:	4			
Wetted Width (m) :			Method Wetted Width (m):				ecy.c Du			$\dashv$	Valley: Chan. Ratio:	3			
Mean Depth (m):			Method Mean Depth (m):							- { }	Stage:	H			
Mean Velocity (m/s)			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Discharge (m3/s):	•	0.71	Method Discharge (m3/s):	••							Braided:	N	Method Braided:		GE
		0,71			<u></u>					괵	Bars (%):	10	Method Bars:		GE
Reach Symb	ol			P. 1.						ľ	pH:	7.9	Method pH:		PH
_			,	Fish)							02 (ppm):		Method Dissolved Oxyger	:	
				CT(*)							Water Temp. (°C):	9.0	Method Temperature:		TC
			6 C 2.0	1							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	l Material)					ľ	Cond. (µmhos):	10	Method Conductivity:		CM

29-May-98 Stream: TAGIT C.

Watershed Code:

Stream Survey Report

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

#### Fish Summary

#### Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference 2 75-100 D۷ R EL 5 67-133 CT J R EL

#### **Obstructions**

- C1 Electrofished u/s from the bridge a 70 m length of stream for 600 s. with a lower net. CT and DV were caught. Suspect some CT spawning occurs in this reach.
- C2 Large, dynamic creek; side channels are present in this reach and bed material is cobble with some suitable trout spawning gravels in pockets. U/S in R5 the channel becomes more confined, the gradient increases, and the bed material is larger.
- C3 R4 is classed as S2 habitat.

29-May-98

Stream: TAGIT C.

Watershed Code:

Watershed Code:   466-6006-445-000-000-0000-0000-0000-0000	Handay Inform	mation														
Watershed Code:   460-6006-405-000-000-000-000-000-000-000-000-000	l		ı													
Location:   500 m US FROM THE TOP OF BLOCK 625 #3.   Map #: 093L024   Sine No.:   5   Length surveyed (m):   100.0   Method:	<u> </u>		445.0	00 000 000 000 000 000 000 000		Stream "L	ocal":	TAGI	rc.			<b>5</b>	_			FT
U.T.M.: 9.6148 .60066	l					M #.	0027.02						5	9 ( )		MW
Date: 18/06/97   Time: 13:00   Agency: C87   Survey Crew: RD\CP\UB\\\\\\   Photos:   A7/18, 19   Air Photos:   BCB 91179:1	Location:	500 m U/S	FKU	M THE TUP OF BLUCK 625 #3.		•							5			HC
Channel Characteristics	10/06/07	371	12.0	A C27 C												No
Av. Chan. Width (m): 6.6 Method Av. Chan. Width (m): T	Date: 18/00/9/	1 ime:	13:0	Agency: C8/ Sur	vey Cre	W: KD \CP \U	B 1 1 1	1 1 1		_		Photos:	A7/18, 19	Air Photos:	BCB 91179	9:107
Av. Wet. Width (m): 5.8 Method Av. Wet. Width (m): T 8.5 5.7 3.8 5.0 6.0  Av. Max. Rift. Depth (cm): 27 Av. Max. Riff. Depth (cm): WS 14 25 42  Av. Max. Pool Depth (cm): 33 Av. Max. Pool Depth (cm): 27 28 32 40  Gradient (%): 5.0 Method Gradient: CL  % Pool: 20 % Riffle: 70 % Run: 10 % Other: 0 Method: GE  % Side Channel: 0-10 Method Side Channel: GE  % Debris Area: 10-40 Method Debris Area: GE  Cover  Cover  Cover Total %: 90 Method Cover Total %: GE  Dp Pool: 20 L.O.D.: 10 Boulder: 50 In Veg.: 0 Over Veg: 0 Cutbank: 20  Crown Closure %: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  Discharge  Wetted Width (m): Method Wetted Width (m): Method Mean Depth (m): Method Mean Velocity (m/s): Method Discharge (m3/s): Method Bars: Or Total (Fish)  CT* DV  7 C 5.0 1270  Av. Max. Rifl Depth (cm): Ms. 5.5 S. 5.7 3.8 5.0 6.0  Method Turbidity: Ms. 6 Crown Closure: 27 28 32 40  Small (2-16mm): Large (cb.4mm): Large (cb.4mm): Large (16-64-mm): Ms. 6 Crown Closure: 20 5 Small (cb.4128mm): Large (16-64-mm): Ms. 6 Small cobble (c4-128mm): La	Channel Chai	racteri	istic	S				Specific D	ata		-	Bed Material				
Av. Wet. Width (m): 5.8 Method Av. Wet. Width (m): T 8.5 5.7 3.8 5.0 6.0  Av. Max. Rif. Depth (cm): 27 Av. Max. Rifle Depth (cm): WS 14 25 42  Gradient (%): 5.0 Method Gradient: CL  % Pool: 20 % Riffle: 70 % Run: 10 % Other: 0 Method: GE  % Side Channel: 0-10 Method Bobris Area: GE  Cover  Cover Total %: 90 Method Cover Total %: GE  Dp Pool: 20 L.O.D.: 10 Boulder: 50 In Veg.: 0 Over Veg: 0 Cutbank: 20  Crown Closure %: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  Discharge  Wetted Width (m): Method Wetted Width (m): Method Wetted Width (m): Method Mean Velocity (m/s): Mean Pepth (m): Method Mean Velocity (m/s): Method Discharge (m3/s): 0.57 Method Discharge (m3/s): CT* DV  Reach Symbol  (Fish)  CT* DV  Method Curve (Width (m): Method Disolved Oxygen: Method Turbidity: 0.0 Method Turbidity: 0	Av. Chan. Width (m):		6.6	Method Av. Chan. Width (m):	T	5.7	10.7	5.7	6.4	5.0	6.2	% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Max. Rof. Depth (cm): 27 Av. Max. Riffle Depth (cm): 27 28 32 40  Gradient (%): 5.0 Method Gradient: CL % Pool: 20 % Riffle: 70 % Run: 10 % Other: 0 Method: GE % Side Channel: 0-10 Method Side Channel: GE % Debris Area: 10-40 Method Debris Area: GE  Cover  Cover Total %: 90 Method Cover Total %: GE Dp Pool: 20 L.O.D.: 10 Boulder: 50 in Veg.: 0 Over Veg: 0 Cutbank: 20 Crown Closure %: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  Discharge Wetted Width (m): Method Wetted Width (m): Method Mean Depth (m): Method Mean Depth (m): Method Discharge (m3/6): 0.57	Av. Wet. Width (m):		5.8	Method Av. Wet. Width (m):	T	8.5	5.7	3.8	5.0	6.0		, , ,		, ,		
Av. Max. Pool Depth (cm): 33 Av. Max. Fool Depth (cm): 27 C 5.0 Method Gradient: CL % Pool: 20 % Riffle: 70 % Run: 10 % Other: 0 Method: GE % Discharge  Wethod Gradient (%): 5.0 Method Side Channel: GE % Debris Area: 10-40 Method Debris Area: GE  Cover  Cover  Cover Total %: 90 Method Cover Total %: GE Dp Pool: 20 L.O.D.: 10 Boulder: 50 In Veg.: 0 Over Veg: 0 Cutbank: 20 Crown Closure %: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  Discharge  Wetted Width (m): Method Wetted Width (m): Method Mean Depth (m): Method Discharge (m3/s): 0.57 Method Discharge (	Av. Max. Rif. Depth (ci	m):	27	Av. Max. Riffle Depth (cm):	MS	14	25	42				% Gravels:	20	,		10
% Pool: 20	Av. Max. Pool Depth (c	:m):	33	Av. Max. Pool Depth (cm):	27	28	32	40						Large (16-64mm):		10
**Side Channel: 0-10 Method Side Channel: GE  **Debris Area: 10-40 Method Debris Area: GE  **Cover  **Cover Total **: 90 Method Cover Total **: 90 In Veg.: 0 Over Veg: 0 Cutbank: 20  **Crown Closure **: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  **Discharge  **Wetted Width (m): Method Wetted Width (m): Mean Depth (m): Mean Depth (m): Mean Depth (m): Method Mean Velocity (m/s): 0.57 Method Discharge (m3/s): 0.	Gradient (%):		5.0	Method Gradient:	CL		_					% Larges:	70	Small cobble (64-128mm):		30
% Debris Area: 10-40 Method Debris Area: GE  Cover  Cover Total %: 90 Method Cover Total %: GE Dp Pool: 20 L.O.D.: 10 Boulder: 50 In Veg.: 0 Over Veg: 0 Cutbank: 20 Crown Closure %: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  Discharge Wetted Width (m): Method Wetted Width (m): Mean Depth (m): Mean Depth (m): Method Mean Depth (m): Method Mean Velocity (m/s): 0.57 Method Discharge (m3/s): 0.50 Method Discharg	% Pool: 20	% Riffle:	70	% Run: 10 % Other:	0	Method:	GE							- · · · · · · · · · · · · · · · · · · ·		30
D90 (cm):   25	% Side Channel:	(	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		10
Cover Total %: 90 Method Cover Total %: GE Dp Pool: 20 L.O.D.: 10 Boulder: 50 In Veg.: 0 Over Veg: 0 Cutbank: 20 Crown Closure %: 5 Method Crown Closure: GE Aspect: SW Method Aspect: MW  Discharge  Wetted Width (m): Method Wetted Width (m): Mean Depth (m): Mean Depth (m): Method Mean Depth (m): Method Mean Velocity (m/s): Method Mean Velocity (m/s): Method Discharge (m3/s): 0.57 Method Discharge (m3/s):   Reach Symbol  (Fish) CT* DV  7 C 5.0 1270    Discharge (m3/s): 20	% Debris Area:	10	0-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Discharge   Specific Data   Discharge (m3/s):   0.57   Method Mean Depth (m):   CT* DV   Method Discolarge (m3/s):   CT* DV   CT* DV   Crown Closure:   Turb. (cm):   20   Method Turbidity:   Compared (m2/s):   Crown Closure:   Confinement:   Crown Closure:	Cover											D90 (cm):	25	Compaction:	Me	edium
Dp Pool : 20 L.O.D.: 10   Boulder: 50   In Veg.: 0   Over Veg: 0   Cutbank: 20	Cover Total % :		90	Method Cover Total %:	GE							Ranks				
Discharge   Specific Data   Textures Fines: Yes Gravel: Yes Larges: No Bedrock: Confinement: 4   Valley: Chan. Ratio: 3   Stage: H   Flood Signs Ht(m): 0.5   Method Flood Signs: No Bedrock: Mean Velocity (m/s): Method Mean Velocity (m/s):   Method Discharge (m3/s):   0.57   Method Discharge (m3/s):	Dp Pool: 20 L.O	D.D.:	10	Boulder: 50 In Veg.:	0	Over Veg:	0	Cutba	nk:		20	Bunns				
Discharge  Wetted Width (m):  Mean Depth (m):  Mean Depth (m):  Mean Velocity (m/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Discharge (m3/s):  Confinement:  4  Valley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  Discharge (m3/s):  Discharg	Crown Closure %:		5	Method Crown Closure:	GE	Aspect:	sw	Metho	d Aspect	:	MW	Height (m):	1.3	% Unstable:		10
Wetted Width (m):   Method Wetted Width (m):   Method Mean Depth (m):   Method Mean Depth (m):   Method Mean Depth (m):   Method Mean Velocity (m/s):   Method Mean Velocity (m/s):   Method Discharge (m3/s):   O.57   Method Discharge (m3/s):		_										Textures Fines:	Yes	Gravel: Yes Larges: N	o Bedrock:	No
Wetted Width (m):  Mean Depth (m):  Mean Depth (m):  Mean Velocity (m/s):  Discharge (m3/s):  O.57 Method Discharge (m3/s):  CT* DV  Wetted Width (m):  Method Wetted Width (m):  Method Mean Depth (m):  Method Mean Depth (m):  Method Mean Velocity (m/s  VO  Braided:  Bars (%):  Discharge (m3/s):  Discharge (m3/s):  O.5 Method Flood Signs:  Method Braided:  Bars (%):  Discharge (m3/s):  Discharge (m3/s):  CT* DV  Turb. (cm):  Walley: Chan. Ratio:  3  Stage:  H  Flood Signs Ht(m):  O.5 Method Flood Signs:  Method Braided:  Discharge (m3/s):	Discharge						Sr	ecific Da	ta			Confinement:	4			
Mean Depth (m):   Method Mean Depth (m):   Method Mean Depth (m):   Method Mean Depth (m):   Method Mean Velocity (m/s)   VO     Flood Signs Ht(m):   0.5   Method Flood Signs:   N   Method Braided:   O   Method Braided:   O   Method Bars:   O   Method Bars:   O   Method Bars:   O   Method Dissolved Oxygen:   O   O   O   O   O   O   O   O   O	Wetted Width (m)			Method Wetted Width (m)				200,10 2 11				Valley: Chan. Ratio:	3			
Mean Velocity (m/s):         Method Mean Velocity (m/s         VO           Discharge (m3/s):         0.57         Method Discharge (m3/s):         Braided:         N         Method Braided:         O           Reach Symbol         (Fish)         pH:         8.0         Method Dissolved Oxygen:         Hethod Dissolved Oxygen:           CT* DV         7 C 5.0         1270         Turb. (cm):         200         Method Turbidity:         Method Turbidity:	` ′			, .								Stage:	Н			
Discharge (m3/s):   0.57   Method Discharge (m3/s):     Braided:   N   Method Braided:   C					vo							Flood Signs Ht(m):	0.5	Method Flood Signs:		MS
Bars (%): 25   Method Bars: Compared   Method pH:   Method Dissolved Oxygen:   Method Dissolved Oxygen:   Method Temperature:   Method Turbidity:   Method Turbidity	• , ,	0		• `								Braided:	N	Method Braided:		GE
(Fish)     02 (ppm):     Method Dissolved Oxygen:       CT* DV     Water Temp. (°C):     7.0 Method Temperature:     7       7 C 5.0 1270     Turb. (cm):     200 Method Turbidity:     0.0 Method Turbidity:												Bars (%):	25	Method Bars:		GE
CT* DV   Water Temp. (°C): 7.0   Method Temperature: 7   C   5.0   1270   Turb. (cm): 200   Method Turbidity: (C)	Reach Symbol	l			D:_L\							pH:	8.0	Method pH:		PH
7 C 5.0 1270 Turb. (cm): 200 Method Turbidity:				•	•							1 "''		••		
					_	_								•		TC
(Width, Valley: Channel, Slope)   (Bed Material)   Cond. (µmhos): 10 Method Conductivity: C														•		GE
				(Width, Valley: Channel, Slope)	(Bec	l Material)						Cond. (µmhos):	10	Method Conductivity:		CM

Watershed Code:

10-Feb-98

Stream: TAGIT C.

Stream/Valley Cross-Section

## Fish Summary

## Obstructions

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	6	62-71	J	R		_	EL
CT	3	240-270	A	S	M		EL
DV	6	69-126	J	R			EL

- C1 Hiked down from access road to creek. Electrofished 40 m length of stream for 519 s. with a lower net. CT and DV were caught. The 270 mm and 250 mm CT's were identified as spawned-out males. Assume CT spawn in this reach. Photo A7/20: CT adult.
- C2 Dynamic creek with potential to move debris. Mainly one channel with cobble bed material and limited pockets of potential spawning gravels.
- C3 Classed as S2 habitat u/s to the top of R5.

29-May-98

Stream: TAGIT C.

Watershed Code:

**Stream Survey Report** 

460-6006-445-000-000-000-000-000-000-000-000

Header Information Stream Name: TAGIT C. Stream "Local": TAGIT C. FT Access: Watershed Code: 460-6006-445-000-000-000-000-000-000-000-000 Reach Length (km): 2.4 Method: MW Reach No.: D/S FROM BLOCK 626 #1; SAMPLED 100 m D/S FROM 093L024 Site No.: 150.0 Method: HC Location: Length surveyed (m): Tall CONFLUENCE. U.T.M.: 9.6148 .60066 Field: Yes Historical: No Fish Card: BCB 91179:212 Date: 18/06/97 Time: 11:00 Agency: C87 Survey Crew: RD \CP \JB \ \ \ \ \ Photos: A7/15-17 Air Photos: **Channel Characteristics Bed Material** Specific Data Av. Chan. Width (m): Method Av. Chan. Width (m): T 3.0 4.5 8.8 3.4 4.1 % Fines (<2mm): 10 % Fines (<2mm): 10 T Av. Wet. Width (m): Method Av. Wet. Width (m): 2.4 3.0 2.7 3.4 4.1 % Gravels: Small (2-16mm): 10 Av. Max. Rif. Depth (cm): Av. Max. Riffle Depth (cm): MS 15 12 24 Large (16-64mm): 10 Av. Max. Pool Depth (cm): Av. Max. Pool Depth (cm): 17 73 56 38 Small cobble (64-128mm): 30 % Larges: CL Gradient (%): 10.0 Method Gradient: Large cobble (128-256mm): 30 % Pool: 25 % Riffle: 60 % Run: % Other: 0 Method: GE 10 Boulder cobble (>256mm): GE % Side Channel: Method Side Channel: GE % Bedrock: % Debris Area: 10 Method Debris Area: % Bedrock: 0 D90 (cm): 27 Compaction: Low Cover Cover Total %: Method Cover Total %: GE Banks Dp Pool: 30 L.O.D.: Boulder: 50 In Veg.: Over Veg: Cutbank: 10 Crown Closure %: Method Crown Closure: GE Aspect: SE Method Aspect: MW Height (m): 1.2 % Unstable: 10 **Textures Fines:** Gravel: Yes Larges: No Bedrock: Yes No Discharge Confinement: 2 Specific Data Valley: Chan. Ratio: 2 Wetted Width (m): Method Wetted Width (m): Н Stage: Mean Depth (m): Method Mean Depth (m): Flood Signs Ht(m): 0.3 Method Flood Signs: MS Mean Velocity (m/s): Method Mean Velocity (m/s VO Braided: Method Braided: GE Discharge (m3/s): 0.57 Method Discharge (m3/s): GE Bars (%): Method Bars: pH: 8.1 Method pH: PH Reach Symbol (Fish) Method Dissolved Oxygen: 02 (ppm): CT DV Water Temp. (°C): TC 7.0 Method Temperature: 5 B 10.0 1270 GE Turb. (cm): 200 Method Turbidity: (Width, Valley: Channel, Slope) (Bed Material) Cond. (umhos): 20 Method Conductivity: CM Stream: TAGIT C.

## Stream/Valley Cross-Section

## Fish Summary

10-Feb-98

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 5 65-121 J R EL DV 2 103-117 J R EL

#### **Obstructions**

- Cl Electrofished 85 m length of stream for 900 s, with a lower net. CT and DV were caught (photo A7/17). Difficult to retrieve or even see fish in the fast water; most of the fish were on the lower net. 4 fish were observed but not captured.
- C2 Very steep, confined section with numerous drops (up to 50 cm high) over debris jams. Some evidence of unstable banks.
- C3 Cobble bed material with limited pockets of trout spawning habitat.
- Hiked up the mainstem from Ta10 confluence: large unstable banks on R. right at 500 m, 530 m, and 600 m; gradient increases to 12-13% at 800 m; at 1000 m, culvert crossing is present at the road and was sampled (see Site 7); DV were caught.
- C5 Classed as S3 habitat in R6 u/s to the road culvert.

10-Feb-98

Stream: TAGIT C.

Watershed Code:

Location: JUST DAND #2	C. 06-445-00 //S FROM 2. ristic 4.3 2.7 36 10 11.0	Method Av. Chan. Width (m): Method Av. Wet. Width (m):		U.T.M. : ew: RD \CP \II	093L024 9.6148 7\\\\	.60066				Reach No.: Site No.: Fish Card: Photos:	6 7 N A8/1-3	Access: Reach Length (km): Length surveyed (m): Field: Yes Air Photos:	2.4 Method: 100.0 Method: Historical: BCB 911	HC No
Watershed Code: 460-600 Location: JUST D. AND #2 Date: 01/07/97 Tim  Channel Characte  Av. Chan. Width (m): Av. Wet. Width (m): Av. Max. Rif. Depth (cm): Av. Max. Pool Depth (cm): Gradient (%): % Pool: 25 % Riffl % Side Channel:	06-445-00 /S FROM 2. ee: 11:00 eristic 4.3 2.7 36 10 11.0	Agency: C87 Surv  Method Av. Chan. Width (m):  Method Av. Wet. Width (m):  Av. Max. Riffle Depth (cm):	T T	Map #: U.T.M. : :w: RD \CP \IF	093L024 9.6148 7\\\\	.60066				Site No.: Fish Card:	7 N	Reach Length (km): Length surveyed (m): Field: Yes	100.0 Method: Historical:	MW HC No
Location: JUST D. AND #2  Date: 01/07/97 Tim  Channel Characte  Av. Chan. Width (m): Av. Wet. Width (m): Av. Max. Rif. Depth (cm): Av. Max. Pool Depth (cm): Gradient (%): % Pool: 25 % Riffl % Side Channel:	/S FROM 2	Agency: C87 Surv  Method Av. Chan. Width (m):  Method Av. Wet. Width (m):  Av. Max. Riffle Depth (cm):	T T	U.T.M. : ew: RD \CP \II	9.6148	.60066				Site No.: Fish Card:	7 N	Length surveyed (m): Field: Yes	100.0 Method: Historical:	HC No
AND #2  Date: 01/07/97 Tim  Channel Characte  Av. Chan. Width (m):  Av. Wet. Width (m):  Av. Max. Rif. Depth (cm):  Av. Max. Pool Depth (cm):  Gradient (%):  % Pool: 25 % Riffl % Side Channel:	e: 11:00 4.3 2.7 36 10 11.0	Agency: C87 Surv  Method Av. Chan. Width (m):  Method Av. Wet. Width (m):  Av. Max. Riffle Depth (cm):	T T	U.T.M. : ew: RD \CP \II	9.6148	.60066				Fish Card:	N	Field: Yes	Historical:	No
Channel Characte  Av. Chan. Width (m):  Av. Wet. Width (m):  Av. Max. Rif. Depth (cm):  Av. Max. Pool Depth (cm):  Gradient (%):  Pool: 25 % Riffl  Side Channel:	4.3 2.7 36 10 11.0	Method Av. Chan. Width (m): Method Av. Wet. Width (m): Av. Max. Riffle Depth (cm):	T T	ew: RD \CP \II	-\\\\\ 	. \ \								
Av. Chan. Width (m): Av. Wet. Width (m): Av. Max. Rif. Depth (cm): Av. Max. Pool Depth (cm): Gradient (%): % Pool: 25 % Riffl % Side Channel:	4.3 2.7 36 10 11.0	Method Av. Chan. Width (m): Method Av. Wet. Width (m): Av. Max. Riffle Depth (cm):	T T	8.3	S									
Av. Wet. Width (m): Av. Max. Rif. Depth (cm): Av. Max. Pool Depth (cm): Gradient (%): % Pool: 25 % Riffl % Side Channel:	2.7 36 10 11.0	Method Av. Wet. Width (m): Av. Max. Riffle Depth (cm):	т			ресии и			_	Bed Material				l
Av. Wet. Width (m): Av. Max. Rif. Depth (cm): Av. Max. Pool Depth (cm): Gradient (%): % Pool: 25 % Riffl % Side Channel:	2.7 36 10 11.0	Method Av. Wet. Width (m): Av. Max. Riffle Depth (cm):	т		2.7	3.3	4.6	2.6	4.3					
Av. Max. Rif. Depth (cm): Av. Max. Pool Depth (cm): Gradient (%): % Pool: 25 % Riffl % Side Channel:	36 10 11.0	Av. Max. Riffle Depth (cm):	_	3.8	2.7	2.0	3.5	2.6	1.8	% Fines (<2mm):	5	% Fines (<2mm):		5
Av. Max. Pool Depth (cm):  Gradient (%):  % Pool: 25 % Riffl % Side Channel:	10 11.0	• • •		3.8	41	37	3.3	2.0	1.6	% Gravels:	25	Small (2-16mm):		10
Gradient (%):  % Pool: 25 % Riffl % Side Channel:	11.0	· · · · · · · · · · · · · · · · · · ·	36	8	11	10			İ	(		Large (16-64mm):		15
% Pool: 25 % Riffi % Side Channel:		Method Gradient:	CL						_	% Larges:	70	Small cobble (64-128mm):	:	25
% Side Channel:	//	% Run: 5 % Other:	0	Method:	GE							Large cobble (128-256mm	ı):	30
% Debris Area:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm)	<b>):</b>	15
L	10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
										D90 (cm):	28	Compaction:	*	Medium
Cover														
Cover Total % :	50	Method Cover Total %:	GE							Banks				,
Dp Pool: 20 L.O.D.:	15	Boulder: 60 In Veg.:	0	Over Veg:	0	Cutba	k:		5	Dunns				
Crown Closure %:	10	Method Crown Closure:	GE	Aspect :	SE	Metho	l Aspect:		MW	Height (m):	1.0	% Unstable:		0
									<u> </u>	Textures Fines:	Yes	Gravel: No Larges:	Yes Bedrock:	No
Discharge						ecific Da				Confinement:	3			
Wetted Width (m):		Mathed Waterd Width (m)			<i>Sp</i>	ecijic Du	<u> </u>			Valley: Chan. Ratio:	2			
Mean Depth (m):		Method Wetted Width (m) : Method Mean Depth (m) :							ĺ	Stage:	L			
Mean Velocity (m/s):		• ` ` `	vo							Flood Signs Ht(m):	0.6	Method Flood Signs:		MS
Discharge (m3/s):		Method Discharge (m3/s) :	VO							Braided:	N	Method Braided:		GE
				<u></u> _		===				Bars (%):	40	Method Bars:		GE
Reach Symbol										pH:	8.5	Method pH:		PH
<b>3</b>		•	ish)							02 (ppm):		Method Dissolved Oxyger	ı:	
			)V T							Water Temp. (°C):	9.0	Method Temperature:		TC
		<b>4 B</b> 11.0	1270							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	20	Method Conductivity:		CM

10-Feb-98 Stream: TAGIT C.

**Stream Survey Report** Watershed Code:

460-6006-445-000-000-000-000-000-000-000-000

## Stream/Valley Cross-Section

## Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
DV	6	106-145	1	R			EL

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
	cv	

- C1 Electrofished 100 m length of stream for 950 s, with a lower net. DV were caught. Also sampled 20 m above the culvert; no fish were caught/observed in this section.
- C2 Problem culvert: 1.8 m diameter x 12.2 m length with a 10% gradient (photo A8/3). Similar habitat above the road as below; suspect culvert is acting as a migration barrier,
- C3 Dynamic creek with and abundance of log stepping and pools. Boulder/cobble bed material.
- C4 Hiked w/s from culvert for 200 m: gradient is 10-13%; a large, unstable bank is present on R. right at 160 m. Surveyed upper extent of fish use by air; potential fish use up to impassable chutes and creek is classed as S3 up to these barriers.

29-May-98

**Stream Survey Report** 

Watershed Code:

460-6006-445-000-000-000-000-000-000-000-000

Header Info	rmation	_															,
Stream Name:	TAGIT C.				Stream "Lo	cal":	TAGI	T C.					Access	:			Н
Watershed Code:	460-6006-4	45-00	0-000-000-000-000-000-000-000								Reach No.:	7	Reach	Length (kn	n): 1.	0 Method:	MW
Location:	U/S FROM	ROA	D, TOP OF R7; ~800 m U/S FROM		Map#:	093L024	ļ				Site No.:	8	Lengtl	surveyed (	( <b>m</b> ): 100.	0 Method:	нС
	HEADWAT	ER L	AKE.		U.T.M.:	9.6148	. 60066				Fish Card:	N	Field:	Yes	Hist	orical:	No
Date: 03/07/97	Time:	15:00	Agency: C87 Surv	ey Cr	ew: DB \CP \	1 1 1 1	11				Photos:	B2/11, 12	Air Ph	otos:		BCB 911	179:215
Channel Cha	aracteris	stic	5				Specific L	Data			Bed Material						
Av. Chan. Width (m)	:	1.1	Method Av. Chan. Width (m):	Т	1.2	1.0	0.8	1.1	1.2	1.3	   % Fines (<2mm):	5	% Fin	es (<2mm):			5
Av. Wet. Width (m):		1.1	Method Av. Wet. Width (m):	T	1.2	1.0	8.0	1.1	0.9	1.3	<b>  </b>			` '			
Av. Max. Rif. Depth	(cm):	I 1	Av. Max. Riffle Depth (cm):	MS	10	8	15				% Gravels:	15		(2-16mm):	_		5
Av. Max. Pool Depth	(cm):	21	Av. Max. Pool Depth (cm):	11	17	21	22	24					Large	(16-64mm):	:		10
Gradient (%):		9.0	Method Gradient:	CL	<u> </u>						% Larges:	80		cobble (64-	,		20
% Pool: 25	% Riffle:	75	% Run: 0 % Other:	0	Method:	GE					}		_	cobble (128	•		35
% Side Channel:		0	Method Side Channel:	GE									Boulde	er cobble (>	256mm):		25
% Debris Area:	10-	-40	Method Debris Area:	GE							% Bedrock:	0	% Bed	lrock:			0
Cover								•			D90 (cm):	30	Compa	action:		N	Medium
Cover Total % :		90	Method Cover Total %:	GE							Banks						
Dp Pool: 20 L	.O.D.:	20	Boulder: 50 In Veg.:	0	Over Veg:	0	Cutba	nk:		10							
Crown Closure %:		5	Method Crown Closure:	GE	Aspect :	E	Metho	d Aspect:		MW	Height (m):	0.3	% Uns	stable:			5
			<del></del>							·	Textures Fines:	Ye	Grave	l: No	Larges: Yes	Bedrock:	No
Discharge							pecific Da				Confinement:	2					
W-44-1 Wilds ()			South of Works of Wilder (m)				recijie Di				Valley: Chan. Ratio:	1					
Wetted Width (m):			Method Wetted Width (m):								Stage:	M	I				
Mean Depth (m):			Method Mean Depth (m):	vo							Flood Signs Ht(m):	0.2	Metho	d Flood Sig	ns:		MS
Mean Velocity (m/s)	: 0.0		Method Mean Velocity (m/s	VO							Braided:	Ŋ	Metho	d Braided:			GE
Discharge (m3/s):			Method Discharge (m3/s) :		<u>L</u>					==	Bars (%):	0	Metho	d Bars:			GE
Reach Symb	ol										pH:		Metho	d pH:			
	<del>-</del> -			ish)							02 (ppm):		Metho	d Dissolved	l Oxygen:		
				NF							Water Temp. (°C):	16.0	Metho	d Tempera	ture:		TC
			1 A 9.0	118	0						Turb. (cm):	200	Metho	d Turbidity	y:		GE
			(Width, Valley: Channel, Slope)	(Be	d Material)						Cond. (µmhos):	30	Metho	d Conducti	vity:		CM

29-May-98 Stream: TAGIT C.

Watershed Code: 460-6006-445-

## 

## Stream/Valley Cross-Section

## Fish Summary

## **Obstructions**

Obstruction Ht(m)	Туре	Location
2	С	11.6
	С	11.6

- C1 Electrofished 100 m length of stream for 744 s, with no lower net. No fish were caught/observed.
- C2 Riffle-pool habitat with boulder bed material. Stable creek moss-covered instream boulders and banks. Channel is confined with steep sideslopes of 90% and 40%.
- C3 2 consecutive chutes are located at the top of setting at bedrock outcrop; the largest chute is 2 m high x 5 m long.
- C4 Shallow lake is located u/s of this reach.
- C5 R7 and u/s is classed S6 throughout.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-112-000-000-000-000-000-000-000

Header Inform	ation													
Stream Name: TA	GIT C. TRI	BUTARY		Stream "Lo	cal":	Tal						Access:		V2
Watershed Code: 40	0-6006-445-	12-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	1.3 Method:	MW
Location: SA	MPLED IN	THE VICINITY OF THE ROAD CROSS	ING.	Map #:	093L024					Site No.:	9	Length surveyed (m):	75.0 Method:	HC
				U.T.M.:	9.6150	.60078				Fish Card:	Y	Field: Yes	Historical:	No
Date: 28/05/97	Time: 14:	OO Agency: C87 Surve	ey Cre	w: RD \CP \	111	1.1				Photos:	A1/2, 3	Air Photos:	BCB 91	179:31
Channel Char	cteristi	cs	[		s	pecific D	ala			Bed Material				
Av. Chan. Width (m):	3.2	Method Av. Chan. Width (m):	T	3.1	2.8	3.9	3.6	2.5		   % Fines (<2mm):	5	% Fines (<2mm):		5
Av. Wet. Width (m):	3.2	Method Av. Wet. Width (m):	T	3.1	2.8	3.9	3.6	2.5	1	% Gravels:	50	Small (2-16mm):		10
Av. Max. Rif. Depth (cm	30	Av. Max. Riffle Depth (cm):	MS	25	35	30			}	78 GTAVEIS.	50	Large (16-64mm):		40
Av. Max. Pool Depth (cn	): 49	Av. Max. Pool Depth (cm):	30	45	47	50	54							
Gradient (%):	3.0	Method Gradient:	CL							% Larges:	45	Small cobble (64-128mm)		40
% Pool: 15 °	Riffle: 80	% Run: 5 % Other:	0	Method:	GE							Large cobble (128-256mn		5
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm	:	0
% Debris Area: 3	)	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover				·					-	D90 (cm):	10	Compaction:	1	Medium
Cover Total % :	60	Method Cover Total %:	GE							Banks				
Dp Pool: 30 L.O.	<b>).:</b> 30	Boulder: 10 In Veg.:	20	Over Veg:	0	Cutba	nk:		10	<i>Duitins</i>				
Crown Closure % :	20	Method Crown Closure:	GE	Aspect:	SE	Metho	d Aspect	:	MW	Height (m):	0.5	% Unstable:		0
								-		Textures Fines:	Yes	Gravel: Yes Larges	No Bedrock:	No
Discharge			[			ecific Da				Confinement:	4			
J					s <sub>\(\ell_{}\)</sub>	ecijic Di	na			Valley: Chan, Ratio:	3			
Wetted Width (m):		Method Wetted Width (m):							]	Stage:	Н			
Mean Depth (m) :		Method Mean Depth (m):								Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.35	Method Discharge (m3/s):		<u> </u>						Bars (%):	5	Method Bars:		GE
Reach Symbol										рН:	8.4	Method pH:		PH
Keuch Symbol		<b>(F</b> )	ish)							02 (ppm):		Method Dissolved Oxyge	<b>1</b> ;	
		c	СТ*							Water Temp. (°C):	8.5	Method Temperature:		TC
		3 C 3.0	1540	)						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	Material)						Cond. (µmhos):	30	Method Conductivity:		CM

**Stream Survey Report** 

460-6006-445-112-000-000-000-000-000-000-000

Watershed Code:

10-Feb-98 Stream: TAGIT C. TRIBUTARY

Stream/Valley Cross-Section

#### Fish Summary

#### Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference 41 40-83 R EL CT 1 28 F R EL CT 2 196-281 Λ S EL

#### **Obstructions**

- Electrofished below the road. Small juveniles and 2 adult spawners were caught. The flows were very high during sampling so this section was re-sampled at lower water levels; only fry/small juvenile CT were caught at this time. Suspect adult CT only come up to spawn and larger juv. CT do not rear in the creek but drop out due to extremely low flows in mid-summer.
- C2 Water is tannic in colour.
- C3 Sections of excellent potential spawning for CT/CO/SST.
- C4 This reach has some wide sections of marsh with blown out beaver dams.
- C5 R1 is classed as S3 habitat.
- Tributary Tal.1 was surveyed: creek was not mapped correctly in the upper end (see O'Dine C. on map). There is no defined channel at the lower road crossing and the 2 culverts along the road are dewatered. U/S at the main haul road, Tal.1 consists of a seepage trickle with no defined channel; there is a small culvert at the road with a large fill over top. Tributary Tal.1 is not a fish creek and is classed as S6 habitat.

29-Мау-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report 460-6006-445-112-Ta1-.2-000-000-000-000-000-000

Header Info	rmatic	on .					_								
Stream Name:	TAGIT	C. TRII	BUTARY		Stream "Lo	cal";	Tal.2						Access:		FT
Watershed Code:	460-600	6-445-	12-Ta12 -000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	1.0 Method:	
Location:	INLET '	IRIBU	TARY, LOCATED 100 m U/S FROM		Map#:	093L024					Site No.:	10	Length surveyed (m):	70.0 Method:	нс
1	BRIDG	e on t	al.		U.T.M. :	9.6145	.60085				Fish Card:	N	Field: Yes	Historical:	No
Date: 28/05/97	Tim	e: 14:	Agency: C87 Sur	rvey Cr	ew: RD \CP \	111	1.1				Photos:	A1/4, 5	Air Photos:	BCB 911	
Channel Ch	aracte	risti	cs	_			specific D	)ata			Bed Material				
Av. Chan. Width (m)	):	0.4	Method Av. Chan. Width (m):	T	0.4	0.3	0.4	0.5	0.3	0.5	% Fines (<2mm):	90	% Fines (<2mm):		90
Av. Wet. Width (m):		0.4	Method Av. Wet. Width (m):	T	0.4	0.3	0.4	0.5	0.3	0.5	% Gravels:		, ,		10
Av. Max. Rif. Depth	(cm):	13	Av. Max. Riffle Depth (cm):	MS	17	10	12				% Graveis:	10	Small (2-16mm):		10
Av. Max. Pool Depth	(cm):	35	Av. Max. Pool Depth (cm):	13	25	30	36	48					Large (16-64mm):		
Gradient (%):		3.5	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 10	% Riff	le: 10	% Run: 80 % Other	: 0	Method:	GE							Large cobble (128-256mm)	:	0
% Side Channel:		0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	75		Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover	•							-			D90 (cm):		Compaction:		High
Cover Total % :		70	Method Cover Total %:	GE							Banks		-		
Dp Pool: 10 L	.O.D.:	40	Boulder: 0 In Veg.:	0	Over Veg:	40	Cutba	nk:		10	Danks				
Crown Closure %:		60	Method Crown Closure:	GE	Aspect :	SE	Metho	d Aspect:		MW	Height (m):	0.9	% Unstable:		0
L											Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge							ecific Da				Confinement:	4			
			8.6 at 1.880 at 1.880 to 2.3			<i>Sp</i>	ecyic Da	<u> </u>			Valley: Chan. Ratio:	3			
Wetted Width (m):			Method Wetted Width (m):							Į.	Stage:	Н			
Mean Depth (m):			Method Mean Depth (m):	***							Flood Signs Ht(m):	0.1	Method Flood Signs:		MS
Mean Velocity (m/s)	:	0.00	Method Mean Velocity (m/s	vo	l						Braided:	N	Method Braided:		GE
Discharge (m3/s) :		0.02	Method Discharge (m3/s):		L						Bars (%):	0	Method Bars:		GE
Reach Symb	al										pH:	8.4	Method pH:		PH
Symb	··		(	(Fish)							02 (ppm):		Method Dissolved Oxygen		
			<del></del>	NF							Water Temp. (°C):	14.0	Method Temperature:		TC
			0 C 3.5	910	)	_					Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope	) (Bed	l Material)						Cond. (µmhos):	50	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-445-112-Ta1-.2 -000-000-000-000-000

## Stream/Valley Cross-Section

Fish Summ	dary Obstructions
Comments	
CI	Electrofished 70 m length of stream with no lower net. No fish were caught.
C2	Small channel with mud bottom, abundant instream LOD and dense alder swale lining it. Very small even during this high flow period.
C3	Water temperature is very warm.
C4	Poor access due to numerous small drops; may have some fish use in the lower 10 m of stream to first small drop. Tal.2 is classed as S6 habitat u/s to where the channel is no longer defined in a seepage bog area, ~600 m u/s.
C5	Assume creek dewaters in the summer.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-112-000-000-000-000-000-000-000

Header Informa	tion								_					
Stream Name: TAG	TC. TRI	BUTARY		Stream "Lo	cal":	Tal						Access:		FT
Watershed Code: 460-	6006-445-	112-000-000-000-000-000-000-000								Reach No.:	2	Reach Length (km):	1.1 Method:	MW
Location: LOW	ER 200 m	OF R2; HIKED IN FROM ROAD.		Map #:	093L024					Site No.:	11	Length surveyed (m):	200.0 Method:	НС
				U.T.M. :	9.6150	.60078				Fish Card:	N	Field: Yes	Historical:	No
Date: 29/05/97 T	ime: 12:	Agency: C87 Sur	vey Cre	ew: RD \CP \	1 1 1	1 1				Photos:	A1/10, 11	Air Photos:	BCB 91	179:31
Channel Charac	teristi	cs			S	pecific D	  ata		- 1	Bed Material				<u> </u>
Av. Chan. Width (m):	2.8	Method Av. Chan. Width (m):	T	3.5	2.1	3.1	2.7	2.4		% Fines (<2mm):	15	% Fines (<2mm):		15
Av. Wet. Width (m):	2.5	Method Av. Wet. Width (m):	T	2.6	2.1	2.9			Ш	% Gravels:	60	Small (2-16mm):		25
Av. Max. Rif. Depth (cm):	25	Av. Max. Riffle Depth (cm):	MS	35	20	20					•	Large (16-64mm):		35
Av. Max. Pool Depth (cm):	28	Av. Max. Pool Depth (cm):	25	25	25	35				A/ T	2.5	5 (		
Gradient (%):	4.0	Method Gradient:	CL							% Larges:	25	Small cobble (64-128mm):		20
% Pool: 20 % R	iffle: 20		0	Method:	GE							Large cobble (128-256mm):		5
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		U
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover			-							D90 (cm):	12	Compaction:	N	Medium
Cover Total % :	70	Method Cover Total %:	GE							Banks				
Dp Pool: 10 L.O.D.:	20	Boulder: 10 In Veg.:	0	Over Veg:	30	Cutbar	nk:		30					
Crown Closure %:	75	Method Crown Closure:	GE	Aspect :	SE	Method	d Aspect:	N	ww	Height (m):	0.8	% Unstable:		5
										Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge					Sn	ecific Dat	ta			Confinement:	4			
Wetted Width (m) :		Mathad Watted Width (m)				ccyst Das			<b>⊣</b> 1	Valley: Chan. Ratio:	3			
Mean Depth (m):		Method Wetted Width (m):  Method Mean Depth (m):							-	Stage:	Н			
Mean Velocity (m/s):		• • •	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
	0.25	Method Mean Velocity (m/s	VU							Braided:	N	Method Braided:		GE
Discharge (m3/s) : 	0.25	Method Discharge (m3/s):		<u> </u>					$_{\perp}$	Bars (%):	10	Method Bars:		GE
Reach Symbol									ļ	pH:	8.1	Method pH:		PH
		·	Fish)							02 (ppm):		Method Dissolved Oxygen:		
		<del></del>	CT*						Ì	Water Temp. (°C):	7.5	Method Temperature:		TC
		3 C 4.0	1630	)						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	/Box	l Material)					- 1	Cond. (µmhos):	30	Method Conductivity:		СМ

10-Feb-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

### **Stream Survey Report**

460-6006-445-112-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 11 51-58 J R EL

#### **Obstructions**

- C1 Electrofished 80 m length of stream for 580 s, with no lower net; only small juvenile CT's were caught. Site was difficult to shock due to high flows and heavy alder swale. 6 of the 11 CT were observed but not caught.
- C2 Water is slightly tannic in colour.
- C3 Sections of good potential CT spawning. Assume CT spawn in this reach.
- C4 R2 is slightly more confined with higher sideslope benches along the channel. No evidence of beavers was observed.
- C5 R2 is classed as S3 habitat.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-112-000-000-000-000-000-000-000

Header Informati	ion		-											
_	C. TRIE	BUTARY		Stream	"Local":	Tal						Access:		н
		12-000-000-000-000-000-00	0-000							Reach No.:	3	Reach Length (km):	1.4 Method:	
		500 m U/S FROM Tal.3 CONFI		Map#:	093L02	4				Site No.:	12	J , ,	100,0 Method:	
	,			U.T.M		.60078				Fish Card:	N		listorical:	No
Date: 03/07/97 Ti	me: 13:0	O Agency: C87	Survey	Crew: DB \C	P\\\\	\ \ \				Photos:	B2/7, 8	Air Photos:	BCB 911	179:106
Channel Charact	eristi	 CS				Specific L	Data			Bed Material				
Av. Chan. Width (m):	1.7	Method Av. Chan. Width (m	):	т і.		2.2	1.8	1.8	2.0	% Fines (<2mm):	35	% Fines (<2mm):		35
Av. Wet. Width (m):	1.0	Method Av. Wet. Width (m):		T 1.5	2 1.4	0.9	0.9	0.6	0.8	1		, ,		
Av. Max. Rif. Depth (cm):	3	Av. Max. Riffle Depth (cm):	M	is 2	. 3	3				% Gravels:	65	Small (2-16mm):		55
Av. Max. Pool Depth (cm):	7	Av. Max. Pool Depth (cm):		3	6	9						Large (16-64mm):		10
Gradient (%):	5.0	Method Gradient:	C	L					J	% Larges:	0	Small cobble (64-128mm):		0
% Pool: 20 % Ri	Me: 30	% Run: 50 %	Other:	0 Meth	od: GE							Large cobble (128-256mm):		0
% Side Channel:	0	Method Side Channel:	C	Ε						1		Boulder cobble (>256mm):		0
% Debris Area:	0-10	Method Debris Area:	C	Ε						% Bedrock:	0	% Bedrock:		0
 Cover										D90 (cm):	2	Compaction:		High
Cover Total % :	100	Method Cover Total %:	c	Æ						Banks				
Dp Pool: 0 L.O.D.:	0	Boulder: 0 In V		0 Over V	eg: 95	Cutba	ınk:		5	Danks				
Crown Closure %:	98	Method Crown Closure:	_	E Aspect	•	Metho	d Aspect	:	MW	Height (m):	0.8	% Unstable:		0
<del></del>		<del></del>			<del></del> -					Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						pecific Da				Confinement:	5			
o .		M. d. 1997 at 1997 ld. ()				pecijic Di				Valley: Chan. Ratio:	4			
Wetted Width (m):		Method Wetted Width (m):		Ì						Stage:	L			
Mean Depth (m):		Method Mean Depth (m):	•	_						Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Mean Velocity (m/s):	0.01	Method Mean Velocity (m/s	V	O						Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.01	Method Discharge (m3/s):								Bars (%):	10	Method Bars:		GE
Reach Symbol										pH:		Method pH:		
			(Fish							02 (ppm):		Method Dissolved Oxygen:		
			NF							Water Temp. (°C):	10.0	Method Temperature:		TC
		2 D	5.0	3700						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel,	Slope)	(Bed Materia	l)					Cond. (µmhos):	60	Method Conductivity:		CM

Stream: TAGIT C. TRIBUTARY

**Stream Survey Report** 

Watershed Code: 460-6006-445-112-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

### Fish Summary

29-May-98

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
	BD	2.7
	BD	3.3

- C1 Electrofished 100 m length of stream for 350 s. with no lower net. No fish were caught/observed.
- C2 Upper R3 is steeper with more boulder/cobble habitat. Further d/s some BD's are present which may restrict fish access. Suspect subsurface flow in swamp area in lower R3.
- C3 Assumed class S3 habitat u/s to the top of R2 and class S6 habitat u/s in R3.

Stream: TAGIT C. TRIBUTARY 29-May-98

Watershed Code:

# 

Header Infori	mation													
Stream Name:	TAGIT C. TRI	BUTARY		Stream "Lo	cal":	Tal						Access:		Н
Watershed Code:	460-6006-445-	112-000-000-000-000-000-000-000								Reach No.:	4	Reach Length (km):	0.8 Method:	MW
Location:	LOCATED AT	TRIBUTARY Tal.4 MOUTH.		Map #:	093L024					Site No.:	13	Length surveyed (m):	100.0 Method:	HC
				U.T.M. :	9.6150	.60078				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Time: 12	00 Agency: C87 Surv	ey Crev	w: DB \CP \	\ \ \ \	1_1				Photos:	B2/5, 6	Air Photos:	BCB 911	179:106
Channel Cha	racteristi	cs	ſ			Specific D	ata			Bed Material				
Av. Chan. Width (m):	2.3	Method Av. Chan. Width (m):	Т	3.2	2.0	2.0	2.1	2.0	2.4	% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):	1.8	Method Av. Wet. Width (m):	T	1.8	1.8	1.9	1.8	2.0	1.3	, ,		` ,		
Av. Max. Rif. Depth (c	m): 6	Av. Max. Riffle Depth (cm):	MS	7	7	3				% Gravels:	60	Small (2-16mm):		15
Av. Max. Pool Depth (	:m): 16	Av. Max. Pool Depth (cm):	6	17	18	13						Large (16-64mm):		45
Gradient (%):	4.0	Method Gradient:	CL							% Larges:	30	Small cobble (64-128mm):		30
% Pool: 20	% Riffle: 30	<b>% Run:</b> 50 <b>% Other:</b>	0	Method:	GE					Ì		Large cobble (128-256mm)		0
% Side Channel:	0	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	>40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover			_							D90 (cm):	9	Compaction:	N	Medium
Cover Total %:	50	Method Cover Total %:	GE							Banks				
Dp Pool: 0 L.C	D.D.: 40	Boulder: 10 In Veg.:	0	Over Veg:	20	Cutba	nk:		30	Dunks				
Crown Closure %:	50	Method Crown Closure:	GE	Aspect :	SE	Metho	d Aspect:	:	MW	Height (m):	0.9	% Unstable:		0
		<del></del>				_				Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge			Г		Çn.	ecific Da				Confinement:	5			
W.a. I W' M. A.		No ak a di tita aa a di tita dak (aa) a	-		SP	ecijic Du				Valley: Chan. Ratio:	4			
Wetted Width (m):		Method Wetted Width (m):								Stage:	L			
Mean Depth (m):		Method Mean Depth (m):	vo							Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Mean Velocity (m/s):	0.02	Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.03	Method Discharge (m3/s):			_					Bars (%):	25	Method Bars:		GE
Reach Symbo	1									pH:		Method pH:		
Livaen Symbo	•		ish)							02 (ppm):		Method Dissolved Oxygen:		
		1	NF							Water Temp. (°C):	8.5	Method Temperature:		TC
		2 D 4.0	1630							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	Material)						Cond. (µmhos):	60	Method Conductivity:		CM

**Stream Survey Report** 

29-May-98

Stream: TAGIT C. TRIBUTARY

Watershed Code:

460-6006-445-112-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
	BD	2.7
	BD	3.3

- C1 Electrofished 100 m length of stream for 555 s, with no lower net. No fish were caught/observed.
- C2 Stable creek (moss-covered banks) with potential to move small debris. Evidence of high flows pile ups of small debris, gravel bars. Abundant LOD within channel.
- C3 Proposed culvert/road crossing is located at the top of the sample site; crossing appears to be suitable.
- C4 Generally nice fish habitat; suspect creek dewaters, is too small for overwintering, or BD d/s is restricting fish access.
- C5 Upper R4 appears to be incorrectly mapped; most of the flow enters O'Dine C. drainage (see map).
- C6 Tributary Tal.4 was surveyed; there is no defined channel and there is no fish habitat present. An aquatic shrew was observed at the site.

29-May-98 Stream: TAGIT C. TRI

Stream: TAGIT C. TRIBUTARY Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta3-000-000-000-000-000-000-000

Header Inform	ation													
Stream Name: TA	GIT C. TRI	BUTARY		Stream "Lo	cal":	Ta3						Access:		FT
Watershed Code: 46	0-6006-445	Ta3-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.2 Method:	MW
Location: SU	RVEYED F	ROM LAKE U/S TO THE END OF R1.		Map #:	093L024	1				Site No.:	14	Length surveyed (m):	160.0 Method:	нС
				U.T.M. :	9.6173	.60083				Fish Card:	N	Field: Yes	Historical:	No
Date: 30/05/97	Time: 14	15 Agency: C87 Sur	vey Cre	ew: RD \CP \	, , , ,	1.1				Photos:	A1/25; A2/1	Air Photos:	BCB 91	179:33
Channel Chard	cteristi	cs				Specific D	)ata			Bed Material				
Av. Chan. Width (m):	1.1	Method Av. Chan. Width (m):	T	1.1	0.9	1.4	1.2	1.0		% Fines (<2mm):	40	% Fines (<2mm):		40
Av. Wet. Width (m):	1.1	Method Av. Wet. Width (m):	T	1.1	0.9	1.4	1.2	1.0		% Gravels:	50	Small (2-16mm):		30
Av. Max. Rif. Depth (cm)	: 12	Av. Max. Riffle Depth (cm):	MS							70 GIBICIS.	50	Large (16-64mm):		20
Av. Max. Pool Depth (cm	): 35	Av. Max. Pool Depth (cm):	12							<b>.</b>		,		
Gradient (%):	2.0	Method Gradient:	CL							% Larges:	10	Small cobble (64-128mm):		10
% Pool: 0 %	Riffle: 0	% Run: 0 % Other:	100	Method:	GE					[		Large cobble (128-256mm)	!	0
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover		333333						-		D90 (cm):	7	Compaction:		High
Cover Total % :	70	Method Cover Total %:	GE							Banks				
Dp Pool: 60 L.O.I	.: 20	Boulder: 10 In Veg.:	5	Over Veg:	0	Cutba	nk:		5	Dunks				
Crown Closure %:	5	Method Crown Closure:	GE	Aspect:	w	Metho	d Aspect:	:	MW	Height (m):	1.0	% Unstable:		0
										Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						ecific Da	ıta			Confinement:	5			
Wetted Width (m):		Method Wetted Width (m):			<u>-</u>	etyle Da				Valley: Chan. Ratio:	4			
Mean Depth (m):		Method Mean Depth (m):								Stage:	Н			
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Discharge (m3/s):	0.08	Method Discharge (m3/s):	••							Braided:	N	Method Braided:		GE
Discharge (ms/s) .	0.00	Without Discharge (mo/s) .				_				Bars (%):	0	Method Bars:		GE
Reach Symbol										pH:	7.8	Method pH:		PH
		,	Fish)							02 (ppm):		Method Dissolved Oxygen:		
		SI	P(CT)							Water Temp. (°C):	11.5	Method Temperature:		TC
		1 D 2.0	4510	0						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	30	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

### **Stream Survey Report**

460-6006-445-Ta3-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
TR	2		J	R		_	vo

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
1	BD	0.0

- C1 There is no sample site in R1. During the survey, 2 juvenile trout were visually observed at the base of the BD in R1; they are suspected to be CT.
- C2 Water is tannic in colour.
- The BD is located 30 m u/s from the mouth; there is easy fish access up to this point. Further u/s to 110 m, the creek consists of a sand/silt-bedded pond. Some riffle with potential trout spawning is located between 110 m and 130 m. At 130 m there is a 0.5 m high drop over debris and the R1 reach break is located at 160 m.
- C4 R2 is steeper and more confined than R1 with larger bed material.
- C5 R1 is classed as S4 habitat and R2 is classed as S4 habitat in the lower 100 m.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta3-000-000-000-000-000-000-000

Header Infor	mation	!				_	_					-				-
Stream Name:	TAGIT C.		JTARY			Stream "Lo	cal":	Ta3						Access:		FT
Watershed Code:	460-6006-	145-T	3-000-000-000-000-0	000-000-000								Reach No.:	2	Reach Length (km):	0.3 Method:	MW
Location:			M LAKE INLET; HIKE	D IN FROM		Map #:	093L025	i				Site No.:	15	Length surveyed (m):	250.0 Method:	HC
	BLOCK 62	20 #4.				U.T.M.:	9.6173	.60083				Fish Card:	N	Field: Yes	Historical:	No
Date: 30/05/97	Time:	13:40	Agency: (	C87 Surv	ey Cre	ew: RD \CP \	1 1 1 1	\ \				Photos:	A1/23, 24	Air Photos:	BCB 91	179:33
Channel Cha	ıracteri	stic	s					Specific D	ata			Bed Material				
Av. Chan. Width (m):	:	1.1	Method Av. Chan. Wid	lth (m):	T	1.0	1.3	1.2	0.9	1.1		% Fines (<2mm):	15	% Fines (<2mm):		15
Av. Wet. Width (m):		1.1	Method Av. Wet. Widtl	h (m):	T	1.0	1.3	1.2	0.9	1.1		% Gravels:	40	Small (2-16mm):		15
Av. Max. Rif. Depth (	cm):	11	Av. Max. Riffle Depth (	(cm):	MS	12	15	7				76 Glaveis.	40	Large (16-64mm):		25
Av. Max. Pool Depth	(cm):	21	Av. Max. Pool Depth (c	:m):	11	25	18	21						2 ,		
Gradient (%):		7.0	Method Gradient:		CL							% Larges:	45	Small cobble (64-128mm	•	30
% Pool: 10	% Riffle:	70	% Run: 20	% Other:	0	Method:	GE							Large cobble (128-256m)	•	10
% Side Channel:		0	Method Side Channel:		GE									Boulder cobble (>256mn	1):	5
% Debris Area:	20		Method Debris Area:		GE							% Bedrock:	0	% Bedrock:		0
Cover												D90 (cm):	20	Compaction:		Low
Cover Total % :		90	Method Cover Total %	:	GE							Banks	-	<u></u>		
Dp Pool: 15 L.	O.D.:	5	Boulder: 40	In Veg.:	0	Over Veg:	30	Cutbai	nk:		10	Dunks				
Crown Closure % :		40	Method Crown Closure	e:	GE	Aspect :	w	Metho	d Aspect:	:	MW	Height (m):	0.6	% Unstable:		5
			<del></del>									Textures Fines:	Yes	Gravel: No Large	: No Bedrock:	No
Discharge							C-	ecific Da				Confinement:	3			
			M. d 1337 44 - 1337 14 7					ecija Da				Valley: Chan. Ratio:	2			
Wetted Width (m):			Method Wetted Width (r	,								Stage:	Н			
Mean Depth (m):			Method Mean Depth (m)		WO.							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s):			Method Mean Velocity (1		vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):		.10	Method Discharge (m3/s)	); ————		<u> </u>						Bars (%):	0	Method Bars:		GE
Reach Symbo	ol											рН:	7.8	Method pH:		PH
				•	ish)							02 (ppm):		Method Dissolved Oxyge	en:	
				1	√F							Water Temp. (°C):	11.0	Method Temperature:		TC
			:	1 B 7.0	1450	)						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Cha	annel, Slope)	(Bed	Material)						Cond. (µmhos):	30	Method Conductivity:		CM

10-Feb-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-445-Ta3-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Sumn	nary Obstructions
Comments	
C1	Electrofished 109 m length of stream for 547 s. No fish were caught/observed.
C2	Water is tannic in colour.
C3	Fish distribution limit is located 100 m u/s in R2: boulder/riffle with very poor spawning potential. In the lower 100 m of R2, stable channel is confined within 5-8 m high gully walls; pockets of potential spawning are present within the mainly boulder/cobble bed material.
C4	The lower 100 m of R2 is classed as S4 habitat; u/s of 100 m is classed as S6 habitat.
C5	R3 was surveyed and consists of low gradient deep run habitat flowing through a meadow. Bed material is sand/silt - no spawning potential.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-445-Ta4-000-000-000-000-000-000-000

Header Information Н Stream Name: TAGIT C. TRIBUTARY Stream "Local": Ta4 Access: MW Reach No.: Reach Length (km): 1.0 Method: 460-6006-445-Ta4-000-000-000-000-000-000-000 Watershed Code: HC Site No.: Length surveyed (m): 200.0 Method: 093L025 ~1000 m U/S FROM CHISHOLM LAKE INLET. Map #: Location: Field: Yes Historical: No N U.T.M.: 9.6169 .60086 Fish Card: BCB 91179:33 Survey Crew: DB \CP \ \ \ \ \ \ Photos: B2/13, 14 Air Photos: Date: 03/07/97 Time: 16:30 Agency: C87 **Bed Material Channel Characteristics** Specific Data 3.1 Av. Chan. Width (m): Method Av. Chan. Width (m): T 2.7 1.1 1.5 2.1 1.4 5 % Fines (<2mm): % Fines (<2mm): T 0.3 0.4 0.7 0.4 0.8 0.5 Av. Wet. Width (m): Method Av. Wet. Width (m): 5 % Gravels: Small (2-16mm): 20 MS 5 Av. Max. Rif. Depth (cm): Av. Max. Riffle Depth (cm): 15 Large (16-64mm): Av. Max. Pool Depth (cm): 4 12 10 Av. Max. Pool Depth (cm): Small cobble (64-128mm): 30 % Larges: CL Gradient (%): Method Gradient: Large cobble (128-256mm): 35 % Pool: 35 % Run: 20 % Other: 0 Method: GE % Riffle: 45 Boulder cobble (>256mm): 10 GE Method Side Channel: % Side Channel: 0-10 % Bedrock: % Bedrock: 0 GE Method Debris Area: % Debris Area: 10-40 D90 (cm): 25 Compaction: Medium Cover GE Method Cover Total %: Cover Total %: Banks In Veg.: 0 Cutbank: 5 0 L.O.D.: Boulder: 15 Over Veg: 65 Dp Pool: 15 GE Method Aspect: MW Crown Closure %: 75 Method Crown Closure: Aspect: 0 0.8 % Unstable: Height (m): Larges: Yes Bedrock: No Textures Fines: Gravel: No Discharge Confinement: Specific Data Valley: Chan. Ratio: Wetted Width (m): Method Wetted Width (m): Stage: Mean Depth (m): Method Mean Depth (m): Method Flood Signs: MS Flood Signs Ht(m): 0.25 VO Mean Velocity (m/s): Method Mean Velocity (m/s GE Method Braided: Braided: Discharge (m3/s): 0.01 Method Discharge (m3/s): GE Bars (%): Method Bars: Method pH: pH: Reach Symbol (Fish) Method Dissolved Oxygen: 02 (ppm): NF TC Water Temp. (°C): Method Temperature: GE Turb. (cm): Method Turbidity: 2 D 6.0 1270 200 CM (Width, Valley: Channel, Slope) (Bed Material) Cond. (umhos): Method Conductivity:

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Obstructions** 

### **Stream Survey Report**

460-6006-445-Ta4-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Summary

Comments	
C1	Electrofished 85 m length of stream for 255 s. with no lower net. No fish were caught/observed. Apparently barren. Fry were found d/s; they may use the lower section of creek for spawning, but during the lake observations it was reported that there is very poor spawning potential in lower R1.
C2	Hiked d/s from meadow at Ta4.1; the confluence with Ta4 was not observed. Suspect main flow for lower Ta4 originates from Ta4.1.
C3	Evidence of high flows during freshet based on the gravel bars and sections of piled up small debris.
C4	Just u/s from sample site the creek is dewatered; suspect only seasonally wetted.
C5	Ta4 is classed as S3 u/s to 700 m in R1; u/s of 700 m is classed as S6.
C6	Heavy alder swales line the channel and made it difficult to shock this section of creek.

Stream: TAGIT C. TRIBUTARY 29-May-98

Watershed Code:

Stream Survey Report 460-6006-445-Ta4-000-000-000-000-000-000-000-000

Header Informati	on												-			_
•		BUTARY				Stream "Lo	ncal"•	Ta4						Access:		V2
			-000-000-00	0-000-000-000		Diream D	,					Reach No.:	2	Reach Length (km):	2.6 Method:	
		SWAMP.				Мар#:	093L025	;				Site No.:	17	Length surveyed (m):	100.0 Method:	
Location. 075 IIV	DD: 10	D.171141.				U.T.M. :	9.6169					Fish Card:	N N	Field: Yes	Historical:	No
Date: 04/06/97 Tir	ne: 16:	00	Agency:	C87 Sur	vey Cr	ew: CP\RD\						Photos:	A2/8, 9	Air Photos:	BCB 911	
Channel Charact	eristi	cs		_				Specific D	ata			Bed Material			_	
Av. Chan. Width (m):	1.2	Method A	Av. Chan. V	Vidth (m):	Т	1.2	2.1	1.7	0.4	0.8		% Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):	1.2	Method A	Av. Wet. Wi	idth (m):	Т	1.2	2.1	1.7	0.4	0.8				, ,		
Av. Max. Rif. Depth (cm):	7	Av. Max.	. Riffle Dept	th (cm):	MS							% Gravels:	0	Small (2-16mm):		0
Av. Max. Pool Depth (cm):	24	Av. Max.	. Pool Depth	ı (cm):	7	20	25	28						Large (16-64mm):		0
Gradient (%):	4.5	Method (	Gradient:		CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 40 % Rif	fle: 20	% Run:	40	% Other:	0	Method:	GE							Large cobble (128-256mm	:	0
% Side Channel:	0	Method S	Side Channe	el:	GE									Boulder cobble (>256mm)		0
% Debris Area:	>40	Method I	Debris Area	:	HC							% Bedrock:	0	% Bedrock:		0
Cover										_		D90 (cm):		Compaction:		High
Cover Total % :	30	Method C	Cover Total	%:	GE							Banks				_
Dp Pool: 20 L.O.D.:	40	Boulder:	0	1n Veg.:	0	Over Veg:	40	Cutba	nk:		0	Banks				
Crown Closure %:	30	Method (	Crown Clos		GE	Aspect :	sw	Metho	d Aspect:		MW	Height (m):	0.6	% Unstable:		0
<del></del>			_									Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge								ecific Da				Confinement:	3			
Wasta Wilder Co.		M-4	/	h () .				ecgic Du				Valley: Chan. Ratio:	2			
Wetted Width (m):			etted Widtl	• ,								Stage:	Н			
Mean Depth (m):			lean Depth (		WO.							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s):	0.01		lean Velocit	• `	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.01	Method Di	ischarge (m.									Bars (%):	0	Method Bars:		GE
Reach Symbol								_				pH:	8.2	Method pH:		PH
					Fish)							02 (ppm):		Method Dissolved Oxygen	:	
					NF							Water Temp. (°C):	12.0	Method Temperature:		TC
				1 B 4.5	F							Turb. (cm):	200	Method Turbidity:		GE
		(Widt	th, Valley: (	Channel, Slope)	(Be	d Material)						Cond. (µmhos):	30	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

### **Stream Survey Report**

460-6006-445-Ta4-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

#### **Obstructions**

Obstruction Ht(m)	Type	Location
1	BD	

- C1 Electrofished 30 m length of stream of inlet to swamp; no fish were caught/observed. Set 11 traps in pond for 24 h. period; no fish were caught.
- C2 Water is tannic in colour. Air Temp.: 16.5 C
- C3 Several BD's up to 1 m high are present in this reach. Bed material is sand/silt; there is no spawning potential.
- C4 Birds nesting in ponded area.
- C5 R2 is classed as S6 habitat.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-445-389-000-000-000-000-000-000-000

Header Inform	nation	!		_											<del>-</del>
Stream Name:	AGIT C.	TRIB	UTARY		Stream "Lo	cal":	Ta7						Access:		V2
Watershed Code:	60-6006-	445-31	39-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.3 Method:	MW
Location:	AMPLED	BEL	OW ROAD CULVERT.		Map #:	093L024	ļ				Site No.:	18	Length surveyed (m):	100.0 Method:	HC
					U.T.M.:	9.6149	.60098				Fish Card:	N	Field: Yes	Historical:	No
Date: 29/05/97	Time:	14:0	Agency: C87 Surv	ey Cre	ew: CP \RD \	1111	1 1				Photos:	A1/12, 13	Air Photos:	BCB 911	179:106
Channel Chai	acteri	stic	S				Specific D	)ata			Bed Material				
Av. Chan. Width (m):		1.6	Method Av. Chan. Width (m):	Т	1.9	1.1	1.6	1.8	1.5	1.9	% Fines (<2mm):	35	% Fines (<2mm):		35
Av. Wet. Width (m):		1.6	Method Av. Wet. Width (m):	T	1.9	1.1	1.6	1.8	1.5	1.9	` ′		, ,		
Av. Max. Rif. Depth (cr	n):	20	Av. Max. Riffle Depth (cm):	MS	20	15	25				% Gravels:	55	Small (2-16mm):		20
Av. Max. Pool Depth (c	m):	48	Av. Max. Pool Depth (cm):	20	40	45	60						Large (16-64mm):		35
Gradient (%):		5.0	Method Gradient:	CL							% Larges:	10	Small cobble (64-128mm):		10
% Pool: 20	% Riffle:	70	% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm		0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm)		0
% Debris Area:	15		Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):	8	Compaction:	N	Medium
Cover Total % :		75	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.O	.D.:	35	Boulder: 10 In Veg.:	0	Over Veg:	20	Cutba	nk:		15	Dunits				
Crown Closure %:		40	Method Crown Closure:	GE	Aspect :	SE	Metho	d Aspect:		MW	Height (m):	0.3	% Unstable:		0
											Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge							ecific Da	-10			Confinement:	2			
			N. O. 1997 at 1997 1d. ( )				ecyte Da				Valley: Chan. Ratio:	1			
Wetted Width (m):			Method Wetted Width (m):								Stage:	Н			
Mean Depth (m):			Method Mean Depth (m):							ĺ	Flood Signs Ht(m):	0,1	Method Flood Signs:		MS
Mean Velocity (m/s):			Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :		.14	Method Discharge (m3/s):				_				Bars (%):	0	Method Bars:		GE
Reach Symbol	,										pH:	8.4	Method pH:		PH
zionen Symbol	•		·	ish)							02 (ppm):		Method Dissolved Oxygen	:	
				CT*							Water Temp. (°C):	6.0	Method Temperature:		TC
			2 A 5.0	361	0						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bec	d Material)						Cond. (µmhos):	20	Method Conductivity:		СМ

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-389-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	4	33-39	F	R		_	EL
CT	1	50	J	R			EL

#### **Obstructions**

- C1 Electrofished 100 m length of stream below the road with a lower net. CT were caught. Very low fish densities.
- Problem culvert at the road: 12 m length x 1 m diameter, no drop at the outlet, and ~2.5 m high road fill over top (photo A1/20). Gradient was not obtained but the high water velocities observed through the culvert restrict fish passage. Some adult CT must pass through the culvert because CT fry were caught in Site 19 u/s. This culvert should be removed.
- C3 LOD abundant within channel and dense brush lines the creek.
- C4 Some pockets of fine gravel are present above the debris steps. Assume CT adults spawn here; creek is too steep below the road for fry to migrate u/s.
- C5 Channel is confined and at these flow levels, the water velocities are very high.
- C6 R1 and R2 are classed as S3 habitat.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

# Stream Survey Report

460-6006-445-389-000-000-000-000-000-000-000

Header Information					_							
Stream Name: TAGIT C. TRIE	UTARY	Stream "L	ocal":	Ta7						Access:		V2
Watershed Code: 460-6006-445-3	89-000-000-000-000-000-000-000							Reach No.:	2	Reach Length (km):	0.6 Method:	MW
Location: HIKED IN ABC	VE THE ROAD CULVERT.	Map #:	093L024	4				Site No.:	19	Length surveyed (m):	100.0 Method:	HC
		U.T.M. :	9.6149	.60098				Fish Card:	N	Field: Yes	Historical:	No
Date: 02/07/97 Time: 11:3	0 Agency: C87 Survey C	rew: CP \RD \	1 1 1 1	. \ \				Photos:	A8/12, 13	Air Photos:	BCB 911	179:106
Channel Characteristic	2.5			Specific D	ata			Bed Material	•			
Av. Chan. Width (m): 2.1	Method Av. Chan. Width (m): T	2.4	2.2	2.4	2.6	1.0		% Fines (<2mm):	25	% Fines (<2mm):		25
Av. Wet. Width (m): 1.2	Method Av. Wet. Width (m):	2.4	0.9	1.8	0.4	0.7				` ,		
Av. Max. Rif. Depth (cm): 4	Av. Max. Riffle Depth (cm): MS	2	3	6				% Gravels:	70	Small (2-16mm):		40
Av. Max. Pool Depth (cm): 24	Av. Max. Pool Depth (cm): 4	24	12	35			Į,			Large (16-64mm):		30
Gradient (%):	Method Gradient: CL	L						% Larges:	5	Small cobble (64-128mm):		5
% Pool: 20 % Riffle: 20	% Run: 60 % Other: 0	Method:	GE							Large cobble (128-256mm	):	0
% Side Channel: 0-10	Method Side Channel: GE									Boulder cobble (>256mm)	:	0
% Debris Area: 0-10	Method Debris Area: GE							% Bedrock:	0	% Bedrock:		0
Cover			_		_			D90 (cm):	5	Compaction:		High
Cover Total %: 90	Method Cover Total %: GE							Banks				
Dp Pool: 5 L.O.D.; 5	Boulder: 15 In Veg.: 5	Over Veg:	65	Cutba	nk:		5					
Crown Closure %: 90	Method Crown Closure: GE	Aspect :	SE	Metho	d Aspect	;	MW	Height (m):	0.3	% Unstable:		0
		-			_			Textures Fines:	Yes	Gravel: No Larges:	Yes Bedrock:	No
Discharge				pecific Da				Confinement:	5			
	Made J Water J Wilde ()	_	- J	ecijic Du				Valley: Chan. Ratio:	4			
` ,	Method Wetted Width (m):							Stage:	L			
• ` ′	Method Mean Depth (m):  Method Mean Velocity (m/s VO							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s) :  Discharge (m3/s) : 0.03	Method Mean Velocity (m/s VO Method Discharge (m3/s):							Braided:	N	Method Braided:		GE
Discharge (m3/s): 0.03	Method Discharge (m3/s):							Bars (%):	15	Method Bars:		GE
Reach Symbol								pH:	8.6	Method pH:		PH
	(Fish)							02 (ppm):		Method Dissolved Oxyger	ı <b>:</b>	
	CT*							Water Temp. (°C):	11.0	Method Temperature:		TC
	2 D 1.0 27	10						Turb. (cm):	200	Method Turbidity:		GE
	(Width, Valley: Channel, Slope) (B	ed Material)						Cond. (µmhos):	50	Method Conductivity:		CM

Watershed Code:

460-6006-445-389-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

# Species Number Size Range (mm) Life Phase Use 1 Use 2 Use 3 Method/Reference CT 10 | 44-57 J R EL

Stream: TAGIT C. TRIBUTARY

#### **Obstructions**

#### Comments

29-May-98

- C1 Electrofished 65 m length of stream for 493 s. with no lower net. CT were caught.
- C2 Sections of excellent potential trout spawning present in this reach.
- C3 Only small juveniles were caught; suspect low flows in mid-summer cause the larger fish to drop out into the mainstem.
- C4 Ta7 is classed as S3 habitat to the top of R2.
- C5 Problem culvert is located d/s in R1 (see Site 18).

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-389-000-000-000-000-000-000-000

Header Informati	ion											<del>-</del>		
Stream Name: TAGI	C. TRII	BUTARY		Stream "Lo	cal":	Ta7						Access:		FT
Watershed Code: 460-60	06-445-3	89-000-000-000-000-000-000								Reach No.:	3	Reach Length (km):	1.1 Method:	MW
Location: ~150 n	n U/S FR	OM ROAD; AT THE BASE OF R3.		Map #:	093L024	ļ				Site No.:	20	Length surveyed (m):	100.0 Method:	: НС
				U.T.M. :	9.6149	.60098				Fish Card:	N	Field: Yes	Historical:	No
Date: 02/07/97 Ti	me: 10:0	OO Agency: C87 Surv	ey Cre	ew: CP \RD \	111	\ \		_		Photos: A8/10, 11;	A1/14, 15	Air Photos:	BCB 91	179:106
Channel Charact	eristi	cs			S	Specific Da	ta			Bed Material				
Av. Chan. Width (m):	3.0	Method Av. Chan. Width (m):	Т	5.9	2.6	1.9	2.5	2.1		% Fines (<2mm):	15	% Fines (<2mm):		15
Av. Wet. Width (m):	1.2	Method Av. Wet. Width (m):	T	1.4	1.3	1.0			- 1	, ,		, ,		
Av. Max. Rif. Depth (cm):	8	Av. Max. Riffle Depth (cm):	MS	7	8	10				% Gravels:	45	Small (2-16mm):		15
Av. Max. Pool Depth (cm):	24	Av. Max. Pool Depth (cm):	8	21	24	27						Large (16-64mm):		30
Gradient (%):	9.0	Method Gradient:	CL							% Larges:	40	Small cobble (64-128mm	):	30
% Pool: 15 % Ri	Me: 70	% Run: 15 % Other:	0	Method:	GE							Large cobble (128-256m)	m):	10
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mn	1):	0
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover				<u> </u>	_					D90 (cm):	25	Compaction:		High
Cover Total % :	80	Method Cover Total %:	GE							Banks			<del></del>	
Dp Pool: 25 L.O.D.:	5	Boulder: 50 In Veg.:	0	Over Veg:	15	Cutban	k:		5	Dunks				
Crown Closure %:	30	Method Crown Closure:	GE	Aspect :	S	Method	Aspect:	:	MW	Height (m):	1.0	% Unstable:		0
		<del></del>								Textures Fines:	Yes	Gravel: No Large	s: No Bedrock:	No
Discharge						ecific Data				Confinement:	4			
117. 44 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		N. d. 1887 (4 1887) 14 ( )				ecijic Daid				Valley: Chan. Ratio:	2			
Wetted Width (m):		Method Wetted Width (m):								Stage:	L			
Mean Depth (m):		Method Mean Depth (m):	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s):	0.06	Method Mean Velocity (m/s Method Discharge (m3/s):	٧٥							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0,00	Method Discharge (m3/s):								Bars (%):	20	Method Bars:		GE
Reach Symbol										pH:	8.3	Method pH:		PH
<b>-</b>		,	ish)							02 (ppm):		Method Dissolved Oxygo	en:	
			<b>√</b> F							Water Temp. (°C):	8.0	Method Temperature:		TC
		3 B 9.0	1540	)						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	50	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-445-389-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Summ	ary Obstructions
Comments	
CI	Electrofished 85 m length of stream with a lower net on May 29/97; no fish were caught/observed. Electrofished 130 m length of stream with a lower net on July 2/97; no fish were caught/observed. The first sampling was done at very high flows and the visibility was very low so the site was repeated to confirm the absence of fish.
C2	High gradient, mainly one channel creek with large bed material. Some 0.5 m high drops over debris are present.
C3	Alder lines the channel. Suspect flows are very low in mid-summer.
C4	Classed as S5 habitat in the lower 550 m of R3 and S6 habitat above.

29-May-98

Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-389-000-000-000-000-000-000-000

Header Informat	ion			-					-				
•		TPP A DAZ		C. 111		T 7							* **
	C. TRIE	.U.LAK.Y 89-000-000-000-000-000-000-000-	000	Stream "L	ocai":	Ta7			Reach No.:	4	Access:	3.4 Method:	V2 MW
				M #-	0021.024					•	Reach Length (km):		
Location: UPPE	K END O	F Ta7; LOCATED IN BLOCK 620	7 # 1 .	Map #:	093L024				Site No.:	21	Length surveyed (m):	150.0 Method:	
Date: 30/05/97 Ti	me: 10:3	0 Agency: C87	Survey C	U.T.M. : Crew: CP \RD \	9.6149				Fish Card: Photos:	N A1/18, 19	Field: Yes Air Photos:	Historical: BCB 911	No 179:211
Channel Characi									Bed Material				
Channel Charact	eium	.S				Specific D	ata		Dea Maieriai				
Av. Chan. Width (m):	2.1	Method Av. Chan. Width (m):	T	2.7	1.9	1.1	2.6		% Fines (<2mm):	25	% Fines (<2mm):		25
Av. Wet. Width (m):	2.1	Method Av. Wet. Width (m):	Т	2.7	1.9	1.1	2.6		% Gravels:	40	Small (2-16mm):		25
Av. Max. Rif. Depth (cm):	19	Av. Max. Riffle Depth (cm):	MS	18	16	24	19		70 Graveis.	40	Large (16-64mm):		15
Av. Max. Pool Depth (cm):	32	Av. Max. Pool Depth (cm):	19	31	29	35					,		
Gradient (%):	9.0	Method Gradient:	CL						% Larges:	35	Small cobble (64-128mm):		10
% Pool: 20 % Ri	<b>Me:</b> 60	% Run: 20 % Of	her: 0	Method:	GE						Large cobble (128-256mm)	:	25
% Side Channel:	0-10	Method Side Channel:	GE								Boulder cobble (>256mm):		0
% Debris Area:	10-40	Method Debris Area:	GE						% Bedrock:	0	% Bedrock:		0
Cover									D90 (cm):	20	Compaction:		High
Cover Total % :	60	Method Cover Total %:	GE						Banks		_		
Dp Pool: 30 L.O.D.:	10	Boulder: 20 In Veg	.: 10	Over Veg:	10	Cutba	nk:	20	During				
Crown Closure % :	20	Method Crown Closure:	GE	Aspect :	sw	Metho	d Aspect:	MW	Height (m):	0.4	% Unstable:		0
					_				Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						:a. D.			Confinement:	3			
•						pecific Da			Valley: Chan. Ratio:	2			
Wetted Width (m):		Method Wetted Width (m):							Stage:	Н			
Mean Depth (m):		Method Mean Depth (m):	***						Flood Signs Ht(m):	0.1	Method Flood Signs:		MS
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo						Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.11	Method Discharge (m3/s):							Bars (%):	5	Method Bars:		GE
Reach Symbol									рН:	8.0	Method pH:		PH
icach bymoot			(Fish)						02 (ppm):		Method Dissolved Oxygen:		
			NF						Water Temp. (°C):	4.0	Method Temperature:		TC
		2 B	9.0 24	140					Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, S.	lope) (E	ed Material)					Cond. (µmhos):	10	Method Conductivity:		СМ

Stream: TAGIT C. TRIBUTARY

Watershed Code:

### Stream/Valley Cross-Section

29-May-98

Fish Summ	Description of the contract of
Comments	
CI	Electrofished 115 m length of stream d/s from the road culvert for 600 s. with no lower net. No fish were caught/observed.
C2	Stream has a large buffer zone in block - good layout! A small culvert was left at the road crossing.
C3	Channel drains from marsh area located u/s. Conductivity is very low implying much of the water is snowmelt. May dewater in mid-summer.
C4	Large debris straddles the creek. Bed material is cobble/fines; very limited potential spawning.
C5	Creek is too steep to support fish. The lower 100 m has a gradient of 20% which makes this upper section inaccessible to fish.

29-May-98

Stream Survey Report 460-6006-445-Ta9-000-000-000-000-000-000-000-000

Watershed Code:

Header Informat	ion													
	T C. TRIE			Stream "Lo	cal":	Ta9						Access:		FT
Watershed Code: 460-6	006-445-7	-747/ - <del>a9-000-00</del> 0-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.5 Method:	MW
Location: 180 m	U/S FRC	M Ta9.1 MOUTH.		Map #:	093L024					Site No.:	22	Length surveyed (m):	00.0 Method:	MW
				U.T.M. :	9.6172	.60134				Fish Card:	N	Field: Yes I	listorical:	No
Date: 01/07/97 T	ime: 14:0	O Agency: C87 Surv	ey Cre	w: CP \RD \IF	1111	. \ \				Photos:	A8/6, 7	Air Photos:	BCB 911	179:212
Channel Charac	teristi	es				pecific D	ata			Bed Material				
Av. Chan. Width (m):	2.4	Method Av. Chan. Width (m):	Т	2.2	2.8	2.5	2.7	2.6	1.7	% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):	2.1	Method Av. Wet. Width (m):	T	1.9	2.2	2.3	1.8	2.6	1.7	% Gravels:	25	Small (2-16mm):		10
Av. Max. Rif. Depth (cm):	11	Av. Max. Riffle Depth (cm):	MS	7	8	17				78 G124E15:	23	Large (16-64mm):		15
Av. Max. Pool Depth (cm):	32	Av. Max. Pool Depth (cm):	11	38	28	30								
Gradient (%):	6.0	Method Gradient:	CL							% Larges:	65	Small cobble (64-128mm):		30
% Pool: 20 % R	iffle: 70	% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm):		25
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		10
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover							•			D90 (cm):	25	Compaction:		Medium
Cover Total % :	60	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.O.D.:	10	Boulder: 45 In Veg.:	0	Over Veg:	10	Cutba	nk:		15					
Crown Closure % :	20	Method Crown Closure:	GE	Aspect:	SW	Metho	d Aspect:		MW	Height (m):	0.5	% Unstable:		0
										Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge					Ç.	ecific Da				Confinement:	3			
					Sp	ecyn Di				Valley: Chan. Ratio:	2			
Wetted Width (m):		Method Wetted Width (m):								Stage:	L			
Mean Depth (m):		Method Mean Depth (m):								Flood Signs Ht(m):	0.4	Method Flood Signs:		MS
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.08	Method Discharge (m3/s):		_					-	Bars (%):	5	Method Bars:		GE
Reach Symbol										pH:	8.0	Method pH:		PH
Itali Dyiilot		,	ish)							02 (ppm):		Method Dissolved Oxygen:		
		D	CT							Water Temp. (°C):	10.5	Method Temperature:		TC
		2 B 6.0	1270	)						Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bec	l Material)						Cond. (µmhos):	10	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

### **Stream Survey Report**

460-6006-445-Ta9-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
DV	_ 5	58-73	J	R			EL
CT	2	51-57	J	R			EL

#### **Obstructions**

- C1 Electrofished 80 m length of stream for 1500 s. with a lower net; CT and DV were caught.
- C2 Small, stable creek with moss-covered banks and instream boulders/debris. Some log stepping is present.
- C3 Riparian vegetation consists of willow/conifers with sections of grassy side hills which confine the creek and may pose as areas with bank stability concerns.
- C4 R1 is classed as S3 habitat throughout.
- C5 A Western Toad was spotted in sample site.

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta9-000-000-000-000-000-000

Header Inform	ation					_				<del></del>	·			
•	GIT C. TRI	BUTARY		Stream "Lo	cal":	Ta9						Access:		Н
Watershed Code: 46	0-6006-445-	Ta9-000-000-000-000-000-000-0	00							Reach No.:	2	Reach Length (km):	0.6 Method:	MW
Location: SA	MPLED JU	ST BELOW Ta9,2 MOUTH.		Map #:	093L024	ţ				Site No.:	23	Length surveyed (m):	150.0 Method:	HC
				U.T.M.:	9.6172	.60134				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Time: 16:	30 Agency: C87 S	Survey Cr	ew: RD \IF \ \	1 1 1	1 1		_		Photos:	A9/5, 6	Air Photos:	BCB 911	179:212
Channel Chard	cteristi	cs				Specific D	ata			Bed Material				
Av. Chan. Width (m):	1.8	Method Av. Chan. Width (m):	T	1.4	1.9	1.3	2.5	2.1		% Fines (<2mm):	25	% Fines (<2mm):		25
Av. Wet. Width (m):	1.7	Method Av. Wet. Width (m):	T	1.4	1.9	1.3	2.2	1.9		% Gravels:	60	Small (2-16mm):		20
Av. Max. Rif. Depth (cm)	: 7	tott tilling 2 optil (cili).	MS	7	4	11				- V Graveis		Large (16-64mm):		40
Av. Max. Pool Depth (cm	): 30		7	35	30	25					1.6	,		
Gradient (%):	3.0		CL							% Larges:	15	Small cobble (64-128mm):	_	15 0
	Riffle: 25			Method:	GE							Large cobble (128-256mm)  Boulder cobble (>256mm):	:	0
% Side Channel:	0-10		GE									,		•
% Debris Area:	0	Method Debris Area:	GE		_					% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):	8	Compaction:		High
Cover Total % :	75	Method Cover Total %:	GE							Banks				
Dp Pool: 25 L.O.I	.: 20	Boulder: 10 In Veg.:	0	Over Veg:	25	Cutbai	nk:		20					
Crown Closure %:	20	Method Crown Closure:	GE	Aspect :	sw	Metho	d Aspect	:	MW	Height (m):	1.2	% Unstable:		0
										Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge					St	ecific Da	ta			Confinement:	4			
Wetted Width (m):		Method Wetted Width (m):						_		Valley: Chan. Ratio:	3			
Mean Depth (m):		Method Mean Depth (m):								Stage:	L			
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Discharge (m3/s):	0.06	Method Discharge (m3/s):								Braided:	N	Method Braided:		GE
				<u></u>						Bars (%):	5	Method Bars:		GE
Reach Symbol			(Figh)							рН:	7.6	Method pH:		PH
•			(Fish) DV							02 (ppm):		Method Dissolved Oxygen:		
										Water Temp. (°C):	11.0	Method Temperature:		TC
			3.0 262							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slo	pe) (Be	d Material)						Cond. (µmhos):		Method Conductivity:		

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-445-Ta9-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
DV	17	67-130	J	R			EL

#### **Obstructions**

- C1 Electrofished 100 m length of stream for 750 s, with no lower net. DV were caught.
- C2 Low gradient pool/run habitat with good rearing potential. Limited potential spawning in gravel/riffle sections.
- C3 Cutbank and brush overstory present in this section but most of reach meanders through open brush meadows.
- C4 Classed as S3 habitat throughout R2.

# DFO/MoELP Stream Survey Form 29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta9-000-000-000-000-000-000-000

		<del>-</del>												
Header Informa	tion													
Stream Name: TAG	IT C. TRI	BUTARY		Stream "Lo	cal":	Ta9						Access:		Н
Watershed Code: 460-	5006-445-	Γa9-000-000-000-000-000-000-000								Reach No.:	3	Reach Length (km):	1.2 Method:	MW
Location: HEL	COPTER	SITE; UPPER SECTION OF Ta9, IN R	3.	Map #:	093L025	5				Site No.:	24	Length surveyed (m):	100.0 Method:	HC
				U.T.M.;	9.6172	.60134				Fish Card:	N	Field: Yes	Historical:	No
Date: 08/07/97 T	ime: 10:	00 Agency: C87 Surv	vey Cr	ew: RD \IF\	1 1 1	1 1				Photos:	A9/20, 21	Air Photos:	BCB 91	180:25
Channel Charac	teristi	cs				Specific Da	ıta			<b>Bed Material</b>				
Av. Chan. Width (m):	1.6	Method Av. Chan. Width (m):	T	1.1	2.3	0.9	2.4	1.3		% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):	1.4	Method Av. Wet. Width (m):	T	1.1	2.0	0.9	2.0	1.2		, ,		, ,		
Av. Max. Rif. Depth (cm):	6	Av. Max. Riffle Depth (cm):	MS	5	7	5				% Gravels:	55	Small (2-16mm):		15 40
Av. Max. Pool Depth (cm):	23	Av. Max. Pool Depth (cm):	6	15	35	18						Large (16-64mm):		
Gradient (%):	5.0	Method Gradient:	CL							% Larges:	35	Small cobble (64-128mm):		25
% Pool: 30 % F	iffle: 30	% Run: 40 % Other:	0	Method:	GE							Large cobble (128-256mm		10
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:	10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):	12	Compaction:		High
Cover Total % :	40	Method Cover Total %:	GE							Banks				
Dp Pool: 30 L.O.D.:	20	Boulder: 10 In Veg.:	0	Over Veg:	20	Cutban	k:		20					
Crown Closure % :	10	Method Crown Closure:	GE	Aspect :	SE	Method	Aspect:	:	мw	Height (m):	1.1	% Unstable:		0
									-	Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						ecific Dat	<b></b>			Confinement:	4			
Wetted Width (m):		Method Wetted Width (m):					•		$\dashv$	Valley: Chan. Ratio:	3			
Mean Depth (m):		Method Mean Depth (m):								Stage:	L			
Mean Velocity (m/s):		Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Discharge (m3/s):	0.03	Method Discharge (m3/s):	••							Braided:	N	Method Braided:		GE
	0.03	Method Discharge (mois)								Bars (%):	5	Method Bars:		GE
Reach Symbol		ar.								pH;	8.3	Method pH:		PH
•		•	Fish)							02 (ppm):		Method Dissolved Oxygen	:	
		<del></del>	NF							Water Temp. (°C):	9.0	Method Temperature:		TC
		2 C 5.0	154							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Be	d Material)						Cond. (µmhos):	20	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

# **Stream Survey Report**

460-6006-445-Ta9-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Summ	ary Obstructions
Comments	
Cl	Electrofished 100 m length of stream with no lower net. No fish were caught/observed. Conductivity was very low, site was difficult to shock.
C2	A Western Toad was observed in the swamp near the creek.
С3	Single, stable channel with gravel bed material and moss-covered banks. May dewater during the summer.
C4	Suspect DV are present in lower R3 to 620 m. U/S of 620 m creek is classed as S6 habitat.

Stream: TAGIT C. TRIBUTARY 29-May-98

Watershed Code:

# Stream Survey Report 460-6006-445-Ta9-.1 -000-000-000-000-000-000-000

Header Info	rmatio	n													
Stream Name:	TAGIT C	. TRIB	UTARY		Stream "Lo	cal":	Ta9.1						Access:		FT
Watershed Code:	460-6006	5-445-T	a91 -000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.8 Method:	MW
Location:			R THE LOWER 200 m; BOTTOM OF		Map#:	093L024					Site No.:	25	Length surveyed (m):	200.0 Method:	HC
	SAMPLE	SITE	S 80 m ABOVE THE MOUTH.		U.T.M.:	9.6172	.60135				Fish Card:	N	Field: Yes	Historical:	No
Date: 01/07/97	Time	: 13:0	Agency: C87 Surv	ey Cre	ew: RD \CP \	1 1 1 1	1 1				Photos:	A8/4, 5	Air Photos:	BCB 911	179:212
Channel Cha	aractei	ristic	es s			S	Specific L	)ata			Bed Material				
Av. Chan. Width (m)	:	2.4	Method Av. Chan. Width (m):	T	2.4	1.9	2.8	2.3	2.4		% Fines (<2mm):	10	% Fines (<2mm):		10
Av. Wet. Width (m):		2.1	Method Av. Wet. Width (m):	T	2.1	1.5	1.7	3.2			% Gravels:	40	Small (2-16mm):		10
Av. Max. Rif. Depth	(cm):	12	Av. Max. Riffle Depth (cm):	MS	11	14	10				76 GIAVEIS.	40	Large (16-64mm):		30
Av. Max. Pool Depth	(cm):	25	Av. Max. Pool Depth (cm):	12	26	21	27						<b>5</b> , ,		
Gradient (%):		13.0	Method Gradient:	CL							% Larges:	50	Small cobble (64-128mm):		25
% Pool: 20	% Riffle	: 60	% Run: 20 % Other:	0	Method:	GE							Large cobble (128-256mm)	•	15
% Side Channel:		0-10	Method Side Channel:	GE									Boulder cobble (>256mm):		10
% Debris Area:		10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover					-				-		D90 (cm):	25	Compaction:	_	Low
Cover Total % :		40	Method Cover Total %:	GE							Banks				
Dp Pool: 15 L	.O.D.:	15	Boulder: 30 In Veg.:	0	Over Veg:	20	Cutba	nk:		20					
Crown Closure %:		60	Method Crown Closure:	GE	Aspect :	SE	Metho	od Aspect:	;	MW	Height (m):	1.1	% Unstable:		15
											Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						Sn	ecific Da	nta			Confinement:	2			
Wetted Width (m) :			Method Wetted Width (m):								Valley: Chan. Ratio:	2			
Mean Depth (m):			Method Mean Depth (m):								Stage:	L			
Mean Velocity (m/s):			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.3	Method Flood Signs:		MS
Discharge (m3/s):			Method Discharge (m3/s):	••							Braided:	N	Method Braided:		GE
Discharge (mo/s) .		0.00	Method Discharge (mo/s).								Bars (%):	5	Method Bars:		GE
Reach Symb	ol										рН:	8,6	Method pH:		PH
			`	ish)							02 (ppm):		Method Dissolved Oxygen		
			<u> </u>	NF							Water Temp. (°C):	11.0	Method Temperature:		TC
			2 B 13.0	1450	0						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bec	d Material)						Cond. (µmhos):	70	Method Conductivity:		CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report

460-6006-445-Ta9-.1 -000-000-000-000-000-000

#### Stream/Valley Cross-Section

Fish Summ	ary Obstructions
Comments	
C1	Electrofished 100 m length of stream for 1100 s. No fish were caught/observed.
C2	Small, steep, confined creek situated in a gully with 70% sideslopes and ~50 m high banks. Unstable mud banks are present on R. right at 50 m. Alder overstory lines the creek.
С3	The lower 30 m of stream is accessible to fish. 30-90 m u/s from the mouth has a gradient of 20% - too steep for fish use. Ta9.1 is classed as S3 habitat in the lower 30 m and S6 habitat above 30 m.

29-May-98

Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta9-.2 -000-000-000-000-000-000

Header Info	rmatio	n													
Stream Name:	TAGIT	C. TRII	BUTARY		Stream "Lo	cal":	Ta9.2						Access:		н
Watershed Code:	460-600	6-445-	Ta92 -000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	1.4 Method:	MW
Location:	HIKED	U/S FR	OM HELICOPTER LANDING SITE.		Map#:	093L025					Site No.:	26	Length surveyed (m):	100.0 Method:	HC
					U.T.M.:	9.6176	.60138				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Tim	<b>e:</b> 16:0	OO Agency: C87 Sur	vey Cre	ew:RD\IF\	. \ \ \	۱ ۱		_		Photos:	A9/3, 4	Air Photos:	BCB 911	179:212
Channel Ch	aracte	risti	cs			S	Specific D	Pata			Bed Material				
Av. Chan. Width (m)	:	0.5	Method Av. Chan. Width (m):	Т	0.4	0.3	0.6	0.8	0.4		% Fines (<2mm):	80	% Fines (<2mm):		80
Av. Wet. Width (m):		0.5	Method Av. Wet. Width (m):	Т	0.4	0.3	0.6	0.8	0.4	H	, ,		,		
Av. Max. Rif. Depth	(cm):	2	Av. Max. Riffle Depth (cm):	MS	2	3					% Gravels:	10	Small (2-16mm):		5
Av. Max. Pool Depth	(cm):	17	Av. Max. Pool Depth (cm):	2	18	23	9			l l			Large (16-64mm):		5
Gradient (%):	,	3.5	Method Gradient:	CL						-1	% Larges:	10	Small cobble (64-128mm)	:	10
% Pool: 40	% Riff	le: 10	% Run: 50 % Other:	0	Method:	GE				Į			Large cobble (128-256mm	ı):	0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm	):	0
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):	7	Compaction:		High
Cover Total %:		30	Method Cover Total %:	GE						Ī	Banks				
Dp Pool: 30 L	.O.D.:	20	Boulder: 0 In Veg.:	0	Over Veg:	10	Cutba	nk:		40	Duning				
Crown Closure %:		20	Method Crown Closure:	GE	Aspect :	SE	Metho	d Aspect:	N	vrw	Height (m):	0.3	% Unstable:		0
						_					Textures Fines:	Yes	Gravel: No Larges	No Bedrock:	No
Discharge							a-iGa Na	.4			Confinement:	5			
						ъp	ecific Da	ша			Valley: Chan. Ratio:	4			
Wetted Width (m):			Method Wetted Width (m):								Stage:	L			
Mean Depth (m):			Method Mean Depth (m):	WO							Flood Signs Ht(m):	0.1	Method Flood Signs:		MS
Mean Velocity (m/s)	:	0.01	Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):		0.01	Method Discharge (m3/s):								Bars (%):	0	Method Bars:		GE
Reach Symb	ol								<u>-                                    </u>		pH:	7.6	Method pH:		PH
	~~		,	ish)							02 (ppm):		Method Dissolved Oxyger	1;	
				DV							Water Temp. (°C):	10.0	Method Temperature:		TC
			1 D 3.5	8110	)						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):		Method Conductivity:		

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta9-.2 -000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
DV	, 2	87-117	J	R			EL

#### **Obstructions**

- C1 Electrofished 80 m length of stream; 2 DV were caught in the lower 30 m.
- C2 Small seepage with sand/silt bed material. Above 35 m, sections with subsurface flow within lowland bog; very poor fish habitat. Very low energy creek.
- C3 Fish access is in the lower 35 m of stream and is classed as S4 habitat. U/S of 35 m, there is no potential fish use and it is classed as S6 habitat.
- C4 Abundant alder overstory.

29-May-98

Stream: TAGIT C. TRIBUTARY

Watershed Code:

Stream Survey Report 460-6006-445-Ta -10 -000-000-000-000-000-000-000

Header Information V2 Stream Name: TAGIT C. TRIBUTARY Stream "Local": Ta10 Access: Watershed Code: 460-6006-445-Ta -10 -000-000-000-000-000-000 Reach No .: 1.3 Method: MW Reach Length (km): Location: LOCATED ALONG BLOCKS 626 #1 AND #2. Man#: 093L024 Site No.: 27 Length surveyed (m): 300.0 Method: HC U.T.M.: 9.6170 .60135 Fish Card: Ν Field: Yes Historical: No BCB 91180:42 Date: 29/05/97 Time: 17:00 Agency: C87 Survey Crew: RD \CP\\\\\\\\ Photos: A1/16, 17 Air Photos: Channel Characteristics **Bed Material** Specific Data Av. Chan. Width (m): 1.4 Method Av. Chan. Width (m): T 0.9 1.6 2.4 1.5 0.8 % Fines (<2mm): 25 % Fines (<2mm): Av. Wet. Width (m): Method Av. Wet. Width (m): T 0.9 1.5 0.8 1.6 2.4 50 Small (2-16mm): 20 % Gravels: MS 12 Av. Max. Rif. Depth (cm): 12 Av. Max. Riffle Depth (cm): 16 8 Large (16-64mm): 30 12 32 49 Av. Max. Pool Depth (cm): Av. Max. Pool Depth (cm): 40 % Larges: Small cobble (64-128mm): 20 CLGradient (%): 10.0 Method Gradient: Large cobble (128-256mm): 5 % Pool: 20 % Riffle: 40 % Run: 20 % Other: 0 Method: GE Boulder cobble (>256mm): 0 GE Method Side Channel: % Side Channel: 0-10 GE 0 % Debris Area: 20 Method Debris Area: % Bedrock: % Bedrock: D90 (cm): 12 Compaction: Medium Cover Cover Total %: Method Cover Total %: GE Banks Dp Pool: 30 L.O.D.: 30 Boulder: 20 In Veg.: 0 Over Veg: 10 Cutbank: 10 Crown Closure %: 15 Method Crown Closure: GE Aspect: Ε Method Aspect: MW 0 Height (m): 0.4 % Unstable: **Textures Fines:** Yes Gravel: Yes Larges: No Bedrock: No Discharge Confinement: 3 Specific Data Valley: Chan. Ratio: 2 Wetted Width (m): Method Wetted Width (m): Н Stage: Mean Depth (m): Method Mean Depth (m): Flood Signs Ht(m): 0.2 Method Flood Signs: MS Mean Velocity (m/s): Method Mean Velocity (m/s VO Method Braided: GE Braided: N Discharge (m3/s) : 0.17 Method Discharge (m3/s): Method Bars: GE Bars (%): pH: 8.4 Method pH: PH Reach Symbol (Fish) Method Dissolved Oxygen: 02 (ppm): NF Water Temp. (°C): Method Temperature: TC 6.0 1 B 10.0 2530 Turb. (cm): 200 Method Turbidity: GE Cond. (µmhos): (Width, Valley: Channel, Slope) (Bed Material) 10 Method Conductivity: CM

29-May-98 Stream: TAGIT C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-445-Ta -10 -000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Summ	ary Obstructions
Comments	
Cl	Electrofished 100 m length of stream d/s from the road with no lower net. No fish were caught/observed.
C2	Small, stable creek in shallow depression with low gradient sideslopes. 5-10 m buffer left on either side of the creek.
C3	Small gravel moss bed with stable instream debris. Low conductivity value suggests majority of water originated from snow melt. Stream may dewater in mid-summer.
C4	Lower 100 m of Ta10 has a gradient of 28% - inaccessible to fish. Creek is classed at S6 habitat throughout.

29-May-98 Stream: O'DINE C.

Watershe

**Stream Survey Report** 

Watershed Code: 460-6006-474-000-000-000-000-000-000-000

Header Informati	on													
Stream Name: O'DIN	E C.			Stream "Lo	cal":	O'DIN	EC.					Access:		V2
Watershed Code: 460-60	06-474-0	000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.6 Method:	MW
Location: TOP C	FR1 AT	BOTTOM OF CANYON.		Map #:	093L024					Site No.:	1	Length surveyed (m):	100.0 Method:	НC
				U.T.M. :	9.6123	.60076				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97 Ti	me: 12:	OO Agency: C87 Surve	ey Crev	v: RD \IF \ \	111	\ \				Photos:	A8/23, 24	Air Photos:	BCB 91	179:30
Channel Charact	eristi	cs			S	Specific D	ata			Bed Material				
Av. Chan, Width (m):	2.7	Method Av. Chan. Width (m):	T	2.7	1.6	3.7	2.4	2.3	3.4	% Fines (<2mm):	5	% Fines (<2mm):		5
Av. Wet. Width (m):	1.0	Method Av. Wet. Width (m):	Т	1.6	1.0	0.5				` ′		, ,		
Av. Max. Rif. Depth (cm):	9	Av. Max. Riffle Depth (cm):	MS	7	10	11				% Gravels:	20	Small (2-16mm):		5
Av. Max. Pool Depth (cm):	28	Av. Max. Pool Depth (cm):	9	34	24	26						Large (16-64mm):		15
Gradient (%):	9.0	Method Gradient:	<b>C</b> L							% Larges:	75	Small cobble (64-128mm)	:	30
% Pool: 20 % Ri	Me: 70	% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm	):	30
% Side ChanneI:	0	Method Side Channel:	GE									Boulder cobble (>256mm	:	15
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover	_				_					D90 (cm):	34	Compaction:		Low
Cover Total % :	75	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L.O.D.:	10	Boulder: 60 In Veg.:	0	Over Veg:	0	Cutba	nk:		10	Dunks				
Crown Closure %:		Method Crown Closure:		Aspect:	sw	Metho	d Aspect	:	MW	Height (m):	1.8	% Unstable:		10
			_							Textures Fines:	No	Gravel: Yes Larges	Yes Bedrock:	Yes
Discharge			Г		C.	ecific Da				Confinement:	2			
_		Mark - 3 337 - 14 3 337 341 ()	-		- Sp	ecijic Du				Valley: Chan. Ratio:	1			
Wetted Width (m):		Method Wetted Width (m):								Stage:	L			
Mean Depth (m):		Method Mean Depth (m):								Flood Signs Ht(m):	0.4	Method Flood Signs:		MS
Mean Velocity (m/s):	0.00		vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.09	Method Discharge (m3/s):	L							Bars (%):	5	Method Bars:		GE
Reach Symbol									-	рН:	7.1	Method pH:		PH
		•	ish)							02 (ppm):		Method Dissolved Oxyge	1:	
		COCT	RB(SST	r)						Water Temp. (°C):	11.0	Method Temperature:		TC
		3 A 9.0	1270							Turb. (cm):	200	Method Turbidity:		GE

29-May-98 Stream: O'DINE C.

Watershed Code:

Stream Survey Report

460-6006-474-000-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	7	62-96	J	R			EL
CO	1	104	J	R			EL
RB	2	71-154	J	R			EL

#### **Obstructions**

- C1 Electrofished 37 m length of stream with no lower net. CO, CT and RB (suspected SST) were caught. No access problems throughout R1 from main river.
- C2 Limited potential spawning and log stepping is present in this section. Suspect more suitable spawning habitat is present in lower R1.
- C3 R1 is class S3 habitat.

29-May-98 Stream: O'DINE C.

Watershed Code:

Stream Survey Report

460-6006-474-000-000-000-000-000-000-000-000

Header Info	rmation	ı													
Stream Name:	O'DINE C.				Stream "Lo	cal":	O'DIN	E C.					Access:		V2
Watershed Code:	460-6006-4	474-00	00-000-000-000-000-000-000-000								Reach No.:	2	Reach Length (km):	1.6 Method:	: MW
Location:			S FROM ROAD BELOW MARSH; TF	APS	Map #:	093L024	4				Site No.:	2	Length surveyed (m):	200.0 Method:	: НС
	SET AT R	2/R3 F	REACH BREAK.		U.T.M. :	9.6123	.60076				Fish Card:	N	Field: Yes	Historical:	No
Date: 29/05/97	Time:	11:00	Agency: C87 Surv	ey Cre	ew: RD \CP \	1 1 1 1	. \ \			_	Photos:	A1/8, 9	Air Photos:	BCB 91	1179:30
Channel Ch	aracteri	stic	S				Specific D	ata		-	Bed Material				
Av. Chan. Width (m)	):	2.4	Method Av. Chan. Width (m):	T	2.9	3.2	1.7	1.9	2.1		% Fines (<2mm):	20	% Fines (<2mm):		20
Av. Wet. Width (m):		2.4	Method Av. Wet. Width (m):	T	2.9	3.2	1.7	1.9	2.1		1				
Av. Max. Rif. Depth	(cm):	40	Av. Max. Riffle Depth (cm):	MS	35	31	51	42			% Gravels:	35	Small (2-16mm):		20 15
Av. Max. Pool Depth	(cm):	60	Av. Max. Pool Depth (cm):	40	59	65	55						Large (16-64mm):		
Gradient (%):		4.5	Method Gradient:	CL							% Larges:	45	Small cobble (64-128mm)		10
% Pool: 10	% Riffle:	<b>9</b> 0	% Run: 0 % Other:	0	Method:	GE							Large cobble (128-256mm		25
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm)	:	10
% Debris Area:	. (	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover						_		_			D90 (cm):	30	Compaction:	1	Medium
Cover Total % :		60	Method Cover Total %:	GE							Banks				
Dp Pool: 10 L	.O.D.:	20	Boulder: 40 In Veg.:	5	Over Veg:	5	Cutba	nk:		20					
Crown Closure %:		10	Method Crown Closure:	GE	Aspect :	SE	Metho	d Aspect:	:	MW	Height (m):	0.4	% Unstable:		5
											Textures Fines:	No	Gravel: Yes Larges:	Yes Bedrock:	No
Discharge						Sr	pecific Da	ta .			Confinement:	2			
Wetted Width (m) :			Method Wetted Width (m) :				recijie Da				Valley: Chan. Ratio:	1			
Mean Depth (m):			Method Mean Depth (m):								Stage:	Н			
Mean Velocity (m/s)			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.15	Method Flood Signs:		MS
Discharge (m3/s):			Method Discharge (m3/s):	••							Braided:	N	Method Braided:		GE
Discharge (m3/3):			riction Discharge (mo/s).								Bars (%):	0	Method Bars:		GE
Reach Symb	ol		47								рН:	8.5	Method pH:		PH
[			•	ish)							02 (ppm):		Method Dissolved Oxyger	:	
				CT							Water Temp. (°C):	6.0	Method Temperature:		TC
			2 A 5.0	2350							Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bec	l Material)						Cond. (µmhos):	30	Method Conductivity:		СМ

10-Feb-98 Stream: O'DINE C.

Watershed Code:

# **Stream Survey Report**

460-6006-474-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	2	66-136	J	R			MT

#### **Obstructions**

Obstruction Ht(m)	Type	Location
1	F	

- C1 Set 10 traps below the bridge at the R2/R3 reach break. CT were caught (photo A1/22). Water levels were very high; unable to shock.
- C2 Water is tannic in colour.
- C3 Channel is bank full; not able to see bed material. LOD straddles the creek and 40% sideslopes with ~10 m high bench confine the creek.
- C4 R2 was mismapped d/s: it does not flow into Tal.1; it is part of O'Dine C. (see map)
- Hiked lower 400-500 m of canyon in lower R2: gradient is 13-16%, bed material is boulder/bedrock, and channel is entrenched. Several 0.5 m high drops over debris are present.

  1.3 m high falls is located ~500 m u/s in R2; observed 6" CT juvenile below the falls; suspect this is the end of anadromous fish use although it is possible that CO and SST could access u/s as far as mid-R3 in the swamp section.
- C6 Suspect creek originates from unnamed lake.
- C7 R2 is classed as S3 habitat.

# DFO/MoELP Stream Survey Form 29-May-98 Stream: O'DINE C.

29-May-98

Watershed Code:

Header Info	rmatio	n													
Stream Name:	O'DINE (	Ξ.			Stream "Lo	cal":	O'DIN	EC.					Access:		H
Watershed Code:	460-6006	-474-0	00-000-000-000-000-000-000-000								Reach No.:	3	Reach Length (km):	2.7 Method:	MW
Location:			C. HIKED IN FROM MEADOW;		Map #:	093L024					Site No.:	3	Length surveyed (m):	100.0 Method:	HC
	SAMPLE	ט טיס	FROM FORK.		U.T.M. :	9.6123	.60076				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Time	: 10:0	O Agency: C87 Surv	ey Cre	w:RD\IF\\	1 1 1	1 1				Photos:	A8/21, 22	Air Photos:	BCB 911	179:103
Channel Cha	aractei	istic	es :			S	pecific D	)ata			Bed Material				
Av. Chan. Width (m)	:	3.1	Method Av. Chan. Width (m):	T	3.8	2.5	2.8	2.3	4.1		% Fines (<2mm):	40	% Fines (<2mm):		40
Av. Wet. Width (m):		2.1	Method Av. Wet. Width (m):	T	2.3	1.9					% Gravels:	50	Small (2-16mm):		35
Av. Max. Rif. Depth	(cm):	8	Av. Max. Riffle Depth (cm):	MS	10	7	6				70 G124CI3.	50	Large (16-64mm):		15
Av. Max. Pool Depth	(cm):	44	Av. Max. Pool Depth (cm):	8	35	51	45					••			
Gradient (%):		1.0	Method Gradient:	CL							% Larges:	10	Small cobble (64-128mm):		10
% Pool: 30	% Riffle	: 25	<b>% Run:</b> 45 <b>% Other:</b>	0	Method:	GE							Large cobble (128-256mm		0
% Side ChanneI:		0	Method Side Channel:	GE									Boulder cobble (>256mm)		
% Debris Area:		10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover											D90 (cm):	7	Compaction:		High
Cover Total %:		50	Method Cover Total %:	GE							Banks				
Dp Pool: 40 L	.O.D.:	20	Boulder: 0 In Veg.:	0	Over Veg:	20	Cutba	nk:		20					
Crown Closure %:		60	Method Crown Closure:	GE	Aspect :	SE	Metho	d Aspect:	. 1	MW	Height (m):	2.0	% Unstable:		0
											Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						Sn	ecific Da	ıta			Confinement:	4			
Wetted Width (m) :			Method Wetted Width (m):				ceigie 24			-	Valley: Chan. Ratio:	4			
Mean Depth (m):			Method Mean Depth (m):								Stage:	L			
Mean Velocity (m/s):			• ` '	vo							Flood Signs Ht(m):	0.4	Method Flood Signs:		MS
Discharge (m3/s):		0.06	Method Discharge (m3/s):	VO							Braided:	N	Method Braided:		GE
Discharge (m5/s):		0.00	Method Discharge (m5/3) .								Bars (%):	15	Method Bars:		GE
Reach Symb	ol										рН:	7.2	Method pH:		PH
			•	ish)							02 (ppm):		Method Dissolved Oxyger	:	
			C	T(*)							Water Temp. (°C):	7.9	Method Temperature:		TC
			3 D 1.0	4510	)						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):		Method Conductivity:		

10-Feb-98 Stream: O'DINE C.

Stream Survey Report

Watershed Code:

460-6006-474-000-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

#### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
СТ	28	41-83	J	R			EL

#### **Obstructions**

- C1 Electrofished 35 m length u/s to the fork with a lower net. CT were caught at high densities and are suspected to be residents. Due to the presence of fry in this site, it is assumed CT spawn in this reach.
- Most of R2 consists of swampy/ponded sections with abundant low gradient run habitat. Bed material is sand/silt and channel meanders through swamp. Grasses and brush make up the riparian vegetation. Numerous channels, some of which are intermittent, are present within the ponded sections.
- C3 The section sampled in this reach has fines/gravel/silt bed material; excellent potential resident CT spawning sections are present.
- R3 is classed as S3 habitat throughout. Based on the air survey, R4 is classed as S3 habitat in the lower 1150 m and suspected S3 habitat u/s to the top of R4. Upper O'Dine C. in R4 and R5 was mismapped; it is not part of upper Ta1.

29-May-98

Stream: O'DINE C.

Watershed Code:

Header Info	rmatic	n				_				_					
Stream Name:	O'DINE	C.			Stream "Lo	cai":	O'DIN	Œ C.					Access:		Н
Watershed Code:	460-600	6-474-0	000-000-000-000-000-000-000								Reach No.:	6	Reach Length (km):	1.9 Method:	MW
Location:			OM HEADWATER LAKE; SAMPLED	NI (	Map #:	093L024	ļ				Site No.:	4	Length surveyed (m):	100.0 Method:	нС
	MEADO	)W AR	EA AT THE BASE OF R6.		U.T.M.:	9.6123	.60076				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Tim	e: 14:6	OO Agency: C87 Surv	vey Cre	ew: DB \CP \	1111	\ \				Photos:	B2/9, 10	Air Photos:	BCB 911	179:215
Channel Ch	aracte	risti	cs				Specific D	Data			Bed Material				
Av. Chan. Width (m)	):	2.9	Method Av. Chan. Width (m):	T	1.1	2.2	1.0	5.2	4.2	3.4	% Fines (<2mm):	30	% Fines (<2mm):		30
Av. Wet. Width (m):		2.9	Method Av. Wet. Width (m):	T	1.1	2.2	1.0	5.2	4.2	3.4	% Gravels:	30	Small (2-16mm):		20
Av. Max. Rif. Depth	(cm):		Av. Max. Riffle Depth (cm):	MS							% Graveis:	30	Large (16-64mm):		10
Av. Max. Pool Depth	(cm):	75	Av. Max. Pool Depth (cm):		85	50	90			ļ			- ` ,		
Gradient (%):		0.5	Method Gradient:	CL							% Larges:	40	Small cobble (64-128mm):		20
% Pool: 90	% Riff	l <b>e:</b> 0	% Run: 10 % Other:	0	Method:	GE							Large cobble (128-256mm):		15
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):		5
% Debris Area:		0	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover							_			_	D90 (cm):	17	Compaction:		Low
Cover Total % :		75	Method Cover Total %:	GE							Banks				
Dp Pool: 70 L	.O.D.:	0	Boulder: 5 In Veg.:	10	Over Veg:	0	Cutba	nk:		15	Duning				
Crown Closure %:		5	Method Crown Closure:	GE	Aspect:	S	Metho	d Aspect:		MW	Height (m):	0.4	% Unstable:		0
											Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge							ecific Da				Confinement:	5			
337-44- d 317/d4b () .			Method Wetted Width (m):				ecyn Du				Valley: Chan. Ratio:	4			
Wetted Width (m):			, ,								Stage:	M			
Mean Depth (m):			Method Mean Depth (m):	110							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s)	;	0.04	Method Mean Velocity (m/s	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s):		0.04	Method Discharge (m3/s):		<u> </u>						Bars (%):	0	Method Bars:		GE
Reach Symb	ol										рН:		Method pH:		
			· ·	ish)							02 (ppm):		Method Dissolved Oxygen:		
ı				NF							Water Temp. (°C):	13.5	Method Temperature:		TC
			3 D 0.5	3340	0						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	d Material)						Cond. (µmhos):	20	Method Conductivity:		СМ

### **DFO/MoELP Stream Survey Form** Stream: O'DINE C.

Watershed Code:

# **Stream Survey Report**

460-6006-474-000-000-000-000-000-000-000

# Stream/Valley Cross-Section

29-May-98

Fish Summ	ary Obstructions
Comments	
Cl	Electrofished 80 m length of stream for 380 s. with no lower net. No fish were caught/observed. Appears to be good fish habitat. Invertebrates present within the channel.
C2	Moss-covered bed material, grass/willow line the creek within the meadow section; timber is present further u/s and d/s in the forested sections.
C3	R5 is higher gradient, more riffle habitat and the channel is confined. It is classed as S5 habitat in the lower section and S6 habitat above the O'D4 confluence. R6 is classed as S6 habitat.

10-Feb-98

Stream: O'DINE C. TRIBUTARY

Watershed Code:

Header Info	matio	7													
Stream Name:	O'DINE C		UTARY		Stream "Lo	cal":	O'D1						Access:		Н
Watershed Code:	460-6006-	474-0	00-000-000-000-000-000-000-000								Reach No.:	2	Reach Length (km):	2.2 Method:	MW
Location:	200 m AB	OVE ?	THI LAKE.		Map#:	093L024	ļ				Site No.:	5	Length surveyed (m):	80.0 Method:	нС
					U.T.M. :	9.6115	.60099				Fish Card:	N	Field: Yes	Historical:	No
Date: 22/10/96	Time:	10:0	Agency: C87 Surve	ey Cre	:w: RD \CP \	, , , ,	\ \ _				Photos:	A14/11, 12	Air Photos:	BCB 911	179:103
Channel Cha	racter	istic	S				Specific D	ata			Bed Material				
Av. Chan. Width (m)	:	1.9	Method Av. Chan. Width (m):	T	2.0	1.7	1.9	2.1	1.7	1.8	% Fines (<2mm):	15	% Fines (<2mm):		15
Av. Wet. Width (m):		1.8	Method Av. Wet. Width (m):	T	2.0	1.6	1.8	1.8					•		
Av. Max. Rif. Depth	cm):	8	Av. Max. Riffle Depth (cm):	MS							% Gravels:	70	Small (2-16mm): Large (16-64mm):		30 40
Av. Max. Pool Depth	(cm):	29	Av. Max. Pool Depth (cm):	8											
Gradient (%):		1.5	Method Gradient:	CL							% Larges:	15	Small cobble (64-128mm):		15
% Pool: 30	% Riffle:	30	% Run: 40 % Other:	0	Method:	GE					1		Large cobble (128-256mm)		0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm):		0
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover					<del></del>			-			D90 (cm):	10	Compaction:		High
Cover Total % :		60	Method Cover Total %:	GE							Banks				
Dp Pool: 20 L	O.D.:	10	Boulder: 20 In Veg.:	0	Over Veg:	10	Cutba	nk:		40	Dunns				
Crown Closure % :		15	Method Crown Closure:	GE	Aspect :	sw	Metho	d Aspect:		MW	Height (m):	0.3	% Unstable:		0
					_		_				Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						Ç.	ecific Da				Confinement:	4			
W-44-3 W'14 ( -)			N. A J. W A J. W. Jak. ()			Sp	ecyn Du	1144			Valley: Chan. Ratio:	3			
Wetted Width (m):			Method Wetted Width (m):								Stage:	L			
Mean Depth (m):			Method Mean Depth (m):								Flood Signs Ht(m):		Method Flood Signs:		
Mean Velocity (m/s)			• •	vo							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	,	),06 	Method Discharge (m3/s):		<u></u>					<u>_</u>	Bars (%):	10	Method Bars:		GE
Reach Symb	al .									-	pH:		Method pH:		
ziewen Gymb			•	ish)							02 (ppm):		Method Dissolved Oxygen	1	
			C1	Γ(*)							Water Temp. (°C):	3.0	Method Temperature:		TC
			2 C 1.5	2710	)	_					Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope)	(Bed	Material)						Cond. (µmhos):	70	Method Conductivity:		CM

**Stream Survey Report** 

Stream: O'DINE C. TRIBUTARY

Watershed Code:

460-6006-474-000-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

29-May-98

### Fish Summary

#### **Obstructions**

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	1	33	F	R			EL
CT	2	69-83	J	R			EL

- Cl Electrofished 30 m length of stream with no lower net. CT were caught.
- C2 Air Temp.: 2.5 C
- C3 Nice, low gradient creek. Appears to be all part of O' Dine C.; there is no obvious inflow channel into the lake.
- C4 Good potential spawning in lower R1 near Site 3. Easy access from mainstem O'Dine C.
- Based on air survey, O'D1 is classed as S3 habitat u/s to mid R2, suspected S3 habitat in the upper half of R2, and S6 habitat in R3 and u/s. O'D1.1 appears to be very small; may have an intermittent channel; classed as suspected S6 habitat.

29-May-98

Stream: O'DINE C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-474-000-000-000-000-000-000-000-000

Header Informat	ion													
Stream Name: O'DIN	E C. TRI	BUTARY		Stream "Loc	:al":	O'DIN	E C. TRIE	BUTARY	•			Access:		Н
Watershed Code: 460-6	06-474-0	00-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	Method:	MW
Location: BLOC	K 622 #2	. STATION 2+402.		Map #: (	093L024					Site No.:	6	Length surveyed (m):	100.0 Method:	HC
				U.T.M.:	9.6126	.60100				Fish Card:	N	Field: Yes	Historical:	No
Date: 10/09/97 Ti	me: 11:1	5 Agency: C87 Surv	ey Cre	ew: DB \MM \	1 1 1	1 1 1		-		Photos:		Air Photos:	BCB 911	179:215 ———
Channel Characi	eristi	cs				Specific D	Pata			Bed Material				
Av. Chan. Width (m):	1.4	Method Av. Chan. Width (m):	T	1.2	1.4	1.4	1.0	1.9	1.4	% Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):	1.0	Method Av. Wet. Width (m):	T	1.0	0.9	1.4	0.6	1.1	1.2	% Gravels:	0	Small (2-16mm):		0
Av. Max. Rif. Depth (cm):	6	Av. Max. Riffle Depth (cm):	MS	5	7	5				76 Graveis.	v	Large (16-64mm):		0
Av. Max. Pool Depth (cm):	13	Av. Max. Pool Depth (cm):	6	15	10	15						-		0
Gradient (%):	2.0	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):	_	0
% Pool: 80 % R	Me: 20	% Run: 0 % Other:	0	Method:	GE					1		Large cobble (128-256mm)  Boulder cobble (>256mm):	:	0
% Side Channel:	0	Method Side Channel:	GE									· · ·		•
% Debris Area:	10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):		Compaction:		High
Cover Total % :	90	Method Cover Total %:	GE							Banks				
Dp Pool: 0 L.O.D.:	0	Boulder: 0 In Veg.:	50	Over Veg:	50	Cutba	nk:		0					
Crown Closure %:	30	Method Crown Closure:	GE	Aspect:		Metho	d Aspect	:	MW	Height (m):	0.2	% Unstable:		0
			_							Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge					Sr	ecific Da	nta .			Confinement:	4			
Wetted Width (m):		Method Wetted Width (m):								Valley: Chan. Ratio:	3			
Mean Depth (m):		Method Mean Depth (m):								Stage:	L			
Mean Velocity (m/s):		Method Mean Velocity (m/s	<b>v</b> o							Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Discharge (m3/s):	0.01	Method Discharge (m3/s):								Braided:	N	Method Braided:		GE
								===		Bars (%):	5	Method Bars:		GE
Reach Symbol		700								рН:		Method pH:		
		•	ish)							02 (ppm):		Method Dissolved Oxygen	•	_
			NF T							Water Temp. (°C):	10.0	Method Temperature:		TC
		1 C 2.0	F							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Be	d Material)						Cond. (µmhos):		Method Conductivity:		

10-Feb-98 Stream: O'DINE C. TRIBUTARY

Watershed Code:

**Stream Survey Report** 

460-6006-474-000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

Fish Summ	ary Obstructions
Comments	
Cl	Electrofished 100 m length of stream for 400 s. at proposed road location; no fish were caught/observed. Suspect stream is too small to support a resident fish population and it is not accessible through the wetland complex d/s from O'Dine Creek. Classed as S6 habitat.
C2	Observed a Western Spotted Frog.
C3	Dense alder overstory.
C4	Observed creek at station 2+340, 50 m North on the road: no defined channel, no flow, some standing water, no fish potential.
C5	These creeks do not appear on the 1:20,000 TRIM map and sampling was conducted after the main survey period.

10-Feb-98

Stream: UNNAMED C.

Watershed Code:

Stream Survey Report 460-6006-481-000-000-000-000-000-000-000-000-000

Header Info	matio	n													,
Stream Name:	UNNAM	ED C.			Stream "Lo	cal":	SWA	MP C.					Access:		Н
Watershed Code:	460-6006	5-481 <b>-</b> 0	00-000-000-000-000-000-000-000								Reach No.:	1	Reach Length (km):	0.6 Method:	MW
Location:	SAMPLE	ED LOV	VER REACH OF MAIN CHANNEL.		Map #:	093L024	1				Site No.:	1	Length surveyed (m):	100.0 Method:	HC
					U.T.M. :	9.6104	.60074				Fish Card:	N	Field: Yes	Historical:	No
Date: 03/07/97	Time	: 14:0	O Agency: C87 Sur	rvey Cre	w: RD \IF\	. 1 1 1	١١				Photos:	A9/1, 2	Air Photos:	BCB 91	179:29
Channel Cha	racte	ristic	S				Specific D	Data			Bed Material				
Av. Chan. Width (m)	:	2.5	Method Av. Chan. Width (m):	T	2.4	2.9	2.5	2.0	2.5	2.8	% Fines (<2mm):	30	% Fines (<2mm):		30
Av. Wet. Width (m):		1.1	Method Av. Wet. Width (m):	T	0.6	1.7					% Gravels:	60	Small (2-16mm):		30
Av. Max. Rif. Depth	cm):	3	Av. Max. Riffle Depth (cm):	MS	3	2	3				76 GIAVEIS.	00	Large (16-64mm):		30
Av. Max. Pool Depth	(cm):	15	Av. Max. Pool Depth (cm):	3	20	15	11						- ,		
Gradient (%):		1.0	Method Gradient:	CL					-		% Larges:	10	Small cobble (64-128mm):		10
% Pool: 20	% Riffle	e: 40	% Run: 40 % Other	. 0	Method:	GE							Large cobble (128-256mm		0
% Side Channel:		0	Method Side Channel:	GE									Boulder cobble (>256mm)	1	0
% Debris Area:		0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover	_										D90 (cm):	6	Compaction:		
Cover Total % :		40	Method Cover Total %:	GE							Banks				
Dp Pool: 15 L.	O.D.:	20	Boulder: 5 In Veg.:	0	Over Veg:	40	Cutha	ınk:		20					
Crown Closure %:			Method Crown Closure:		Aspect :	S	Metho	od Aspect:	:	MW	Height (m):	2.0	% Unstable:		0
			<del></del>								Textures Fines:	Yes	Gravel: Yes Larges:	No Bedrock:	No
Discharge						Sı	pecific Da	nta			Confinement:	6			
Wetted Width (m):			Method Wetted Width (m):				, , , , , ,				Valley: Chan. Ratio:	5			
Mean Depth (m):			Method Mean Depth (m):								Stage:	L			
Mean Velocity (m/s):			Method Mean Velocity (m/s	vo							Flood Signs Ht(m):	0.4	Method Flood Signs:		MS
Discharge (m3/s):			Method Discharge (m3/s):	,,							Braided:	N	Method Braided:		GE
		-,						_			Bars (%):	35	Method Bars:		GE
Reach Symbo	ol			TP!-LA							pH;	7.1	Method pH:		PH
[				Fish)							02 (ppm):		Method Dissolved Oxygen	:	
			<del></del> _	ост							Water Temp. (°C):	11.0	Method Temperature:		TC
			3 E 1.0		)						Turb. (cm):	200	Method Turbidity:		GE
			(Width, Valley: Channel, Slope	) (Bed	l Material)						Cond. (µmhos):		Method Conductivity:		

29-May-98 Stream: SWAMP C.

Watershed Code:

Stream Survey Report

400-0000-461-000-000-000-000-000-000-000-000

#### Stream/Valley Cross-Section

### Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
co	9	47-83	1	R			EL
CT	1	124	1	R			EL

#### **Obstructions**

- C1 Spot sampled 35 m length of stream with a lower net; CO and CT were caught.
- C2 Small, low gradient, single channel. Very low flows on this fan; flows are higher u/s from the fan. Excellent potential CO/CT spawning present. Brush overstory is abundant.
- C3 Suspect anadromous fish use end at the 3.5 m high chute located in lower R2.
- C4 Tributary SWI was not found during the ground survey or the air survey; SWI was mapped as not observed.

# **DFO/MoELP Stream Survey Form** 10-Feb-98

Stream: UNNAMED C.

Watershed Code:

**Stream Survey Report** 

460-6006-SW -000-000-000-000-000-000-000

Header Informati	ion -									<del></del>		<del></del>		
_	MED C			Stream "Lo	cal":	SWAI	MP C.					Access:		FT
Watershed Code: 460-66	006-SW -	000-000-000-000-000-000-000-000								Reach No.:	3	Reach Length (km):	1.0 Method:	MW
Location: HIKE	) 500 m	D/S FROM ROAD.		Map #:	093L024	ı				Site No.:	2	Length surveyed (m):	500.0 Method:	HC
				U.T.M. :	9.6104	.60074				Fish Card:	N	Field: Yes	Historical:	No
Date: 02/07/97 Ti	me: 14:	OO Agency: C87 Surv	еу Сте	ew: RD \CP \	1 1 1	1 1				Photos:	A8/14, 15	Air Photos:	BCB 91	179:29
Channel Charact	eristi	cs				Specific D	Pata			Bed Material				
Av. Chan. Width (m):	1.6	Method Av. Chan. Width (m):	T	1.8	1.6	0.7	2.3	1.5		% Fines (<2mm):	20	% Fines (<2mm):		20
Av. Wet. Width (m):	0.9	Method Av. Wet. Width (m):	T	1.2	0.9	0.7				, ,		, ,		
Av. Max. Rif. Depth (cm):	8	Av. Max. Riffle Depth (cm):	MS	10	5	8				% Gravels:	45	Small (2-16mm):		15
Av. Max. Pool Depth (cm):	26	Av. Max. Pool Depth (cm):	8	17	41	19						Large (16-64mm):		30
Gradient (%):	3.0	Method Gradient:	CL		_	_				% Larges:	35	Small cobble (64-128mm)	:	15
% Pool: 30 % Ri	ffle: 30	% Run: 40 % Other:	0	Method:	GE							Large cobble (128-256mm	-	5
% Side Channel:	0	Method Side Channel:	GE									Boulder cobble (>256mm	):	15
% Debris Area:	0-10	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):	30	Compaction:	N	Medium
Cover Total % :	40	Method Cover Total %:	GE							Banks				_
Dp Pool: 30 L.O.D.:	15	Boulder: 10 In Veg.:	10	Over Veg:	15	Cutba	nk:		20	24.000				
Crown Closure %:	70	Method Crown Closure:	GE	Aspect :	w	Metho	d Aspect:	: N	MW	Height (m):	1.5	% Unstable:		0
							_			Textures Fines:	No	Gravel: Yes Larges	No Bedrock:	No
Discharge						ecific Da				Confinement:	3			
•		20 0 22 0 22 0 22 0 2 0 2 0 2 0 2 0 2 0		-	- SI	ecijic Du				Valley: Chan. Ratio:	2			
Wetted Width (m):		Method Wetted Width (m):								Stage:	L			
Mean Depth (m):		Method Mean Depth (m):								Flood Signs Ht(m):	0.2	Method Flood Signs:		MS
Mean Velocity (m/s):	0.00	Method Mean Velocity (m/s	VO							Braided:	N	Method Braided:		GE
Discharge (m3/s) :	0.03	Method Discharge (m3/s):		L						Bars (%):	5	Method Bars:		GE
Reach Symbol										рН:	7.5	Method pH:		PH
ILLHUN DYNIUUI		(F	ish)							02 (ppm):		Method Dissolved Oxyge	n:	
			CT_							Water Temp. (°C):	11.0	Method Temperature:		TC
		2 B 3.0	2440	)	_					Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	I							Cond. (µmhos):	50	Method Conductivity:		CM

Watershed Code:

460-6006-SW -000-000-000-000-000-000-000-000

# Stream/Valley Cross-Section

# Fish Summary

29-May-98

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CT	3	104-113	J	R			EL

Stream: SWAMP C.

#### **Obstructions**

Obstruction Ht(m)	Туре	Location
5	F	

- C1 Electrofished 70 m length of stream for 720 s, with no lower net; CT were caught. Also sampled below the road culvert; no fish were caught.
- C2 Very small creek with trickle flow discharge. Single channel is confined with moss-covered boulders and small gravel bed material. Pockets of potential spawning are present.
- C3 The 4.5 m high impassable falls at the top of this reach is the end point of fish distribution.

10-Feb-98 Stream: UNNAMED C.

Watershed Code:

**Stream Survey Report** 

460-6006-SW -000-000-000-000-000-000-000

Header Informat	ion													
Stream Name: UNN	AMED C.			Stream "Lo	cal":	SWAN	ΛP C.					Access:		V2
		000-000-000-000-000-000-000-000								Reach No.:	4	Reach Length (km):	1.0 Method:	MW
Location: 100 n	D/S FRC	M ROAD CULVERT.		Map #:	093L024	ļ				Site No.:	3	Length surveyed (m):	100.0 Method:	HC
					9.6104					Fish Card:	N	Field: Yes	Historical:	No
Date: 29/05/97 T	ime: 10:0	O Agency: C87 Surv	еу Сте	w: RD \CP \	1 1 1 1	\ \ \				Photos:	A1/6, 7	Air Photos:	BCB 911	179:29
Channel Charac	teristi	es				Specific D	ata			Bed Material				
Av. Chan. Width (m):	1.8	Method Av. Chan. Width (m):	T	0.6	2.8	1.9	0.9	1.5	3.1	   % Fines (<2mm):	100	% Fines (<2mm):		100
Av. Wet. Width (m):	1.8	Method Av. Wet. Width (m):	T	0.6	2.8	1.9	0.9	1.5	3,1	% Gravels:	0	Small (2-16mm):		0
Av. Max. Rif. Depth (cm):	22	Av. Max. Riffle Depth (cm):	MS	25	18					76 Graveis:	v	Large (16-64mm):		0
Av. Max. Pool Depth (cm):	87	Av. Max. Pool Depth (cm):	22	80	110	70								U
Gradient (%):	1.5	Method Gradient:	CL							% Larges:	0	Small cobble (64-128mm):		0
% Pool: 20 % R	iffle: 5	% Run: 75 % Other:	0	Method:	GE							Large cobble (128-256mm	•	0
% Side Channel:	0-10	Method Side Channel:	GE									Boulder cobble (>256mm)	:	0
% Debris Area:	10-40	Method Debris Area:	GE							% Bedrock:	0	% Bedrock:		0
Cover										D90 (cm):		Compaction:		High
Cover Total % :	80	Method Cover Total %:	GE							Banks	-			
Dp Pool: 40 L.O.D.:	5	Boulder: 0 In Veg.:	15	Over Veg:	10	Cutba	nk:		30	Dunks				
Crown Closure %:	10	Method Crown Closure:	GE	Aspect :	S	Metho	d Aspect:		MW	Height (m):	0.3	% Unstable:		0
<del></del>										Textures Fines:	Yes	Gravel: No Larges:	No Bedrock:	No
Discharge						ecific Da	4			Confinement:	5			
Ü		N. 4. 180 (c. 180/10 / )		ļ	sp	ecijic Du				Valley: Chan. Ratio:	3			
Wetted Width (m):		Method Wetted Width (m):							,	Stage:	Н			
Mean Depth (m):		Method Mean Depth (m):	*10							Flood Signs Ht(m):	0.5	Method Flood Signs:		MS
Mean Velocity (m/s):		Method Mean Velocity (m/s	VO							Braided:	N	Method Braided:		GE
Discharge (m3/s):	0.20	Method Discharge (m3/s):		<u> </u>					لــــــا	Bars (%):	5	Method Bars:		GE
Reach Symbol				-		_				pH:	8.2	Method pH:		PH
iteach Bymoot		(F	ish)							02 (ppm):		Method Dissolved Oxyger	:	
		1	VF							Water Temp. (°C):	7.0	Method Temperature:		TC
		2 C 1.5	F							Turb. (cm):	200	Method Turbidity:		GE
		(Width, Valley: Channel, Slope)	(Bed	l Material)						Cond. (µmhos):	30	Method Conductivity:		СМ

29-May-98 Stream: SWAMP C.

Watershed Code:

Stream Survey Report

460-6006-SW -000-000-000-000-000-000-000-000

### Stream/Valley Cross-Section

#### Fish Summary

#### **Obstructions**

Obstruction Ht(m)	Type	Location
	X	

- C1 Electrofished 100 m length of stream for 417 s, with a lower net. No fish were caught/observed. Classed as S6 habitat due to the impassable falls d/s.
- C2 Water is tannic in colour. Air Temp.: 10 C. The average max. pool depth is actually the value for the average max. run depth; the 40% cover is the cover from deep run, not deep pool.
- C3 Reach consists of of low gradient run habitat meandering through a large marsh/wetland. Heavy alder swale lines the creek in some sections.
- C4 Tributary SW3 was surveyed by air; suspect fish use in this stream; classed as suspected S4 habitat.





Photo	Stream name (gaz.)	Stream name	Watershed code	Crew	Crew	Reach/	Fish	Roll/	Count. #	Neg.	Date of	Reach	Site	Map #	UTM	UTM	Stream	Picture	Photo	Comments
"		(loc.)		(init 1)	(trait 2)	site card (Y/N)	cards (Y/N)	Batch	}	#	photo	*	*	NTS/TRIM	(E)	(N)	photo   dir.	type	dir.	}
	Unnamed Creek	Unnamed Creek	460-6006-397-000-000-000-000-000-000-000-000	RĎ	CP		N	A2	2	2	1997/06/04	2	-	093L025	6212	60056	Up	Čh	N	<del> </del>
2	Unnamed Creek	Unnamed Creek	460-6006-397-000-000-000-000-000-000-000	RD	CP	- <del>'</del>	N	A2	3	3	1997/06/04		1	093L025		60056	Dn	Ch	S	
3	False Tagit Creek	False Tagit Creek	460-6006-407-000-000-000-000-000-000-000-000	RD		Y	Y	A3	3	3	1997/06/11		1	093L025		60061	Up	Ch	NE	
4	False Tagit Creek	False Tagit Creek		RD		Υ	Υ	A3	2	2	1997/06/11		1	093L025	6192	50061	Dn	Ch	sw	
5 6	False Tagit Creek			CP	JB :	Y	N	B1	13	13	1997/06/12		2	093L025	6192	60061	Up	Ch	N	
7	False Tagit Creek False Tagit Creek	False Tagit Creek	460-6006-407-000-000-000-000-000-000-000-000 460-6006-407-000-000-000-000-000-000-000-000	CP CP	JB	- Y	N	B1	14	14	1997/06/12	I i	3	093L025 093L025	6192 6192	60061 60061	Dn Up	Ch	S W	L
8	False Tagit Creek	False Tagit Creek	460-6006-407-000-000-000-000-000-000-000-000	CP	JB	· 🐫 –	N	B1	2	2	1997/06/11		-3	093L025	6192	60061	- Op - On	Ch	- Y	·
9	False Tagit Creek	False Tagil Creek		CP	JB	Ý	N	B1	16	16	1997/06/11	4	3	093L025	6192	60061	Xs		N	Road culvert.
10	False Tagit Creek	False Tagit Creek	460-6006-407-000-000-000-000-000-000-000-000	RD	IF .	Y	N	A10	,	1	1997/07/08	4	4	093L025	6192	60061	Up	Ch	NW	
11	False Tagit Creek	False Tagit Creek		RD	IF	Υ _	N	A10	2	2	1997/07/08	4	4	093L025	6192	60061	Dn	Ch	SE	
12	False Tagit Creek	False Tagit Creek		DB	CP	N	2	B2	15	14	1997/07/08		n/a	093L025	6192	60061	Dn	1 1	SW	Aerial view of lake.
13	False Tagit Creek False Tegit Creek			DB	CP	Y	N	82	18	17	1997/07/08		5	093L025	6192	60061	Up	Ch	NE	ļ
15	False Tagit Creek	False Tagit Creek False Tagit Creek	460-6006-407-000-000-000-000-000-000-000-000 460-6006-407-000-000-000-000-000-000-000	DB RD	CP IF	Y	N N	B2 A10	17	-18 7	1997/07/08		5	093L025 093L025	6192 6192	60061 60061	Dn Up	Ch Ch	SW	· · · · ·
18	False Tagit Creek	False Tagit Creek		RD	IF.	- <del>'</del>	N	A10	B	- 8	1997/07/08		6	093L025	6192	60061	Dn	Ch	SE	ļ
17	False Tagit Creek			RD	ïF.	Ÿ	N	A9	22	22	1997/07/08		7	093L025	6192	60061	Up	Ch	NW	<del> </del>
18	False Tagit Creek	False Tagit Creek		RD	IF	Y	N	A9	23	23	1997/07/08		7	093L025	6192	60061	Dn	Ch	SE	
19	False Tagit Creek Tributary	FTa1	460-6006-407-FTa-1 -000-000-000-000-000-000	RD	CP	Υ	N	A2	4	4	1997/06/04		8	093L025	6194	60066	Up	Ch	NE	
20	False Tagit Creek Tributary	FTa1	460-6006-407-FTa-1 -000-000-000-000-000-000	RD	CP	Y	N	A2	5	5	1997/06/04		8	093L025	6194	60066	Dn	Ch	SW	
21	False Tagit Creek Tributary False Tagit Creek Tributary	Fta4	460-6006-407-FTs-4 -000-000-000-000-000-000	CP CP	JB	- <del>*</del>	N N	B1	11	11	1997/06/12		9	093L025	6202	60094	Up	Ch	NE	
23	False Tagit Creek Tributary	Fta4	460-6006-407-FTs-4 -000-000-000-000-000-000-000 460-6006-407-FTs-4 -000-000-000-000-000-000-000	RD RD	JB CP	ţ	N	B1 A2	12 6	12	1997/06/12		10	093L025	6202 6202	60094	On Up	Ch Ch	SW	<del> </del>
24	False Tagit Creek Tributary	Fta4	460-6006-407-FTa-4 -000-000-000-000-000-000	RD	CP	<del>-</del>	N	A2	7	7	1997/06/04		10	093L025	6202	60094	Dn Dn	Ch	SW	
25	False Tagit Creek Tributary	Fta5	460-6006-407-481-000-000-000-000-000-000-000	RD		Ÿ	N	A3	6	6	1997/06/11		11	093L025	6204	60104	Up	Ch	ÑE	
26	False Tagit Creek Tributary	Fta5	460-6006-407-481-000-000-000-000-000-000-000	RD_		Y	N	A3	7	7	1997/06/11	1	11	093L025	6204	60104	Dn	Ch	SW	
27	False Tagit Creek Tributary	Fta5	460-6006-407-481-000-000-000-000-000-000-000	CP	JB	Υ	N	B1	5	5	1997/06/11		12	093L025	6204	60104	Up	Ch	NE	
28 29	False Tagit Creek Tributary False Tagit Creek Tributary	Fta5	450-6006-407-481-000-000-000-000-000-000-000	CP	JB	Υ	N	B1	6	- 6	1997/06/11		12	093L025	6204	60104	Dn	Ch	SW	·
30	False Tagit Creek Tributary	Fta5	460-6006-407-481-000-000-000-000-000-000-000-000 460-6006-407-481-000-000-000-000-000-000-000	CP	JB JB	Y	ZZ	B2 B2	23	22	1997/07/08		13	093L025	6204 6204	60104 60104	Up Dn	Ch	NE SW	<del> </del>
31	False Tagit Creek Tributary	Fta5	460-6006-407-481-000-000-000-000-000-000-000	RD	JF.	- <del>'</del>	N	A10	9	9	1997/07/08		14	093L025	6204	60104	Up	Ch	N	<del>                                     </del>
32	False Tagit Creek Tributary	Fta5	460-6006-407-481-000-000-000-000-000-000-000	RD	IF.	Y	N	A10	10		1997/07/06		14	093L025	6204	60104	Dn	Ch	s	<del> </del>
33	False Tagit Creek Tributary	Fla5.1	460-6006-407-481-221-000-000-000-000-000-000	CP	JB	Y	N	B1	3	3	1997/06/11		15	093L025	6211	60112		Ch		
34	False Tagit Creek Tributary	Fta5.1	450-6006-407-481-221-000-000-000-000-000-000	CP	JB	Υ	N	B1	4	4	1997/06/11	1	15	093L025	6211	60112	Dn	Ch	S	
35	False Tagit Creek Tributary	Fta5.1	460-6006-407-481-221-000-000-000-000-000-000	CP	_DB	Y	N	B2	21	20	1997/07/08		16	093L025		60112		Ch	NW	
36 37	False Tagit Creek Tributary	Fta5.1	460-6006-407-481-221-000-000-000-000-000-000-000 460-6006-407-481-221-000-000-000-000-000-000	CP	DB DB	Y	N	B2 B2	22 19	21	1997/07/08		16 n/a	093L025		60112	Dn Up	Ch	SE	ļ
38	False Tagit Creek Tributary	Fta5.1	460-6006-407-481-221-000-000-000-000-000-000	CP	DB	- <del>Y</del> -	N	B2 B2	20		1997/07/08		n/a n/a	093L025	6211	60112	Dn	Ch Ch	SE	<del></del>
39	Faise Tagit Creek Tributary	Fta5.2	460-6006-407-481-295-000-000-000-000-000-000	CP	JB	Ÿ	N	B1	7	7	1997/06/11		17	093L025	8215	60113		Ch	S	
40	False Tagit Creek Tributary	Fta5.2	480-6006-407-481-295-000-000-000-000-000-000-000	CP	JB	Ý	N	B1	8	8	1997/06/11		17	093L025		60113		Ch	N	
41	False Tagit Creek Tributary	F1a5.2	460-6006-407-481-295-000-000-000-000-000-000	RD		N	N	A3	4	4	1997/06/11	n/a	n/a	093L025	6215	60113	Up	Ĺ	S	Lake on False Tagit Creek Tributary FTa5.
42	False Tagit Creek Tributary	Fta5.2	460-6006-407-481-295-000-000-000-000-000-000	RD		N	N	_A3	5	5	1997/06/11		n/a	093L025	8215	60113	Dn	L_L	N	Lake on False Tagit Creek Tributary FTa5.
43	False Tagit Creek Tributary False Tagit Creek Tributary	Fta5.3 Fta5.3	460-6006-407-481-FTa-5.3-000-000-000-000-000-000	RD	CP	Y	N	B1	9	9	1997/06/11		18	093L025	6216 6216	80114	Up	Ch	N	<del> </del>
45	False Tagit Creek Tributary	Fta5.4	460-6006-407-481-FTa-5.3-000-000-000-000-000-000 460-8006-407-481-FTa-5.4-000-000-000-000-000-000	RD DB	CP	<u>`</u>	N	B1 B2	10 25	10	1997/06/11		18	093L025	6222	60114	Dn Up	Ch	S	<del> </del>
46	False Tagit Creek Tributary	Fta5.4	460-6006-407-481-FTa-5.4-000-000-000-000-000	DB	CP	⊢ ; ·	, <u>"</u>	B3	1	1	1997/07/08		19	093L025	6222	60118	Dn	Ch	s	<del> </del>
47	False Tagit Creek Tributary	Fta5.4	460-6006-407-481-FTa-5.4-000-000-000-000-000	DB	CP	Y	N	B3	4	4	1997/07/08		20	093L025	6222	60118	Up	Ch	N	
48	False Tagit Creek Tributary	Fta5.4	460-6006-407-481-FTa-5.4-000-000-000-000-000	DB	CP	Y	_N	B3	5	5_	1997/07/08	11	20	093L025	6222	60118	Dn	Ch	S	
49	False Tagit Creek Tributary	Fta5.4	460-6006-407-481-FTa-5.4-000-000-000-000-000	DB	CP	_ <u>Y</u>	N	B3	2	_2			21	093L025	6222	60118	Up	Ch	NW	1
50 51	False Tagit Creek Tributary	Fta5.4 FTa6	460-6006-407-481-FTa-5.4-000-000-000-000-000	DB	CP	Y	N	B3	3	3	1997/07/08		21	093L025	6222	60118	Dn	Ch	SE	<u> </u>
52	False Tagit Creek Tributary	FTa6	460-6006-407-660-000-000-000-000-000-000-000 460-6006-407-660-000-000-000-000-000-000-000	RD RD	IF IF	- Y	N	A10 A10	3 4	3_4	1997/07/08		22	093L025	6194	60119	Up Dn	Ch	SE	<del>                                     </del>
53	False Tagit Creek Tributary	FTa6.1	460-6006-407-660-FTa-6.1-000-000-000-000-000	RD	IF.	Y	N	A10	5	5	1997/07/08		23	093L025	6195	60120	Up	Ch	NE	<del> </del>
54	False Tagit Creek Tributary	FTa6,1	460-6006-407-660-FTa-6.1-000-000-000-000-000	RD	īF.	Y	N	A10	6	6	1997/07/08		23	093L025	6195	60120	Dn	Ch	SW	<del> </del>
55	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	CP	RD	Υ	N	A8	16	15	1997/07/02	1	1	093L024	6148	60066	Up	Ch	N	
56	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	CP	RD	Υ	N	A8	17	16	1997/07/02	1	1	093L024	6148	60066	Dn	Ch	s	
57	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	CP	RD	Υ	N	A8	19	18	1997/07/02		1	093L024	6148	60066	n/a	FI	n/a	CT, CO and SST samples.
58 59	Tagit Creek Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	DB	CP	Y	N	B2	1	. 0	1997/07/03		_2_	093L024	6148	60066	Up	Ch	NW	<del> </del>
60	Tagit Creek	Tagit Creek Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000 460-6006-445-000-000-000-000-000-000-000-000	DB DB	CP	Y N	N N	B2 B2	3	- 1	1997/07/03		n/a	093L024 093L024	6148 6148	60066	Dn Up	Ch	SE	Gravel fan at inlet of Chisholm Lake.
61	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000	DB	CP	N	_ <u>N</u> _	B2 B2	4	3	1997/07/03		n/a	093L024	6148	60066	On —		SW	Chisholm Lake outlet.
82	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	RD	CP	Ÿ	N	A8	8	7	1997/07/01	_	3	093L024	6148	60066	Up	Ch	NW	
63	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	RD	CP	Y	- N	A6	9	8	1997/07/01		3	093L024	6148	60066	Dn	Ch	SE	
84	Tagit Creek	Tagit Creek	460-6008-445-000-000-000-000-000-000-000-000	RD	CP	Y	Ň	A7	22	22	1997/06/18		4	093L024	6148	60066	Up	Ch	NE	
65	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	RD	CP	Y	N	A7	21	21	1997/06/18		4	093L024	6148	60066	Dn	Ch	SW	
66	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	RD	CP	Y	N	_A7_	18	18	1997/06/18		5	093L024	6148	60066	Up	Ch	NE	<del> </del>
67	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	RD	CP	Y	N(	_ <u>A7</u>	_ 19	19	1997/06/18		_5	093L024	6146	60066	Dn	Ch	sw	·
67		Todit Cross	460 6006 446 000 000 000 000 000 000 000																	
67 68 69	Tagit Creek Tagit Creek	Tagit Creek Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000 460-6006-445-000-000-000-000-000-000-000-000	RD RD	CP	<u>Y</u>	N	A7	20 15	20 15	1997/06/18		5 6	093L024 093L024	6148 6148	60066	n/a  Up	Ch	n/a NW	Adult CT.

Photo	Stream name (gaz.)	Stream name	Watershed code	Crew	Crew	Reach/	Fish	Roll	Count. #	Neg.	Date of	Reach	Site	Map #	MTU	UTM	Stream	Picture	Photo	Comments
#		(loc.)		(lnR 1)	(init 2)	site card	cards	Batch	1	*	photo	*	*	NTS/TRIM	(E)	(N)	photo	type	dir.	
1			1	<b>.</b>		(Y/N)	(Y/N)	*	1	}	1	\	1		1	١ ١	dir.	l	ŀ	<b>{</b>
71	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	RD	CP	Y	N	A7	17	17	1997/06/18		6	093L024		60066	n/a	Fi	n/a	DV and CT juveniles.
72	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	CP	RD	Y	N	A8	_11	0	1997/07/01		7	093L024			Up	Ch	NW	
73	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000	СР	RD	Y	N	A8	2	1.1	1997/07/01		_7_	093L024		60066	Dn	Ch	SE	
75	Tagit Creek Tagit Creek	Tagit Creek Tagit Creek	460-6006-445-000-000-000-000-000-000-000-000- 460-6008-445-000-000-000-000-000-000-000-000-000	CP	RD	Y	N	A8 B2	3	2	1997/07/01		8	093L024 093L024	6148 6148	60066 80068	Up	Ch	- NW.	Road culvert.
76	Tagit Creek	Tagit Creek	460-6006-445-000-000-000-000-000-000-000	DB	CP	<sub>Y</sub>	N	B2_	11	-10 11	1997/07/03		- °	093L024	6148	60066	Up Dn	Ch	<b>E</b>	
77	Tagit Creek Tributary	Ta1	460-6006-445-112-000-000-000-000-000-000-000	RD	CP	Ÿ	Y	AI	2	2	1997/05/28		9	093L024	6150	60078	Up	Ch	NW	
78	Tagit Creek Tributary	Ta1	460-6006-445-112-000-000-000-000-000-000-000	RD	CP	Ÿ	Y	A1	3	3	1997/05/28		9	093L024	6150	60078	Dn Dn	Ch	SE	
79	Tagit Creek Tributary	Ta1.2	460-6006-445-112-Ta12 -000-000-000-000-000-000	RD	CP	Y	N	A1	4	4	1997/05/28		10	093L024	6145	60085	Up	Ch	NW	
80	Tagit Creek Tributary	Ta1.2	460-6006-445-112-Ta12 -000-000-000-000-000	RD	CP	Y	N	A1	5	5	1997/05/28		10	093L024	8145	60085	Dn_	Ch	SE	
81	Tagit Creek Tributary	Ta1	460-6006-445-112-000-000-000-000-000-000-000	RD	CP	ΥΥ	N	A1	10_	10	1997/05/29		11	093L024	6150	60078	Up	Ch	NW	
82	Tagit Creek Tributary	Ta1	460-6006-445-112-000-000-000-000-000-000-000	RD	CP	Υ	N	A1	11	11	1997/05/29		11	093L024	6150		Dn	Ch	SE	
83	Tagit Creek Tributary Tagit Creek Tributary	Ta1	460-6006-445-112-000-000-000-000-000-000-000 460-6006-445-112-000-000-000-000-000-000-000	DB DB	CP	Y	N	B2 B2	7	- 6	1997/07/03		12	093L024	6150	60078 60078	Op	Ch Ch	NW SE	
85	Tagit Creek Tributary	Ta1	460-6006-445-112-000-000-000-000-000-000-000	DB	CP	<del></del>	N	B2		7	1997/07/03		12	093L024			Dn	Ch	NW	<del></del>
86	Tagit Creek Tributary	Tai	460-6006-445-112-000-000-000-000-000-000-000	DB	CP	Ÿ	N	B2	6	5	1997/07/03		13	093L024			Dn	Ch	SE	
87	Tagit Creek Tributary	Ta3	460-6006-445-Ta3-000-000-000-000-000-000-000	RD	CP.	Ÿ	N	A1	25	25	1997/05/30		14	093L024			Up	Ch	E	<u> </u>
88	Tagit Creek Tributary	Ta3	460-6006-445-Ta3-000-000-000-000-000-000-000	RD	CP	Ý	N	A2	1	1	1997/05/30		14	093L024			Dn	Ch	w	
89	Tagit Creek Tributary	Ta3	460-6006-445-Ta3-000-000-000-000-000-000-000	RD	СР	Υ	N	A1	23	_23	1997/05/30		15	093L025	6173	60083	Up	Ch	E	
90	Tagit Creek Tributary	Ta3	460-6006-445-Ta3-000-000-000-000-000-000-000	RD	CP	ΥΥ	N	A1	24	24	1997/05/30		15	093L025	6173	60083	Dn	Ch	W	
91	Tagit Creek Tributary	TB4	460-6008-445-Ta4-000-000-000-000-000-000-000	DB	CP	Y	_N	B2	13	12	1997/07/03		16	093L025	6189	88008	Up	Ch	E	<del> </del>
92	Tagit Creek Tributary	Ta4	460-6006-445-Ta4-000-000-000-000-000-000-000-000	DB	CP	_ Y	N_	82	_14	13	1997/07/03		16	093L025	6169	60086	Dn	Ch	W	<del> </del>
93	Tagit Creek Tributary Tagit Creek Tributary	Ta4	460-6006-445-Ta4-000-000-000-000-000-000-000-000 460-6006-445-Ta4-000-000-000-000-000-000-000	RD RD	CP CP	Y	N	A2 A2	8	8	1997/06/04		17	093L025	6169	60086 60086	Up Dn	Ch Ch	NE SW	<del></del>
95	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000	RD	CP	<del>-</del>	N	A2 A1	12	12	1997/05/29		18	093L025	6149	60098	Up	Ch	NW	
96	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Ý-	N	A1	13	13	1997/05/29		18	093L024	6149		Dn	Ch	SE	<del> </del>
97	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Y	N	A1	20	20	1997/05/30		n/a	093L024	8149	60098	Up	0	NW	Road culvert.
98	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Υ	N	A8	12	11	1997/07/02	2	19	0931024	6149	60098	Uр	Ch	NW	
99	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Υ	N	A8	13	12	1997/07/02		19	093L024	6149		Dn	Ch	SE	
100	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Y	N	A1	14	14	1997/05/29		20	093L024	6149	60098	Up	Ch	N	Creek at high flows.
101	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Y 	N	A1	15	15	1997/05/29		20	093L024	6149		Dn_	Ch	S	Creek at high flows.
102	Tagit Creek Tributary Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000 460-6006-445-389-000-000-000-000-000-000-000	RD RD	CP CP	- T	N-	A8 A8	11	10	1997/07/02		20	093L024	6149 6149	60098	Up Dn	Ch	N S	Creek at low flows.
104	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	- <del>'</del>	N N	A1	18	18	1997/05/30		21	093L024	6149	60098	Up	Ch	NE	Cicer at low lows,
105	Tagit Creek Tributary	Ta7	460-6006-445-389-000-000-000-000-000-000-000	RD	CP	Ÿ	N	A1	19	19	1997/05/30		21	093L024	6149	80098	Dn	Ch	SW	
106	Tagit Creek Tributary	Ta9	460-6006-445-Ta9-000-000-000-000-000-000-000	RD	CP	Y	N	A8	6	5	1997/07/01		22	093L024	6172	60314	Up	Ch	NE	
107	Tagit Creek Tributary	Ta9	460-6006-445-Ta9-000-000-000-000-000-000-000	RD	CP	Y	N	8A	7	6	1997/07/01	1	22	093L024	6172	60314	Dn	Ch	SW	
108	Tagit Creek Tributary	Ta9	460-6006-445-Ta9-000-000-000-000-000-000-000	RD	IF	ΥΥ	N_	A9	5	5	1997/07/03		23	093L024			Up	Ch	NE	
109	Tagit Creek Tributary	Ta9	460-6006-445-Ta9-000-000-000-000-000-000-000	RD	IF	Υ	N	A9	- 6	6	1997/07/03		23	093L024	6172		Dn	Ch	SW	
110	Tagit Creek Tributary Tagit Creek Tributary	Ta9	460-6006-445-Ta9-000-000-000-000-000-000-000-000- 460-6006-445-Ta9-000-000-000-000-000-000-000	RD	₹F IF	Y	N	A9	20	20	1997/07/08		24	093L025		60314	Up_	Ch Ch	NW SE	
112	Tagit Creek Tributary	Ta9.1	460-6006-445-Ta91 -000-000-000-000-000-000	RD RD	CP	- <del>Y</del> -	N	A9 A8	21	3	1997/07/08		24	093L025			On Up	Ch	NW	
113	Tagit Creek Tributary	Ta9.1	460-6006-445-Ta91 -000-000-000-000-000-000	RD	CP	Ÿ	N	A8	5	4	1997/07/01		25	093L024			Dn Dn	Ch	SE	<del></del>
114	Tagit Creek Tributary	Ta9.2	460-6006-445-Ta92 -000-000-000-000-000-000-000	RD	IF	Ÿ	N	A9	3	3	1997/07/03		26	093L025	6176		Up	Ch	NW	
115	Tagit Creek Tributary	Ta9.2	460-6006-445-Ta92 -000-000-000-000-000-000	RD	ίF	Υ	N	A9	4	4	1997/07/03		26	093L025	6176	60138	Dn	Ch	SE	
116	Tagit Creek Tributary	Ta10	460-6006-445-Ta -10 -000-000-000-000-000-000	RD	CP	Ϋ́	N	_A1	17	17	1997/05/29		27	093L024	6170		Up	Ch	W	
117	Tagit Creek Tributary	Ta10	460-8006-445-Ta -10 -000-000-000-000-000-000	RD	CP	Y	N	A1	16	16	1997/05/29		27	093L024	6170		Dn	Ch	_ E	ļ
118	O'Dine Creek	O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	RD	IF 15	. Y	N_	A8	23	22	1997/07/03		1	093L024	6123	60076	Up	Ch	NE	<del> </del>
119	O'Dine Creek O'Dine Creek	O'Dine Creek O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	RD	)F CP	<del></del>	N	A8	24	23	1997/07/03		1_1_	093L024	6123 6123	60076	Dn_	Ch	SW	<u></u>
120	O'Dine Creek	O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	RD RD	CP	<del>-</del> Y	N.	A1	8	8	1997/05/29		-2-2	093L024	6123	60076	Up Dn	Ch Ch	SE	<del> </del>
122	O'Dine Creek	O'Dine Creek	460-8006-474-000-000-000-000-000-000-000-000	RD	CP .	- <del>-</del> -	N	A1 A1	22	22	1997/05/29		2	093L024	6123		n/a	FI	n/a	CT juvenile.
123	O'Dine Creek	O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	RD	IF IF	Y	N	A8	21	20	1997/07/03		3	093L024	6123		Up	Ch	NW	o , jordinio.
124	O'Dine Creek	O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	RD	iF	Ÿ	N	A8	22	21	1997/07/03		3	093L024	6123		Dn	Ch	SE	
125	O'Dine Creek	O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	DB	CP	Y	N	B2	9	8	1997/07/03		4	093L024	6123		Up	Ch	N	
126	O'Dine Creek	O'Dine Creek	460-6006-474-000-000-000-000-000-000-000-000	DB	CP	Υ	N	B2	10	9	1997/07/03	_ 6	4	093L024	6123	60076	Dn	Ch	S	
127	O'Dine Creek Tributary	0'01	460-6006-474-O'D-1 -000-000-000-000-000-000	RD	CP	Y	N	A14	12	12	1996/10/22		5	093L024	6115		Up	Ch	NE	Conducted during 1996 Thautil R. Stream
128	O'Dine Creek Tributary	O'D1	460-6006-474-O'D-1 -000-000-000-000-000-000	RD	CP	Y	N	A14	- 11	11	1996/10/22		5	093L024	6115		Dn	Ch	SW	Inventory project.
129	Unnamed Creek	Swamp Creek	460-8006-SW -000-000-000-000-000-000-000-000	RD	IF	Y	N_	A9	_ 1	1	1997/07/03		1_1_	093L024	6104		Up_	Ch	N	
130	Unnamed Creek	Swamp Creek	460-6006-SW -000-000-000-000-000-000-000-000	RD	(F	Y	N_	A9	2	2	1997/07/03		1	093L024			Dn	Ch	S E	ļ
131	Unnamed Creek Unnamed Creek	Swamp Creek	480-8008-SW -000-000-000-000-000-000-000-000-000-0	RD RD	CP	- Y Y	N	BA 8A	14 15	13	1997/07/02		2	093L024 093L024			Up	Ch		
133	Unnamed Creek	Swamp Creek Swamp Creek	460-6006-SW -000-000-000-000-000-000-000-000	RD RD	CP	- Y	N	A5	6	6	1997/07/02		3	093L024			Un Un	Ch	W N	<del> </del>
134	Unnamed Creek	Swamp Creek	460-8006-SW -000-000-000-000-000-000-000-000		CP	Ÿ	N	A1	7	7	1997/05/29		3	093L024			Dn	Ch	s	<del> </del>
						<u> </u>	<u>'''</u>		<u> </u>	<u> </u>	.001700128	<del>' '</del>		3000024	, 0,04	, 500,4		·		·

Note: All activity was conducted in UTM zone 9.

### PHOTO SURVEY FORM 1 - Equipment Details

Survey start date (yyyy/mm/dd):1997/05/28Survey end date:1997/07/11

Agency: C087

Crew:

DB/RD/CP/JB/IF

#### CAMERA A:

Make and mode	: Pentax Zoom 90-WR Multi-AF		Lens: 38-90 mm zoom
Format:	35 mm film	_	(focal length, mm)
Resolution (for a	ligital and video cameras):	n/a	
Output file type	(for digital and video cameras):	n/a	

#### **CAMERA B:**

Make and mode	: Pentax Zoom 90-WR Multi-AF		Lens: 38-90 mm zoom
Format:	35 mm film		(focal length, mm)
Resolution (for	digital and video cameras):	n/a	
Output file type	(for digital and video cameras):	n/a	

#### **ROLL DETAILS:**

Roll #'s	Camera	Output Medium	Output Medium For film cameras:						
	#		Film Type	ISO					
A1 - A3, A10	Α	negative	color	200					
A7 - A9	Α	negative	color	400					
B1 - B3	В	negative	color	400					



Photo 1. Unnamed C., R2, Site 1 - Upstream



Photo 3. False Tagit C., R2, Site 1 - Upstream



Photo 2. Unnamed C., R2, Site 1 - Downstream



Photo 4. False Tagit C., R2, Site 1 - Downstream



Photo 5. False Tagit C., R3, Site 2 - Upstream



Photo 7. False Tagit C., R4, Site 3 - Upstream



Photo 6. False Tagit C., R3, Site 2 - Downstream



Photo 8. False Tagit C., R4, Site 3 - Downstream



Photo 9. False Tagit C., R4, Site 3 - Road culvert.



Photo 11. False Tagit C., R4, Site 4 - Downstream



Photo 10. False Tagit C., R4, Site 4 - Upstream



Photo 12. False Tagit C., R5, Aerial view of lake - Downstream



Photo 13. False Tagit C., R6, Site 5 - Upstream



Photo 15. False Tagit C., R7, Site 6 - Upstream



Photo 14. False Tagit C., R6, Site 5 - Downstream



Photo 16. False Tagit C., R7, Site 6 - Downstream



Photo 17. False Tagit C., R8, Site 7 - Upstream



Photo 19. False Tagit C.Tributary FTa1, R2, Site 8 - Upstream



Photo 18. False Tagit C., R8, Site 7 - Downstream



Photo 20. False Tagit C.Tributary FTa1, R2, Site 8 - Downstream



Photo 21. False Tagit C. Tributary FTa4, R1, Site 9 - Upstream



Photo 23. False Tagit C.Tributary FTa4, R2, Site 10 - Upstream



Photo 22. False Tagit C. Tributary FTa4, R1, Site 9 - Downstream

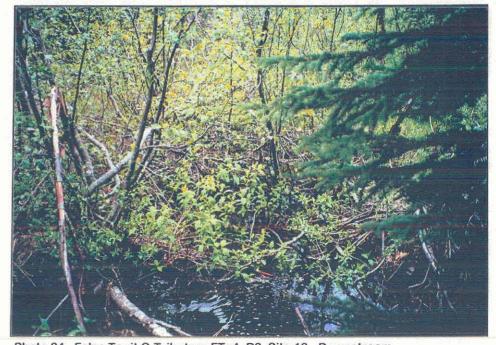


Photo 24. False Tagit C.Tributary FTa4, R2, Site 10 - Downstream



Photo 25. False Tagit C. Tributary FTa5, R1, Site 11 - Upstream



Photo 27. False Tagit C. Tributary FTa5, R2, Site 12 - Upstream



Photo 26. False Tagit C. Tributary FTa5, R1, Site 11 - Downstream



Photo 28. False Tagit C.Tributary FTa5, R2, Site 12 - Downstream



Photo 29. False Tagit C. Tributary FTa5, R3, Site 13 - Upstream



Photo 31. False Tagit C.Tributary FTa5, R5, Site 14 - Upstream



Photo 30. False Tagit C. Tributary FTa5, R3, Site 13 - Downstream



Photo 32. False Tagit C. Tributary FTa5, R5, Site 14 - Downstream



Photo 33. False Tagit C. Tributary FTa5.1, R1, Site 15 - Upstream

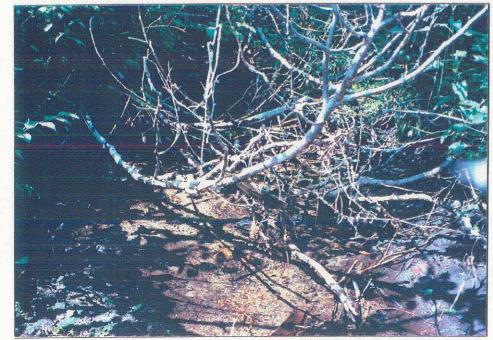


Photo 35. False Tagit C.Tributary FTa5.1, R2, Site 16 - Upstream



Photo 34. False Tagit C. Tributary FTa5.1, R1, Site 15 - Downstream



Photo 36. False Tagit C.Tributary FTa5.1, R2, Site 16 - Downstream



Photo 37. False Tagit C. Tributary FTa5.1, R3 - Upstream



Photo 39. False Tagit C.Tributary FTa5.2, R1, Site 17 - Upstream



Photo 38. False Tagit C. Tributary FTa5.1, R3 - Downstream



Photo 40. False Tagit C.Tributary FTa5.2, R1, Site 17 - Downstream



Photo 41. Lake on False Tagit C. Tributary FTa5.2 - Upstream





Photo 42. Lake on False Tagit C. Tributary FTa5.2 - Downstream



Photo 44 Folgo Torit C Tributery FToF 3 D4 Site 49 Downstree



Photo 45. False Tagit C. Tributary FTa5.4, R1, Site 19 - Upstream





Photo 46. False Tagit C. Tributary FTa5.4, R1, Site 19 - Downstream





Photo 49. False Tagit C. Tributary FTa5.4, R1, Site 21 - Upstream





Photo 50. False Tagit C. Tributary FTa5.4, R1, Site 21 - Downstream





Photo 53. False Tagit C. Tributary FTa6.1, R1, Site 23 - Upstream





Photo 54. False Tagit C. Tributary FTa6.1, R1, Site 23 - Downstream

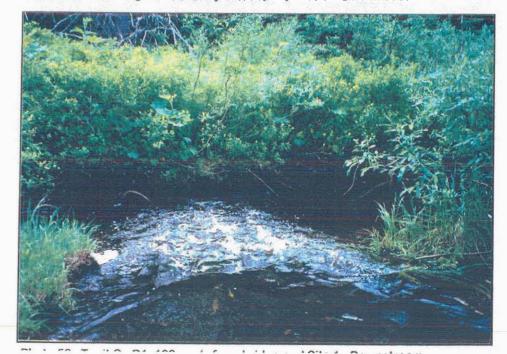




Photo 57: Tagit 6:, R1, Site 1, 61, 60 and SST samples.





Photo 58. Tagit C., R4, Site 2 - Upstream

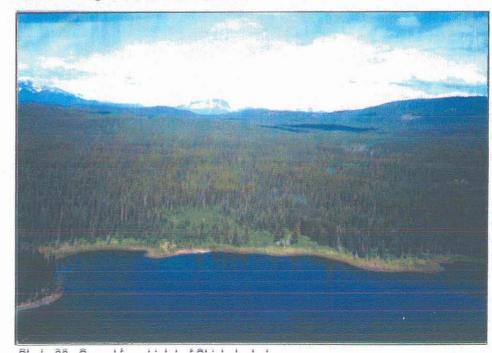




Photo 61. Chisholm Lake outlet.





Photo 62. Tagit C., R4, Site 3 - Upstream





Photo 65. Tagit C., R4, Site 4 - Downstream

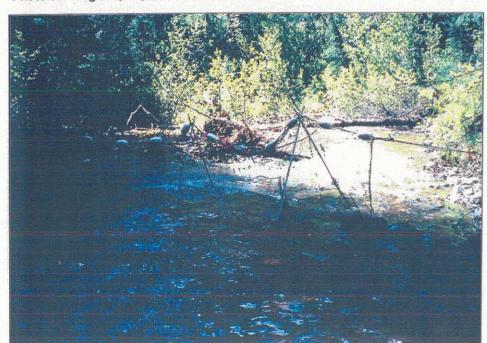




Photo 66. Tagit C., R5, Site 5 - Upstream





Photo 69. Tagit C., R6, Site 6 - Upstream



Dhata 74 Tanit A DE Cita & DV and OT immaniles



Photo 70. Tagit C., R6, Site 6, Debris jam 10 m d/s from lower net.



Dhata 70 Tanit O DO OHA 7 Handan



Photo 73. Tagit C., R6, Site 7 - Downstream

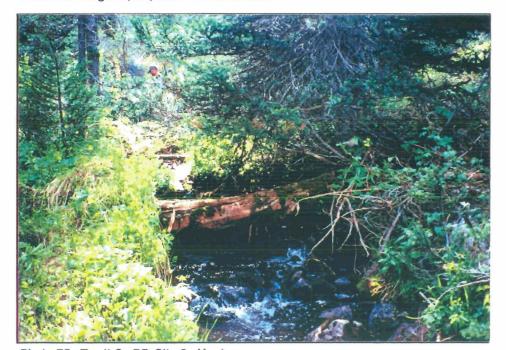




Photo 74. Tagit C., R6, Site 7, Road culvert.



DI-1-70 T-110 D7 011-0 D-11-1-



Photo 77. Tagit C. Tributary Ta1, R1, Site 9 - Upstream



Photo 78. Tagit C. Tributary Ta1, R1, Site 9 - Downstream



Direct On Tamit O Tulbulani, Tad O D4 Olto 40 Decimalina



Photo 81. Tagit C. Tributary Ta1, R2, Site 11 - Upstream





Photo 82. Tagit C. Tributary Ta1, R2, Site 11 - Downstream



Distance Table Talle dam Tal Do Cita 40 Dammatanam



Photo 85. Tagit C. Tributary Ta1, R4, Site 13 - Upstream





Photo 86. Tagit C. Tributary Ta1, R4, Site 13 - Downstream





Photo 89. Tagit C. Tributary Ta3, R2, Site 15 - Upstream





Photo 90. Tagit C. Tributary Ta3, R2, Site 15 - Downstream



Shata OO Tanis O Talbutani Ta4 D4 Cita 40 Danmataana



Photo 93. Tagit C. Tributary Ta4, R2, Site 17 - Upstream





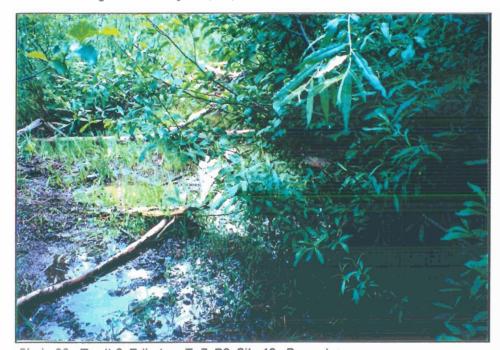
Photo 94. Tagit C. Tributary Ta4, R2, Site 17 - Downstream



Direction Table Tulbulant Table 04 Office 40 December



Photo 97. Tagit C. Tributary Ta7, R1, Road culvert.



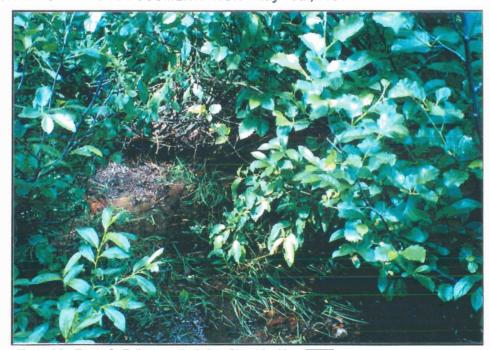


Photo 98. Tagit C. Tributary Ta7, R2, Site 19 - Upstream





Photo 101. Tagit C. Tributary Ta7, R3, Site 20, At high flows - Downstream

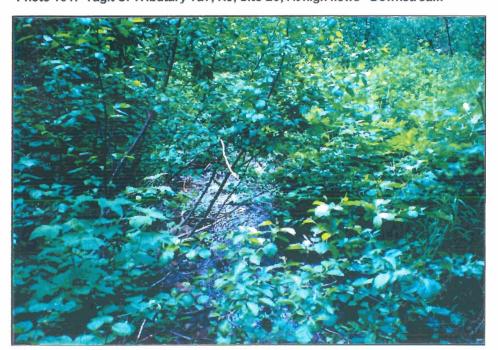




Photo 102. Tagit C. Tributary Ta7, R3, Site 20, At low flows - Upstream



Distance Tour C Tributani Tay D4 Cita 04 Hardwarm



Photo 105. Tagit C. Tributary Ta7, R4, Site 21 - Downstream

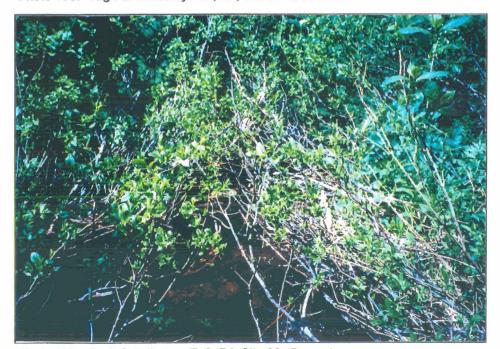




Photo 106. Tagit C. Tributary Ta9, R1, Site 22 - Upstream



Dist. 400 T-010 T-110 T-0 D0 CH-00 H-1-4---



Photo 109. Tagit C. Tributary Ta9, R2, Site 23 - Downstream





Photo 110. Tagit C. Tributary Ta9, R3, Site 24 - Upstream



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Photo 113. Tagit C. Tributary Ta9.1, R1, Site 25 - Downstream





Photo 114. Tagit C. Tributary Ta9.2, R1, Site 26 - Upstream





Photo 117. Tagit C. Tributary Ta10, R1, Site 27 - Downstream

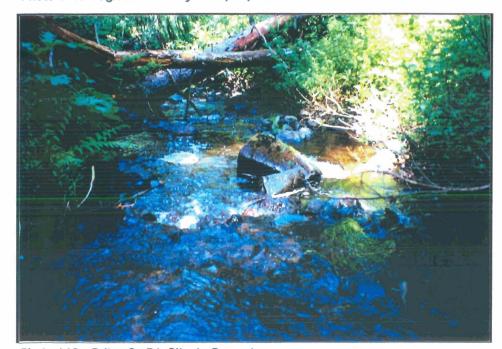




Photo 118. Odine C., R1, Site 1 - Upstream





Photo 121. Odine C., R2, Site 2 - Downstream

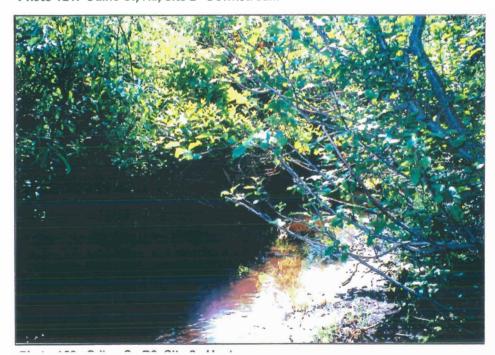




Photo 122. Odine C., R2, Site 2, CT juvenile.





Photo 125. Odine C., R6, Site 4 - Upstream





Photo 126. Odine C., R6, Site 4 - Downstream



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Photo 129. Swamp C., R1, Site 1 - Upstream





Photo 130. Swamp C., R1, Site 1 - Downstream

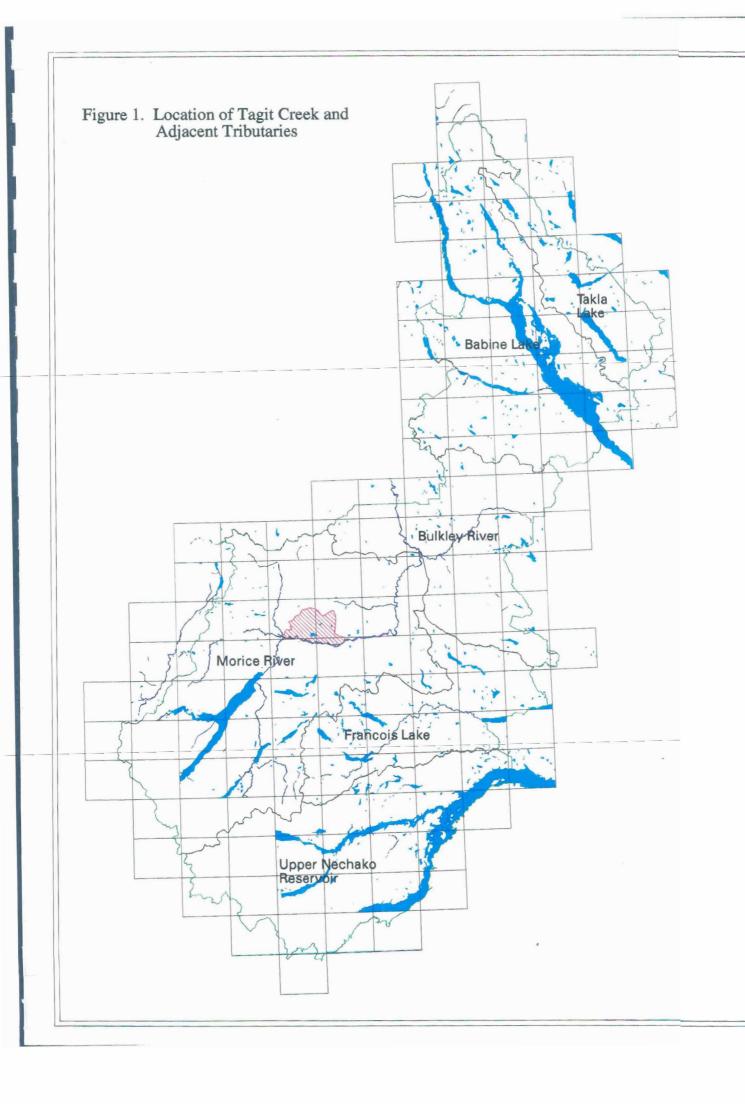


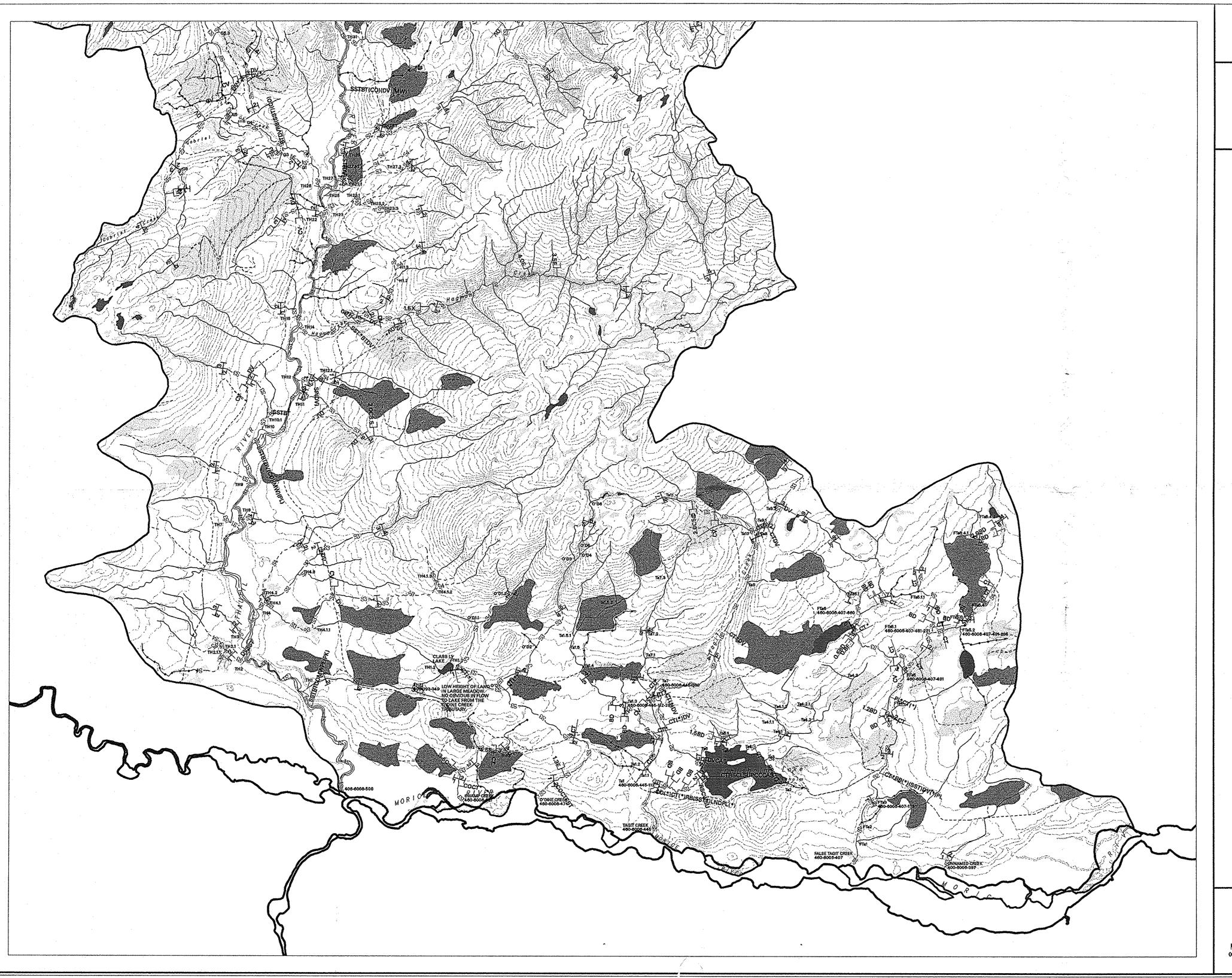


Photo 133. Swamp C., R4, Site 3 - Upstream



Photo 134. Swamp C., R4, Site 3 - Downstream







## Morice T.S.A. 20 Aquatic Inventory

Thautil Operating Area
Tagit Creek and Adjacent Tributaries

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Fish stream \$1 > 20m(channel width) \$2 5-20m \$3 1.5-5m \$4 < 1.5m Non-fish stream -\$4---\$4 Suspected riparian class No defined channel 

## Fish Species Codes

SP - Fish present, species not known

NF - No fish captured

\* - Spawning

(DV) - Suspected Dolly Varden present

BT - Bull trout

CAS - Prickly sculpin CO - Coho salmon

CT - Cutthroat trout

DV - Dolly Varden

LND - Longnose dace LSU - Longnose sucker

MW - Mountain whitefish

PCC - Peamouth chub

PL - Pacific lamprey

SST - Summer steelhead

WSU - White sucker

## Obstructions

Log jam (1m high debris)

—\_\_BD

Cascade/Chute
(3m high, 10m long)

Culvert on fish stream

### Other Features

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Lakes

Aquatic Inventory Data Collected by: David Bustard & Associates

Maps produced by: Western Geographic Information Systems Inc.

# NAD 83 TRIM 1994

SCALE 1:50000 1 cm = 500 metres

500 1000 1500 2000 2500 3000 3500 Date Drawn: February 02, 1998

