Reconnaissance (1:20,000) Fish and Fish Habitat Stream Inventory of Deep Canoe Creek

Watershed Code: 400 - 574200

Kispiox Forest District Fish and Fish Habitat Inventory Project

Final Report

Prepared for:

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PROJECT REFERENCE INFORMATION

Project Code:	06-KISP-3068-0002-1998
Proponent:	Ministry of Environment, Lands and Parks
Inventory Program:	Forest Renewal BC
Contract Number:	Section of CSK 3068, Skeena Region
FRBC Project Number:	SB96120

WATERSHED INFORMATION

Stream Names:	Deep Canoe Creek
Watershed Codes:	400 574200
TRIM map sheets	93M.071, 103P.080, 103P.090
Total Number of Reaches:	86
Number of Reaches/Sites	8
Sampled:	
Fish Species Present:	PK, RB
Biogeoclimatic Zone(s):	ICH
Survey Dates:	September 5, 11 & 14, 1997
MELP Region:	Skeena Region (6)
Management Units:	6-30
Forest District:	Kispiox Forest District
Forest Licensee:	Skeena Cellulose Inc.

CONTRACTOR INFORMATION

001/114101011111111111111									
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	Dallyn and Chris Collins								
Data Entry:	Lloyd Dallyn and Sam Buchanan, D. Tech.,								
Inventory Mapping:	Shannon Shields, B.A., and Michele Patterson, D. Tech.,								

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 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.

ACKNOWLEDGMENTS

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We would like to thank Todd Mahon, Skeena Cellulose Inc. representative who was the contract administrator and provided valuable input throughout the contract, and Paul Giroux, Fisheries Inventory Specialist, Ministry of Environment, Lands and Parks, Skeena Region, who acted as contract monitor and provided technical expertise as well as valuable input throughout the project.

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1. INTRODUCTION

1.1 Project Objectives

Triton Environmental Consultants Ltd. was contracted by the British Columbia Ministry of Environment, Lands and Parks, Fisheries Branch to conduct stream inventories in select watersheds within the Kispiox Forest District. Information was collected on the biological and physical stream characteristics, fish species assemblage, and fish distribution. The purpose of the Reconnaissance (1:20 000) Fish and Fish Habitat Inventory is to describe watershed-wide fish distributions and habitat characteristics for the project area.

1.2 Study Area

The project area is within the Kispiox Forest District in northwestern central British Columbia (Figure 1). The project area covered 11 discrete working areas (Table 1). This report covers Project Working Area #9: Deep Canoe Creek(Table 1). Deep Canoe Creek flows east into the Skeena at approximately 120 km northwest of Smithers (Figure 1). Access to this area was by helicopter from Hazelton, B.C..

Table 1. Watershed working areas within the Kispiox Forest District

Working	Working Area	rking Area Stream Network								
Area #	~	Unnamed Creeks, Sperry Creek, Rosenthal	Code							
1	Shedin Creek	480 027800								
		Creek, Damsumlo Creek ⇒ Shedin Creek ⇒								
		Babine River \Rightarrow Skeena River \Rightarrow Pacific Ocean								
2	Goathead	Unnamed Creeks \Rightarrow Goathead Creek \Rightarrow Shedin	480 027800							
	Creek	Creek \Rightarrow Babine River \Rightarrow Skeena River \Rightarrow	11600							
		Pacific Ocean								
3	West Kitsuns	Unnamed Creeks \Rightarrow Unnamed Creek \Rightarrow Kitsuns	450 318200							
	Creek	Creek ⇒ Kitseguecla River ⇒ Skeena River ⇒	18200							
	Tributary	Pacific Ocean	45700							
4	Kitsuns Creek	Unnamed Creek ⇒ Kitsuns Creek ⇒ Kitseguecla	450 318200							
		River ⇒ Skeena River ⇒ Pacific Ocean								
5	Larkworthy	Unnamed Creeks ⇒ Larkworthy Creek ⇒	400 593800							
	Creek	Skeena River ⇒ Pacific Ocean								
6	Cranberry	Unnamed Creeks ⇒ Cranberry River ⇒ Nass	530-000000							
	River	River ⇒ Pacific Ocean								
	Tributaries									
7	Carrigan Creek	Unnamed Creeks ⇒ Carrigan Creek ⇒ Skeena	400 519600							
	Tributaries	River ⇒ Pacific Ocean								
8	Skeena River	Unnamed Creeks ⇒ Skeena River ⇒ Pacific	400-							
	Tributaries (S.	Ocean								
	of Larkworthy									
	Cr.)									
9	,	Unnamed Creeks ⇒ Deep Canoe Creek ⇒	400 574200							
	Creek	Skeena River ⇒ Pacific Ocean								
10	Skeena River	Unnamed Creeks ⇒ Skeena River ⇒ Pacific	400							
	Tributaries (S.	Ocean								
	of Sicintine R.)									
11	Moonlit Creek	Unnamed Creeks ⇒ Moonlit Creek ⇒ Kitwanga	400 694900							
	1.100mm Crock	River ⇒ Skeena River ⇒ Pacific Ocean	48600							
		River — Dicenta River — I actific Occasi	10000							

Figure 1. Project overview map

1.3 Review of Existing Information

The Fisheries Information Summary System (FISS) Map 93M/13 has no fisheries information for Deep Canoe Creek.

2. METHODS

Standard methodology as outlined in Reconnaissance (1:20 000) Fish and Fish Habitat Inventory: Standards and Procedures (RIC 1997) for performing stream inventories were followed. The reconnaissance level fish and fish habitat inventory is a sample-based survey covering whole watersheds as defined from 1:20,000 scale maps and air photos. The project includes 6 phases as listed below:

- Phase 1: Data Review: A review of all available background information was completed. All known fisheries information is summarized in this report; new data were transcribed onto the 1:20,000 TRIM maps, and 1:50,000 NTS maps to update Fisheries Information Summary System (FISS) database (DFO).
- Phase 2: Classification and Sampling Design: A comprehensive map and air photo review was completed for all waterbodies identified on 1:20,000 TRIM maps. Reach characteristics (gradient, order, pattern, confinement) were recorded for all streams within the project area and recorded on the Reach Table (RIC,1997). The Reach Table was used to generate a sample size (a subset of reaches to be sampled) within the working area based on RIC guidelines. The Reach Totals and Sample Size Sheet (RIC, 1997) was generated which provides a summary of the number of reaches of each type (based on gradient class, size and pattern/confinement) to be sampled. Detailed Reach Forms were completed for selected reaches to be sampled.
- Phase 3: Project Plan: A field sampling plan was developed to sample sites in a variety of stream gradients and stream orders. The purpose of the plan was to describe watershed wide fish distribution, not necessarily to sample all potential fish bearing reaches. Data from Phases 1 and 2, and the Project Plan were presented to and approved by Paul Giroux, MELP Fisheries Inventory Specialist.

Phase 4: Field Inventory: Field sampling of selected sites was completed on September 5, 11 & 14, 1997.

Phase 5: Data Entry and Analysis: Field sampling data (including site cards, fish cards, and photodocumentation) were entered into the FDIS database. 1:50,000 scale NTS maps of the study area were updated with new information as per the FISS Data Compilation and Mapping Procedures (DFO, 1997).

Phase 6: Reporting and Final Mapping: Field and office data were mapped using Arc View and Arc Info software, photographs were scanned and printed, and draft and final reports were completed.

2.1 Changes To Methodology

2.1.1 Phase 2

The required number of sample sites as determined by the Reach Sampling Summary were chosen with bias (rather than randomly) to incorporate biological concerns (fish distribution) and access issues. Additional reaches were chosen upstream and downstream of known barriers to determine limits of fish distribution.

2.1.2 Phase 4

All sample site locations (except for no visible channel sites) were marked in the field with flagging tape and with the ILP and site numeric identifier (NID) on a steel tag fixed to a blaze on a tree.

2.1.3 Phase 5

Photographic data were edited when entered into FDIS from the original field data forms to reduce duplication of photographs and to eliminate poor quality photographs. Field data forms remain unaltered as a permanent record for the sample site. All photos were taken with 35mm slide film, and scanned using a Nikon LS-1000 film scanner. Slides were scanned at 300 dpi, and saved as *.JPG files (.8 compression). Stored photo files are about 300kb, and uncompress to about 5mg each. Digital photos were printed as thumbnails using Corel Mosaic. All site photos were copied to CD, 2 copies have been sent to MELP Smithers, and Triton will retain 1 copy on file.

2.1.4 Phase 6

The inventory and interpretative maps were combined to produce one map. The working area is indicated by blue coloured stream lines. Fish presence is represented by light red highlighting over stream lines (sampled: solid or inferred: dashed) and no fish presence is represented by light blue highlighting over stream lines (sampled: solid or inferred: dashed). Stream classifications are provided for sampled reaches only. Stream summary symbols provide the following information for each sampled site:

- sample site ID,
- fish species presence, not sampled or no fish caught,
- stream or wetland.
- reach confinement,
- reach gradient,
- reach pattern,
- site gradient,
- site channel width,
- site morphology,
- site dominant substrate type,
- site disturbance(s) if applicable, and
- stream classification.

2.2 Field Assessments

The Deep Canoe Creek watershed was surveyed on September 5th, 11th and 14th, 1997. Field assessments followed procedures outlined in Reconnaissance (1:20 000) Fish and Fish Habitat Inventory: Standards and Procedures (RIC, 1997). Generally, the process we followed in the field was to:

- assess the watershed during a helicopter overflight to confirm reach boundaries, identify access points, and photograph reaches at a watershed scale.
- assess each reach on the ground by completing a standard site card, sampling for fish presence, completing a fish collection card and photographing representative habitats.
- identify dey features such as barriers to fish migration, spawning locations and bridges; photograph and recorded features on site cards with a unique numeric identifier (NID).

Sample site lengths were equal to the greater of 100m or 10 bankfull widths. Stream widths were determined by measuring the channel width with a tape measure, or by visual estimate. At least 6 channel width measurements were made within each reach, each one at least one channel width distance apart. These measurements were averaged

to determine the average channel width. Stream gradients were measured using a clinometer. Stream morphology was determined using the *Channel Assessment Procedures Guidebook* (MOF 1996). Depths were measured using a folding meter stick. Water quality (pH and conductivity) was assessed using a Hannah pHTestr2TM and TDSTestr3TM. Turbidity was assessed by ground estimate. Habitat quality was assessed for rearing, spawning, overwintering and cover, each of these habitat types was rated as either Good, Fair, Moderate or Poor. Wildlife observations were noted.

2.3 Fish Sampling

Fish presence was determined by electrofishing at least 100m^2 or the equivalent of 10 bankfull widths of habitat in each reach using a Smith Root Model 12B electroshocker. Captured fish were measured (nose-fork length) and keyed out to species using the *Field Key to the Freshwater Fishes of British Columbia* (McPhail and Carveth, 1994). Fish collection forms were completed for each site where fish sampling occurred.

3. INVENTORY DATA

3.1 Survey Information

A total of 86 reaches were identified within the Deep Canoe working area. A total of 8 sample sites were visited for inventory purposes.

Project inventory maps are presented in Appendix A - Inventory Map. Individual site card information and fish collection data is presented in Appendix B - Stream Site Data from FDIS and Fish Collection Data. Individual site photographs and contact sheets are presented in Appendix C - Photograph Captions and Contact Sheets.

3.1.1 Problems

Watershed codes were not available at the time of mapping and have therefore not been included. All streams were identified with a numeric interim locational point (ILP), ILP's are used throughout this report to identify specific streams.

3.2 Fish Distribution

Pink salmon (*Oncorhynchus gorbuscha*) and rainbow trout (*O. mykiss*) were identified in Deep Canoe Creek. Pink salmon likely utilize the first 0.9 km of Deep Canoe Creek up to the 2.5m waterfall. Rainbow trout were captured in the first major left bank tributary (ILP 00003, map sheet 103P.080) up to the first barrier, a 6m waterfall, 0.45 km upstream from the mouth. The upstream limit of rainbow trout in the mainstem of Deep

Canoe Creek was not determined due to the project area not including the entire watershed. Deep Canoe Creek is entrenched for the reaches within the project area. No fish were captured in any of the mountain plateau reaches sampled.

3.3 Fish Habitat

Fish habitat exists primarily in the mainstem of Deep Canoe Creek. The first major left bank tributary (ILP 00003) is steep and provides fish habitat up to the first waterfall barrier.

A small third order stream immediately south of Deep Canoe Creek (ILP 00050 map sheet 93M.071), was mapped incorrectly by TRIM as a right bank tributary to Deep Canoe Creek. This stream flows into the Skeena River downstream (south) of Deep Canoe Creek. This stream does not provide fish habitat due to the 6m waterfall barrier near the mouth.

Critical spawning habitat was noted in the first 175m of Deep Canoe Creek. Pink salmon were observed holding and spawning at this location. The entire mainstem of Deep Canoe Creek that was sampled, provides suitable habitat for all life phases of salmonids.

3.4 Fish Condition

All captured fish appeared to be healthy. Adult pink salmon were visually estimated to be 400mm in length; rainbow trout ranged in size from 89mm - 195mm. Pink salmon were observed holding and spawning. Captured rainbow trout were not exhibiting spawning colouration. No attempt was made to examine captured fish internally for the determination of maturity. The rainbow trout in Deep Canoe Creek are likely steelhead.

3.5 Rehabilitation/Enhancement Opportunities

Forest harvesting has occurred in this watershed, however no rehabilitation or enhancement opportunities were noted. No impacts to the watershed were observed during the field sampling.

3.6 Follow-up Sampling

No follow-up sampling is recommended for Deep Canoe Creek. The sampling rate and locations of sites was sufficient to determine fish distribution at the 1:20,000 level for the entire working area. Where forest harvesting is planned adjacent to inferred fish bearing or non-fish bearing stream reaches with average reach gradient less than 20%, 1:5,000

scale riparian area classifications should be performed to confirm fish presence or absence.

3.7 Other Concerns/Interest Points

No concerns or interest points for this working area.

3.8 Non-Fish Bearing Reaches

Non-fish bearing reach reports are provided for relevant reaches including intermittent streams (Table 2). The most downstream reach of a stream which was determined to be non-fish bearing is identified in the report. All subsequent reaches upstream are non-fish bearing by default and are not identified separately. No reports are provided for the TRIM anomaly of a no visible channel - a channel that appears on a TRIM map but was not found in the field.

9nofish.xls Deep Canoe

Table 2. Non-Fish Bearing Status Report for the Deep Canoe Creek Watershed

Initial Sampling Date	Follow-up Sampling Date		Stream Name	Reach Number	Site Number	Map Sheet Number	Capture Method (elecrofishing settings)	Area Covered (m²)	Sampling Effort	Cond. (µS)	Water Temp. (deg. Celsius)	Flow Stage (VO)	Turbidity (V0)	Known Fish Presence (u/s- d/s)	Obstructions to Fish Migration	Seasonal Habitat Availability	Seasonal Fish Use
05/09/1997	-	61	Unnamed	2	3046	93M.071	no habitat to sample fish	ı	-	30	12	Low	Clear	RB downstream in Deep Canoe Creek	43% gradient for first 140m	None	None
14/09/1997	-	50	Unnamed	1	1082	93M.071	EF, 400/70/6	150	160 seconds	110	6	Low	Clear	AF in Skeena River. Stream does not flow into Deep Canoe Creek.	6m falls 60m upstream from mouth. Creek flows into the Skeena River downstream of Deep Canoe Creek	All	None
11/09/1997	-	23	Unnamed	1	3051	103P.080	EF, 600/60/8	100	179 seconds	40	8.5	Low	Clear	RB downstream in deep Canoe Creek	25% gradient from mouth	No overwintering habitat	None
11/09/1997	-	3	Unnamed	2	3049	103P.090	EF, 400/60/8	360	209 seconds	70	7.5	Low	Clear	RB downstream of falls in this stream	6m falls 450m upstream from mouth	All	None

4. REFERENCES

- Department of Fisheries and Oceans. 1997. Fisheries Information Summary System Data Compilation and Mapping Procedures.
- McPhail, J.D. and R. Carveth. 1994. Field Key to the Freshwater Fishes of British Columbia.
- Ministry of Environment and Department of Fisheries and Oceans. 1995. Fisheries Information Summary System. Map sheet 93M/13.
- Ministry of Forests. 1988. Biogeoclimatic and Ecoregion Units of the Prince Rupert Forest Region.
- Ministry of Forests. 1995. Fish Stream Identification Guidebook.
- Ministry of Forests. 1996. Channel Assessment Procedures Guidebook.
- Province of British Columbia, Resources Inventory Committee. 1997. Reconnaissance (1:20,000) Fish and Fish Habitat Inventory: Standards and Procedures.

Appendix A - Inventory Map

Appendix B - Stream Site Data from FDIS and Fish Collection Data

Appendix C - Photograph Captions and Contact Sheets

Photo Date	Watershed/ Working area	Stream Name or ILP	ILP Mapsheet	Card Site #	Site or Feature NID	NID Mapsheet #	Roll #	Frame #	CD#	Folder	Image	Focal Length (St, Wd, Te)	Dir (Up, Dn, Xs, Fish,	Comments
					1,22							16)	Ae)	(Description and/or scale item)
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1058	01058	93M.081	12	21	KISPIOX	12	14	St	Dn	View downstream to confluence with Skeena, Gedrock on left.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1058	01058	93M.081	12	22	KISPIOX	12	15	St	Up	Deep pool and steps over boulders.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1058	01058	93M.081	12	23	KISPIOX	12	16	St	Dn	Deep pool, bedrock on right, start of reach 2.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1058	02111	93M.081	12	24	KISPIOX	12	17	St	Dn	Spawning area, PK salmon noted, near mouth of creek.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1058	02111	93M.081	12	25	KISPIOX	12	18	St	Dn	Spawning area, PK salmon noted, near mouth of creek.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1058	02111	93M.081	12	26	KISPIOX	12	19	St	Up	Spawning area, PK salmon noted, near mouth of creek, person on right bank.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1066	1066	93M.081	12	27	KISPIOX	12	20	St	Ae	Aerial view of Reach 2, entrenched canyon, falls.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1066	1066	93M.081	12	28	KISPIOX	12	21	St	Ae	Aerial view of Reach 2, entrenched canyon, falls.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1066	1066	93M.081	12	29	KISPIOX	12	22	St	Ae	Reach 2, aerial view.
97-Sep-5	Deep Canoe	Deep Canoe	93M.071	1066	1066	93M.081	12	30	KISPIOX	12	23	St	Ae	Reach 2, aerial view.
97-Sep-5	Deep Canoe	00056	93M.071	1061	01061	93M.071	5	3	KISPIOX	5	1	St	Dn	Pool at culvert outflow
97-Sep-5	Deep Canoe	00056	93M.071	1061	01061	93M.071	5	4	KISPIOX	5	2	St	Up	Culvert at road crossing
97-Sep-5	Deep Canoe	00056	93M.071	1061	01061	93M.071	5	5	KISPIOX	5	3	St	Up	Pool and small debris step.
97-Sep-5	Deep Canoe	00056	93M.071	1061	01061	93M.071	5	7	KISPIOX	5	4	St	Dn	Person electroshocking in devils club
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1066	02050	93M.071	5	17	KISPIOX	5	13	St	Ae	Aerial view of Reach 2, entrenched canyon, falls.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1066	01066	93M.071	5	18	KISPIOX	5	14	St	Ae	Aerial view of Reach 2, entrenched canyon.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1066	02050	93M.071	5	19	KISPIOX	5	15	St	Ae	Aerial view of Reach 2, entrenched canyon, falls.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	21	KISPIOX	5	16	St	Ae	Aerial view Reach 3.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1066	01066	93M.071	5	22	KISPIOX	5	17	St	Dn	Upstream limit of Reach 2, bedrock banks.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1066	01066	93M.071	5	23	KISPIOX	5	18	St	Up	Upstream limit of Reach 2, large boulders.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	24	KISPIOX	5	19	St	Fish	Fish in bucket.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	28	KISPIOX	5	20	St	Fish	RB 175mm.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	30	KISPIOX	5	21	St	Up	Glide, rock outcrop on left bank.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	31	KISPIOX	5	22	St	Dn	Cobble/boulder riffle.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	32	KISPIOX	5	23	St	Up	Riffle pool sequence.
97-Sep-11	Deep Canoe	Deep Canoe	93M.071	1065	01065	103P.080	5	33	KISPIOX	5	24	St	Xs	Bedrock steps.

Photo Date	Watershed/ Working area	Stream Name or ILP	ILP Mapsheet	Card Site #	Site or Feature NID	NID Mapsheet #	Roll #	Frame #	CD#	Folder	Image	Focal Length (St, Wd, Te)	Dir (Up, Dn, Xs, Fish, Ae)	Comments (Description and/or scale item)
97-Sep-14	Deep Canoe	00050	93M.071	1082	01082	93M.071	7	22	KISPIOX	7	20	St	Ae	Gully into Deep Canoe (R2) where stream should be, mapped incorrectly, flows directly to Skeena.
97-Sep-14	Deep Canoe	00050	93M.071	1082	01082	93M.071	7	23	KISPIOX	7	21	St	Dn	Alder over small stream, cobbles.
97-Sep-14	Deep Canoe	00050	93M.071	1082	01082	93M.071	7	24	KISPIOX	7	22	St	Up	Alder over small stream, cobbles.
97-Sep-4	Deep Canoe	00008	103P.080	3049	03049	103P.090	14	28	KISPIOX	14	22	St	U	Book on rock, left side of photo.
97-Sep-4	Deep Canoe	00008	103P.080	3049	03049	103P.090	14	29	KISPIOX	14	23	St	D	2 people in photo, boulders.
97-Sep-4	Deep Canoe	00008	103P.080	3049	04016	103P.090	14	30	KISPIOX	14	24	St	U	Falls 15m, person on right for scale.
97-Sep-4	Deep Canoe	00008	103P.080	3050	03050	103P.080	14	32	KISPIOX	14	25	St	U	Person electrofishing in channel.
97-Sep-4	Deep Canoe	00008	103P.080	3050	03050	103P.080	14	33	KISPIOX	14	26	St	Fish	RB on fry board.
97-Sep-4	Deep Canoe	00008	103P.080	3050	04017	103P.080	14	34	KISPIOX	14	27	St	U	Falls 6m upstream limit to fish.
97-Sep-4	Deep Canoe	00008	103P.080	3050	03050	103P.080	14	36	KISPIOX	14	28	St	D	Boulders on banks, dead standing tree in background.
97-Sep-4	Deep Canoe	00008	103P.080	3050	03050	103P.080	14	37	KISPIOX	14	29	St	X	Eroding bank with person for scale.
97-Sep-4	Deep Canoe	00008	103P.080	3050	04018	103P.080	14	38	KISPIOX	14	30	St	U	Log jam 2m RB captured upstream.
97-Sep-11	Deep Canoe	00023	103P.080	3051	03051	103P.080	16	1	KISPIOX	16	1	St	D	Open notebook and meterstick in channel.
97-Sep-11	Deep Canoe	00023	103P.080	3051	03051	103P.080	16	2	KISPIOX	16	2	St	U	Open notebook and meterstick in channel.
97-Sep-11	Deep Canoe	Deep Cano	93M.071	3052	03052	103P.080	16	3	KISPIOX	16	3	St	U	Person standing in channel.
97-Sep-11	Deep Canoe	Deep Cano	93M.071	3052	03052	103P.080	16	4	KISPIOX	16	4	St	D	Run/riffle section.
97-Sep-11	Deep Canoe	Deep Cano	93M.071	3052	03052	103P.080	16	5	KISPIOX	16	5	St	Fish	RB in person's hands.
97-Sep-11	Deep Canoe	Deep Cano	e 93M.071	3052	04019	103P.080	16	6	KISPIOX	16	6	St	U	Chute 1.5 m, person for scale. Not a barrier. Potential ST holding d/s.
97-Sep-11	Deep Canoe	Deep Cano	93M.071	3052	04020	103P.080	16	7	KISPIOX	16	7	St	Ae	Chutes 5m Aerial estimate. Barrier.
97-Sep-14	Deep Canoe	Deep Cano	93M.071	1058	01058	93M.071	6	29	KISPIOX	6	27	St	Ae	Aerial view of mouth of Deep Canoe Creek at the Skeena