1:5,000 Fish and Fish Habitat Inventory

In the Kispiox Watershed

TRITON
Environmental Consultants Ltd.

February, 1999

1:5,000 Fish and Fish Habitat Inventory in the KISPIOX WATERSHED

Project: 06-KISP-430000001-1998
Final Report

Prepared for:
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PROJECT REFERENCE INFORMATION

FRBC Project Number	000102
FDIS Project Number	06-KISP-430000001-1998
MELP Project Number	SCI-C172-001-1999
MELP Region	Skeena Region (6)
MELP District	Bulkley
FW Management Unit	6-30
Fisheries Planning Unit	North Coast
DFO Sub District	#4C
Forest Region	Prince Rupert
Forest District	Kispiox Forest District
Forest Licensee	Skeena Cellulose Inc.

WATERSHED INFORMATION

Watershed Group	Skeena Group
Watershed Name	Kispiox River
Watershed Codes	470-000000-
UTM at Mouth	9.582864.6133681
Fish Species	CM, PK,CH, CO, SK, ST, RB, CT, DV, MW, KO, LT, LW
Project Area	±63,000 ha
Biogeoclimatic Zone	ICHmc2
Kispiox River Length	125 Km
Stream Order	7th order
NTS mapsheets	103P/9, 103M/12, 93M.05, 103P16, 103P.10 and 103P.15
TRIM Mapsheets	103P.059, 103P.060, 103P.068, 103P.069, 103P.070, 103P.071, 103P.078, 103P.079, 103P.080, 103P.088, 103P.089,103P.090, 103P.099,103P.100, 93M.041, 93M.051, 93M.061

SAMPLING DESIGN SUMMARY

Total Number of Reaches	27
Sample Sites	27
Survey Dates	September 16 - September 25, 1998

Disclaimer

This product has been accepted as being in accordance with approval standards within the limits of Ministry quality assurance procedures. Users are cautioned that interpreted information on this product developed for the purposes of the Forest Practices Code Act and Regulations, for example stream classifications, is subject to review by a statutory decision maker for the purposes of determining whether or not to approve an operational plan.

Acknowledgements

Triton Environmental Consultant's team for this inventory project included Mr. Dave Gordon, Project Manager, Mr. Bryan Williams, Crew Leader and author, Ms. Michelle Prins, Field Crew member, Mr. Dave Warburton, GIS Manager, Ms. Kay Kennes, GIS Technician, and Ms. Heather Draper, support staff.

Triton Environmental Consultants Ltd. would like to thank Mr. Todd Mahon of Wildfor Environmental Consultants and Mr. Fernando Barbosa and Mr. Dave Gill of Skeena Cellulose (Carnaby) for their assistance throughout the planning and field phases of this project. Triton would also like to thank the Provincial Ministry contact, Mr. Paul Giroux, Regional Inventory Specialist, BC Ministry of Environment, Lands and Parks, Smithers and Mr. Chris Schell, the quality assurance monitor.

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Appendix V: Photo Survey Form 1

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(to be submitted with final reports)

(available from Regional Fisheries Inventory Specialist, Ministry of Environment, Lands and Parks Regional Office in Smithers, BC)

1. Fisheries Inventory Maps, 1:20,000 Scale TRIM based.
2. Photo Summary Report, slide binders and Photo Cds for all project photos.
3. Digital Files (8 watershed reports, FDIS data file, ArcInfo Map files and plot files).
4. Hard copy FISS update forms with 1:50,000 maps

LIST OF ABBREVIATIONS

Abbreviation	Definition
CM	chum salmon (*Oncorhynchus keta*)
CH	chinook salmon *(Oncorhynchus tshawytscha)*
CO	coho salmon *(Oncorhynchus kisutch)*
PK	pink salmon *(Oncorhynchus gorbuscha)*
SK	sockeye salmon *(Oncorhynchus nerka)*
DV	Dolly Varden char (*Salvelinus malma*)
RB or ST	rainbow or steelhead trout *(Oncorhynchus mykiss)*
CT	cutthroat trout *(Oncorhynchus clarki clarki)*
SP	unknown species
( )	Assumed fish presence, seasonally or year round based on access, gradient or habitat capabilities, i.e. (DV) = assumed Dolly Varden.
NF	No fish
U/S	Upstream
D/S	Downstream
FISS	Fisheries Information Summary System (DFO/MoE)
E/F	Electrofishing
VO	Visual observation
FPC	Forest Practices Code
S1 - S6	Stream classifications S1 to S6 based on Ministry of Forests, Forest Practices Code, Riparian Management Area Guidebook.
FSZ	Fisheries Sensitive Zone
EFU	End of Fish Use
NVC	No Visible Channel
RMA	Riparian Management Area
M/L	Mainline (road)

1. INTRODUCTION

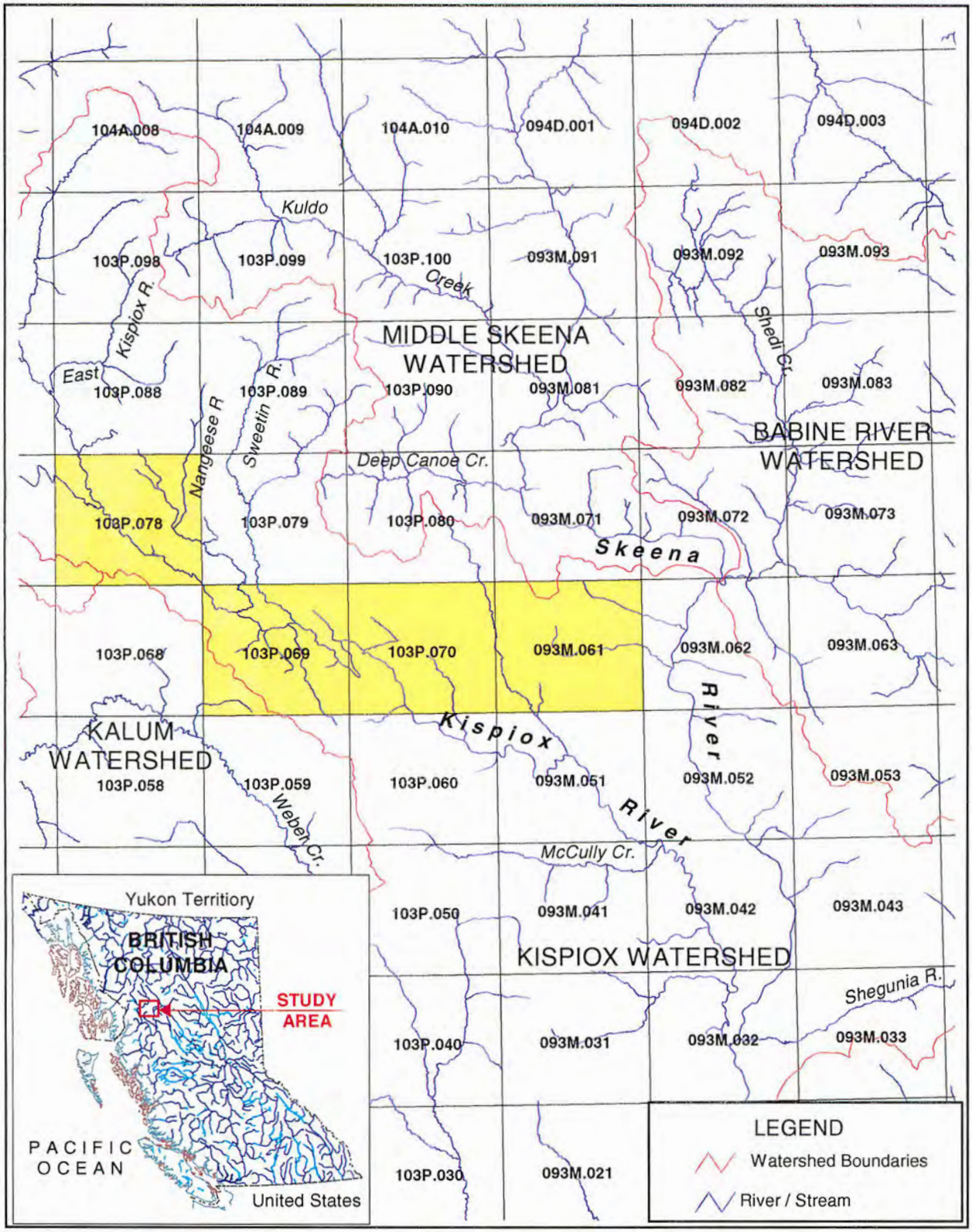
Triton Environmental Consultants Ltd. was retained by Skeena Cellulose Inc., Carnaby, to conduct a reconnaissance 1:20,000 fish and fish habitat inventory within the Kispiox Watershed between Cullon Creek (inclusive) and Stephens Creek (exclusive). Typically 1:20,000 stream inventories precede block level (1:5,000 level) fisheries assessments. In order to accommodate immediate management plans, preliminary block level (1:5,000) assessments were made on 12 cutblocks during the 1998 season. This report describes the results of field surveys conducted on September 16th -25th, 1998 and provides stream classifications for the cutting areas surveyed. The phase 1-3 1:20,000 stream inventory planning was completed in the fall of 1998 (Triton, 1998) with the field work to commence in the 1999 season.

This report is organised by working area and cutblock number. Within each cutblock, streams have been assigned unique ILP (Interim Locational Point) numbers, and sample sites a unique NID (Numeric Identifier) number. All relevant information for each block assessed can be found in the section of the report devoted to that block. The information in each section can be found in the following order: stream specific text, site specific photographs and a stream summary table. FDIS site card hardcopy, FDIS fish form hardcopy, FDIS reach card hardcopy and annotated TRIM maps can be found in the appendix section of this report.

1.1 Location and Study Area

The Kispiox River originates in the Skeena Mountains between the Nass and the Skeena Rivers. It flows south east for approximately 125 km and is joined by the Nangeese and Sweetin Rivers along with numerous creeks before entering the Skeena River (Figure 1). Numerous fish species are found in the Kispiox watershed including all five pacific salmon species including kokanee, steelhead, rainbow and cutthroat trout, lake trout and Dolly Varden char and rocky mountain and lake whitefish (SIS, 1991). The Kispiox River is well known by anglers for its autumn steelhead fishing and is popular destination for anglers from around the world.

The Kispiox Valley is located within the Interior Cedar-Hemlock cold zone (ICHmc2) and is typified by cool wet winters and warm dry summers (Meidinger and Pojar, 1991). The terrain surrounding the river is typically rolling sidehills with a forest dominated by western hemlock and western red cedar with smaller lodgepole pine and sub alpine fir components. The climax forests are commonly blanketed with a thick *sphagnum* spp moss layer and few shrubs.



KISPIOX INVENTORY

Figure 1

Overview of the
Kispiox Inventory Project

Date : February, 1999
Created By : EL
Revised By : BW

Scale 1 : 500,000

5 0 5 10 Kilometers

Sources :
1 : 20,000 TRIM Gid
1 : 50,000 B.C. Watershed Atlas

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The project area covers four working areas (assigned by Triton) between Cullon Creek (inclusive) and Stephens Creek (exclusive) (Table 1). The Cullon Stream Sampling Area includes the Cullon Creek Watershed and one cutblock from the lower Ironside Watershed; the Ironside Stream Sampling Area includes the Ironside and Corral Creek Watersheds; and the Nangeese Stream Sampling Area includes the Nangeese and Sweetin River Watersheds. The Beaverlodge or Mitten stream sampling area is located along the Mitten Mainline on the south side of the Kispiox River. One of the cutblocks is located in the Beaverlodge Creek Watershed and the three other cutblocks are located in small, unnamed watersheds along the south side of the Kispiox River (Figure 1).

Table 1: List of cutblocks in each sampling area

Stream Sampling Area	Cutblocks	TRIM maps
Cullon	Block 78, 79, 80 and 81	103P.070, 93M.061
Ironside	Block 72, 73 and 74	103P.070
Nangeese	Block 1	103P.078
Beaverlodge (Mitten)	Blocks 94, 95, 96 and 97	103P.069, 103P.070

1.2 Study Objectives

The objectives of this study were to conduct fish and fish habitat inventories, using 1:20,000 scale maps, to classify stream reaches within or adjacent to proposed timber harvesting areas as per Forest Practises Code regulations. The proposed Cutting Permits lie within the Skeena Cellulose chart area within the Kispiox Forest District. Key components of the fish and fish habitat inventory were to determine fish presence and the End-of-Fish Use (EFU) for fish-bearing stream reaches and to collect channel width and channel morphology information to determine stream classification.

One key objective in this study was to identify fish bearing reaches within cutblock boundaries. The location of each cutblock was annotated on a 1:20,000 Forest Development Plan map which often proved to be limiting in accurately determining the exact location of the boundaries in the field. Also there were no field markers to tie our field measurements into as the majority of the cutblocks had yet to be engineered (layed out with ribboning). Subsequently, field measurements have been made with a hipchain and are subject to revision as block boundaries are engineered. End of Fish Use (EFU) and reach breaks have been marked in the field and engineering crews have been alerted of this in order that the marked points may be included on future 1:5,000 block maps.

1.3 Background Data Review

Background information on the watersheds is generally restricted to the larger mainstem rivers and creeks (e.g. Kispiox, Cullon, Ironside etc.). The smaller streams and headwater stream reaches (first and second order) that were examined in this inventory had little or no existing fisheries information.

2. METHODS

The field survey and subsequent classifications are based on the following publications:

- *FPC Regulations* (MoF, 1995)
- *Riparian Management Area Guidebook* (MoF, 1995)
- *Fish Stream Identification Guidebook* (MoF, 1995)
- *Fish Stream Identification Guidebook, 2nd edition* (MoF, 1998)

Stream assessments were conducted as outlined in the *Fish Stream Identification Guidebook*, which follows the procedures outlined in the *Stream Inventory Manual* (MELP, 1998).

2.1 Fish sampling

Fish sampling was conducted by electrofishing, Gee (minnow) trapping and visual observations. Electrofishing was conducted using Smith - Root type 12B electroshockers. Gee-traps were used as a second fish sampling method where required. The traps were baited with commercial salmon roe and left overnight.

To maximize efficiency, determining fish presence and finding the end of fish use for the most downstream reaches of streams adjacent to or within cutblocks was focused upon. For each stream reach fish sampling was conducted if fish habitat existed. The stream was then walked upstream and/or downstream to determine fish presence or the point of end of fish use.

As described in the Fish Stream Identification Guidebook (MoF, 1995), once fish were confirmed as being present in a stream, no further sampling was conducted. Establishing no fish presence in a stream was more difficult. Once it was decided that sufficient electrofisher sampling (and possibly second method sampling depending on the stream) was conducted, and no fish were captured, the possibilities of seasonal fish presence were explored. If a reason existed that no fish were caught (e.g. poor habitat quality/quantity or a downstream barrier) then "no fish present" was established and the stream was classified S5 or S6 (depending on channel width). "No fish streams" are recorded in the non-fish bearing status report at the end of this report. Streams where no fish were

captured yet contained suitable habitat and were easily accessed from a known fish bearing stream were assumed to contain fish as they may provide seasonal habitat.

Electroshocking conditions were not ideal as often is the case in high level upper watershed streams. Water temperature, clarity and conductivity are three parameters which have significant effect on electroshocking efficiency. Each of these parameters in discussed below.

1) As the survey was conducted in September, water temperatures were moderate to high ranging from 7.5 to 12 degrees Celsius. Vincent (1971), through Cowx and Lamarque (1990) suggest 5-10 degrees Celsius is ideal for salmonid electroshocking. The temperatures encountered in the field were typically close to or within the optimal range.

2) The water was clear in every stream visited in the Kispiox Watershed. Seeing fish that were electroshocked was never limited by water clarity.

3) The conductivity of the streams were typically low, ranging from 20 to 180 microSiemens/cm, which is commonly the case in higher elevation, low magnitude streams. As suggested by Cowx and Lamarque (1990), lower conductivity streams can be effectively fished using increased voltage levels. Most of the electroshocking conducted in this study was done with a voltage setting of 400 V. This had proven adequate on streams in other areas of the watershed with similar conductivity. Also higher settings were tried periodically throughout the survey with no apparent increased success.

2.2 Stream Measurements

Stream widths were determined by measuring the channel width with an Eslon tape or meter stick. Multiple measurements (minimum of 6) were made for each site, each measurement at least one channel width distance apart. These measurements were averaged to determine the average stream width for classification purposes. Stream gradients were determined from 1:20,000 maps and field surveys using a clinometer or ground estimate. Streams that are greater than 20% gradient are generally assumed to be non-fish bearing (MoF, 1995).

2.3 Stream Identification and RMA Classification

Streams were marked by Triton at the classification boundary of each stream with red and white striped 'creek' flagging tape; a tree was blazed and painted with blue spray paint and stream information was imprinted on steel tags and nailed to the blaze (i.e.: *Triton,*

Stream #, Site #, Date, S5 / S6 boundary). RMA classification is determined through the process outlined in the RMA guidebook (MoF, 1995).

ILPs were issued to streams as the streams were surveyed with only one ILP issued to each stream. Tributaries were assigned unique ILPs if they flowed into streams which had existing ILPs. Sample sites and special features (barriers, cascades) were given a NID number in ascending order as the sites or features were visited.

2.4 Photographs

Photographs of sites, streams, fish and channel features were taken with a 35 mm camera fixed with a 38 - 90 mm zoom lens. Representative photographs are presented in the Results section. Additional photos that were taken but are not presented in the Results section can be found on the accompanying Photo CD(s). A photo documentation form is presented at the back of this report which can be used to cross-reference the site number, roll and frame number with the image file name located on the Photo CD. Digital photos can be viewed with appropriate graphical software (Corel DRAW, Power Point, etc.)

2.5 Mapping

Stream classifications and classification boundaries are shown on 1:20,000 maps included in the Appendix. Fish bearing streams (S1-S4) are coloured in red, non - fish streams (S5 and S6) are shown in blue and fish sensitive zones are in yellow. Several unmapped or incorrectly mapped streams were found within the study area; these streams were classified and added or amended on the maps provided. Several watercourses that are technically not streams as defined by the FPC (i.e. they have no continuous, definable banks, no bed scouring has occurred or there is no alluvial substrate deposits) were noted in the study area. These appear on the maps provided as stream lines but have no fisheries potential, are not coloured and are classified as "no visible channel" (NVC).

The TRIM maps in this report do not show the proposed cutblocks. While Skeena Cellulose Inc. has mapped these blocks, we were unable to transfer them to these fish inventory maps because SCI's maps are NAD 27 based while RIC standard maps are NAD 83. SCI is currently in the process of updating to NAD 83 but they do not expect to complete this process until mid 1999 (Randy Hall, SCI GIS dept., pers. com).

2.6 Follow-up Sampling

Follow-up sampling is often required in areas where fish bearing status cannot be determined at the time of initial sampling. Situations like this typically occur when fish habitat exists in the stream yet the stream is dry (no fish sampling can be conducted) and seasonal fish use is possible. Also distance and ease of access from the nearest fish bearing body of water located downstream are key factors. In order for follow-up or second sampling to be applicable:

- fish access into the reach must be possible,
- the closest fish bearing body of water downstream must be within reasonable distance (distances fish may migrate seasonally for purposes such as spawning),
- fish habitat must exist and
- the stream must be <20% gradient.

Reaches of streams that are close or adjacent to fish bearing waters, are accessible to fish, contain fish habitat and are dry and cannot be sampled are typically inferred fish bearing.

3. RESULTS

3.1 Cullon Study Area

Cullon Creek is the most easterly major watershed flowing into the north bank of the Kispiox River (found on TRIM mapsheet 103P.070). It is a fourth order stream that contains major tributaries such as Tahtlum, Kuitan and Mooluck Creeks. The mainstem contains populations of coho, pink and chinook salmon along with steelhead, rainbow and cutthroat trout, rocky mountain whitefish and Dolly Varden char (SIS, 1991). Most of these species have been observed in the lower 2 km of the stream, however, coho and Dolly Varden have been observed 20 km upstream of the mouth (SIS, 1991).

The Cullon stream sampling area consists of 3 cutblocks within the Cullon Creek watershed (Blocks 78, 79 and 81) and one cutblock in the lower end of the Ironside Watershed (Block 80).

3.1.1 Block 78

Blocks 78 and 79 are adjacent to two small lakes at the head of a long unnamed tributary to Cullon Creek (assumed to be a tributary to Cullon Creek as the creek disappears on TRIM map 93M.051). These lakes are at ~600 m elevation and are approximately 9 km upstream of Cullon Creek. The blocks were accessed by turning north off of the Trail Main onto the Cancel Main at the 49 km post. They are located approximately 14 km from the Trail Main on the Bridge Main.

Block 78 contains two streams within its boundaries identified on TRIM mapsheet 103P.070 (ILP 1016 and 1015). Both streams are first order streams, one (ILP 1016) flowing into a small lake to the south and the other (ILP 1015) flowing into the outflow of the small lake.

ILP 1016 (Photo 1) had moderate rearing values and cover, yet did not provide any spawning or overwintering habitat for fish. The average channel width was 0.72 m and the average gradient was 3.5%. The end of fish use (EFU) was established 200 m upstream of the lake where the stream deteriorated and there was no suitable fish habitat (S4/S6 break). According to preliminary development plan maps the end of fish use (S4 stream) extends into the cutblock ~100 m.

ILP 1015 (Photo 5 and 6) is a low gradient (0.5% average) stream with an average channel width of 0.73 m. Spawning habitat was limited although the stream did provide

some rearing habitat. The S4/S6 break is located 150 m from the confluence with ILP 1016. Upstream of this there was no suitable fish habitat found. The EFU is located ~900 m downstream of the Block 78 boundary. ILP 1015 flows along the Block 79 boundary for approximately 400 m.

3.1.2 Block 79

Block 79 contains three streams within the block boundaries identified on TRIM mapsheet 103P.070 (ILP 1013,1014 and 1015). ILP 1014 is a second order mainstem stream which flows from the largest of the three lakes. ILP 1013 is a first order stream which is indicated on TRIM maps to flow from a third small lake to ILP 1014. ILP 1015 (discussed above in association with Block 78), is a first order stream flowing into the larger central lake.

ILP 1014 (Photo 3 and 4) is a low gradient stream (average 0.75%) with an average channel width of 2.7 m. Rearing habitat was abundant with cover consisting mainly of overstream vegetation and woody debris (LWD/SWD). Spawning habitat was limited as the stream substrate was made up of mainly cobble. Overwintering habitat was not present in the stream, however, the adjacent lake would provide good overwinter habitat for fish. A 83 mm cutthroat trout was captured by electrofishing approximately 40 m downstream of the lake. ILP 1014 is a S3 stream within the cutblock area.

ILP 1013 did not exist and was classified as "no visible channel".

ILP 1015 (Photo 5 and 6) flows for approximately 400m along the northern boundary of Block 79. As mentioned above, the stream provides suitable fish habitat for 150 m upstream from the lake and is classified as S4. Upstream of the 150 m point the stream does not contain fish habitat and is classified S6.

3.1.3 Block 80

Block 80 is adjacent to a small lake situated in the lower Ironside Creek watershed approximately 2.5 km east of Ironside Creek. This block was accessed by turning north off of the Trail Main onto the Cancel Main at the 49 km post. It was then accessed by turning left on the Bailey Main (located approximately 7 km from the Trail Main).

Block 80 contains two streams within its boundaries identified on TRIM mapsheet 103P.070 (ILP 1021 and 251). ILP 1021 is a third order stream which flows into Ironside Creek, and ILP 251 is a first order stream which, indicated by TRIM mapping, joins with another first order stream and flows into ILP 1021.

ILP 1021 (Photo 7, 8 and 9) is a small (average channel width is 0.87 m), low gradient stream (average 1.5%) flowing south through the centre of Block 80. Spawning and rearing values were good throughout the sampled area. A 45 mm cutthroat trout was captured upstream of the road within the block. The stream through Block 80 is classified as S4.

ILP 251 did not exist and was classified as "no visible channel".

3.1.4 Block 81

Block 81 is situated east of Cullon Creek approximately 3 km at an elevation of 650 m in an unnamed tributary watershed to Cullon Creek. Block 81 is accessed by turning off of the Trail Main onto the Kuldo FSR at the 45.5 km post, turning right on the Bush Main, and again on the Mill Main (located approximately 10 km from the Trail Main).

Block 81 has four streams within or in the vicinity of the block boundary identified on TRIM mapsheet 93M.061 (ILP 1017, 1018, 1019 and 1020). ILP 1019 is a second order stream flowing in a south-west direction through the centre of the block. ILP 1017, 1018 and 1020 are short, first order streams. ILP 1018 and 1020 flow into ILP 1019.

ILP 1019 (Photo 10 and 11) is a moderate gradient (average 4.5%) stream with an average channel width of 1.05 m. Moderate rearing habitat exists, yet, due to many small barriers/obstructions it is not accessible by fish. The obstructions were made up of organic materials located throughout the sampled area (limiting upstream migrations by juveniles). Cover was abundant and was composed of mainly overstream vegetation and instream LWD. Spawning and overwintering habitat did not exist. The stream was dry at the time of survey except for a few wetted pools. These pools were electroshocked and

no fish were captured. Sections of one to five metres existed of subterranean flow. Many of the barriers/obstructions would constitute barriers to adult fish migrations. This stream was classified as S6.

ILP 1017 did not exist and was classified as "no visible channel".

ILP 1018 did not exist and was classified as "no visible channel".

ILP 1020 (Photo 12) did not exist and was classified as "no visible channel".

Photo 1 - ILP 1016 is a low gradient stream with limited fisheries values. Rearing values were moderate due in part to the ample cover shown above (S4/S6 break located 200 m from mouth).

Photo 2 - ILP 1014 flows from a small lake and provides habitat for cutthroat trout (classified S3).

Photo 3 - ILP 1014 looking downstream (classified S3).

Photo 4 - ILP 1014 looking upstream towards the lake (classified S3).

Photo 5 - ILP 1015 is a low gradient stream with limited fisheries values. This is a view of a fish accessible section of stream (S4/S6 break located 150 m from mouth).

Photo 6 - ILP 1015 showing the end of fish use (S4/S6 break located 200 m from mouth).

Photo 7 - ILP 1021 is a low gradient stream with good fisheries values. This is a view looking upstream from the sample site (classified S4).

Photo 8 - ILP 1021 showing the road crossing. A cutthroat trout was caught in the foreground (S4).

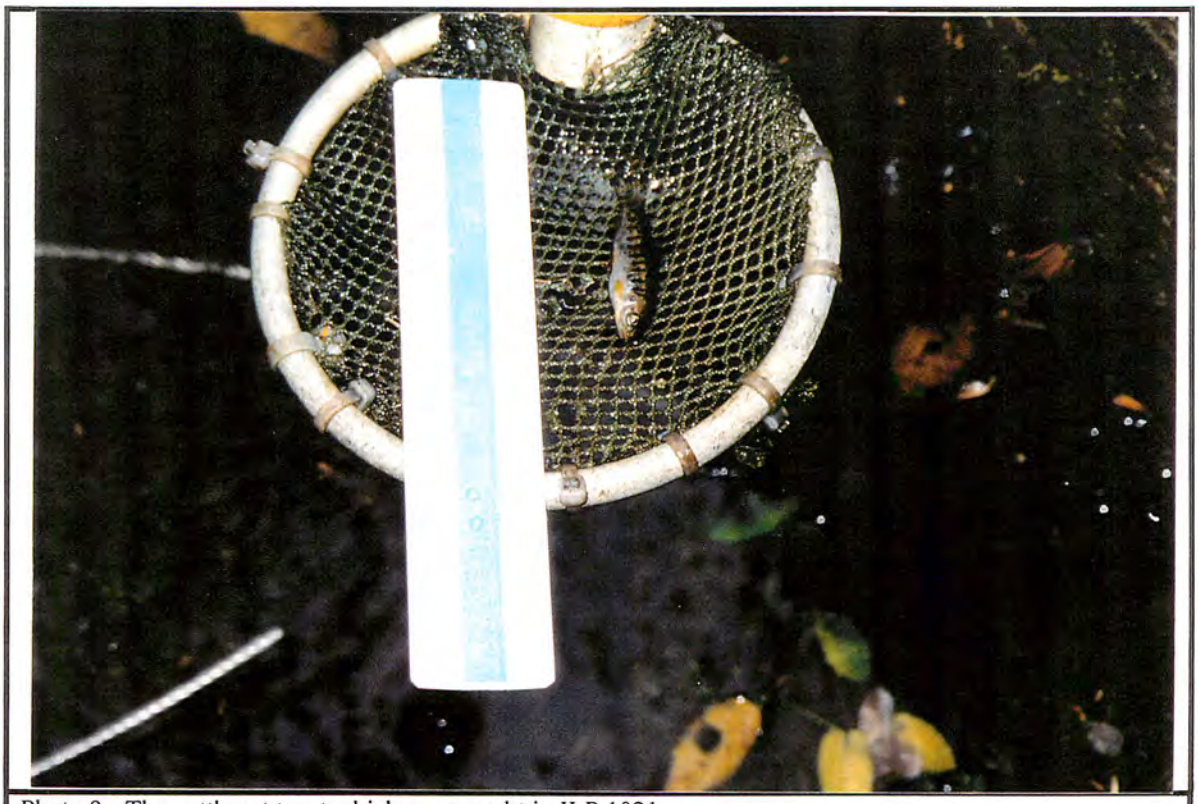

Photo 9 - The cutthroat trout which was caught in ILP 1021.

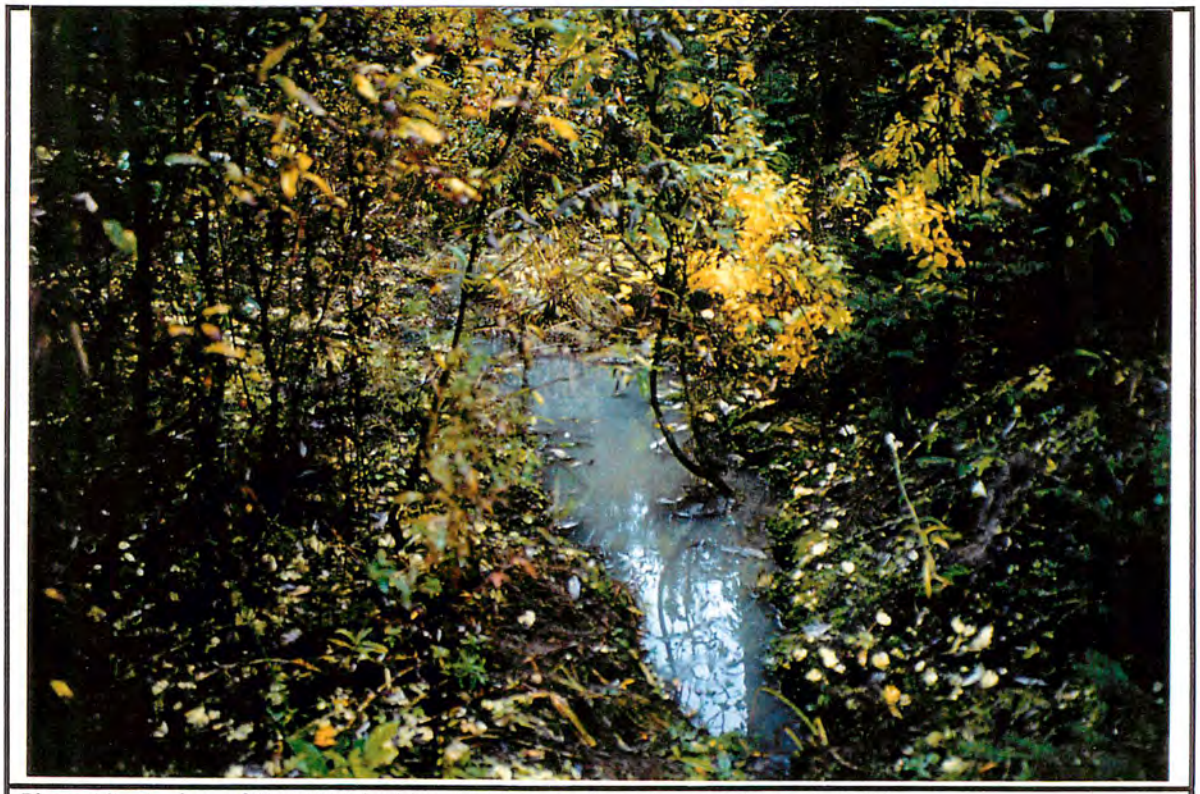

Photo 10 - A view of ILP 1019 looking downstream from the road (classified S6).

Photo 11 -A view of ILP 1019 looking upstream from the sample site showing the poor habitat values (S6)

Photo 12 - A view of ILP 1020 where a defined channel did not exist (no visible channel).

Table 2: Summary of Stream Assessments for the Cullon Stream Sampling Area

Block	TRIM Map No.	Stream ILP (Reach)	Stream NID	Avg Chan Width (m)	RMA Class.	Grad. (%)	Location of End of Fish Use	Fish Present	Photo Numbers	Habitat Comments
78	103P.070	1015	2015	.73	S4/S6	0.5	150 m u/s from mouth	[CT]	5,6	Low gradient swampy stream.
78	103P.070	1016	2016	.72	S4/S6	3.5	200 m u/s from mouth	[CT]	1	Low gradient with moderate rearing values.
79	103P.070	1013	2013	n/a	NVC	-	n/a			No visible channel.
79	103P.070	1014	2014	.27	S3	1	n/a	CT	2,3,4	Moderate rearing but poor spawning values.
80	103P.070	1021	2012	.87	S4	1.5	u/s of the cutblock	CT	7,8,9	Good spawning and rearing values.
80	103P.070	251	2251	n/a	NVC	-	n/a			No visible channel.
81	93M.061	1017	2017	n/a	NVC	-	n/a			No visible channel.
81	93M.061	1018	2018	n/a	NVC	-	n/a			No visible channel.
81	93M.061	1019	2019	1.05	S6	4.5	Downstream of the cutblock	None	10,11	Fish habitat does not exist.
81	93M.061	1020	2020	n/a	NVC	-	n/a			No visible channel.

3.2 Ironside Study Area (CP 385)

Ironside Creek flows south-east into the north bank of the Kispiox River approximately 5 km upstream of Cullon Creek (found on TRIM mapsheet 103P.070). It is a fourth order stream with numerous first and second order tributaries. The mainstem contains populations of coho and pink salmon along with steelhead, rainbow and cutthroat trout, rocky mountain whitefish and Dolly Varden char (SIS, 1991). Coho have been observed spawning 11 km from the mouth and pink have been observed spawning 5 km from the mouth (SIS, 1991).

Corral Creek flows south into the north bank of the Kispiox River approximately 10 km upstream of Ironside Creek. It is a third order stream with numerous first and second order tributaries. The mainstem contains populations of coho and pink salmon up to a rock falls 250 m upstream of the mouth, which is the upstream limit for anadromous fish (SIS, 1991). Resident populations of cutthroat trout and bull trout exist upstream of the falls (Nortec, 1997).

The Ironside stream sampling area contains Blocks 72, 73 and 74. Blocks 72 and a portion of Block 73 are within the Ironside Creek Watershed and Block 74 along with the remainder of Block 73 is within the Corral Creek Watershed. All three cutblocks are located within a 2 km radius on a gradual southern exposed slope at approximately 600 m in elevation. The area was accessed by turning north off of the Trail Main at approximately the 65 km point and travelling for approximately 7 km on the Corral Main.

3.2.1 Block 72

Block 72 is the eastern-most of the three cutblocks and is the lowest in elevation. The surrounding area is relatively flat and swampy with some deciduous content to the coniferous forest. The block was accessed via a deactivated spur road from the Corral Main.

Block 72 is bordered by three streams; Ironside Creek to the east, ILP 11010 to the south and ILP 11013 to the west (TRIM 103P.070). ILP 11010 is a second order stream flowing south east into Ironside Creek and ILP 11013 is shown on the TRIM map as a first order stream which flows into ILP 11010.

Ironside Creek (Photos 13 and 14) has been previously sampled with documented coho salmon located as high upstream as the cutting areas (SIS, 1991). The section of stream alongside the cutblock contains excellent spawning and rearing values. The average

channel width at the downstream edge of the cutblock (sample site # 22012) was 6.66 m. Ironside Creek is classified as S2.

ILP 11010 (Photos 15, 16 and 17) is a moderate gradient stream (average 4.5%) with moderate to good rearing values yet does not provide much spawning and overwintering habitat. The cover is abundant, dominated by overstream vegetation and some LWD and SWD. A 70 mm cutthroat juvenile was electroshocked approximately 2.2 km upstream of the confluence of stream ILP 11010 and Ironside Creek. ILP 11010 has an average channel width 1.23 m and is subsequently classified as S4 to upstream of Block 73.

ILP 11013 did not exist and was classified as "no visible channel".

3.2.2 Block 73

Block 73 is located between Blocks 72 and 74 on the lower portion of the south facing slope. Within or in the vicinity of the block are four streams identified on TRIM mapsheet 103P.070 (ILP 11010, 11011, 1007 and 1008). Two streams join and flow south east into Ironside Creek (ILP 11010 discussed as part of Block 72 and ILP 11011), and two which join and flow south west into Corral Creek (ILP 1007 and 1008). ILP 1007 is a second order, ~4.5 km long stream which flows through Block 74, and is joined by ILP 1008 before flowing south along the west boundary of Block 73 and into Corral Creek. ILP 11010 is joined by ILP 11011 and flows along the east boundary of Block 73.

ILP 11011 is a low gradient stream (avg. 2%) with an average channel width of 0.87 m. The spawning and rearing values are poor throughout the stream yet juvenile fish may rear in the stream during periods of high water. The EFU (S4/S6 break) is located 150 m upstream of the confluence within the cutblock boundary where the stream emerges from a swampy area.

ILP 11010 is classified as S4 (discussed above as part of Block 72).

ILP 1007 (Photos 18, 19, 20 and 21) is a moderate to high gradient stream (avg. 7.5% in Reach 1 increasing to 16% in Reach 2) which has an average channel width of 2.07 m. There is a cascade barrier (barrier to fish migrations) 10 m in height and 15 m long located approximately 200 m upstream of Corral Creek. Extensive electroshocker sampling confirmed that there are no resident populations of fish upstream of the barrier. ILP 1007 and ILP 1008 (trib to 1007) are classified as S6. There was no sampling done downstream of the barrier.

ILP 1008-classified as S6 (see ILP 1007 above).

3.2.3 Block 74

Block 74 is situated higher on the south facing slope than Block 72 and 73 at an elevation of 760 m. Block 74 contains three streams (TRIM 103P.070); one which flows through Block 73 (ILP 1007), a tributary to it (ILP 1009) and a third that flows directly into Corral Creek (ILP 1006). ILP 1007 is a first order stream in the portion flowing along the upper west side of the block. ILP 1009 flows from within the block and joins ILP 1007 before it reaches Block 73. ILP 1006 is a second order stream that flows along the east boundary of the block.

ILP 1007 (Reach 2) has an average gradient of 16 % (the upper stream adjacent to Block 74) and an average channel width of 1.07 m. Potential spawning and rearing values are poor. ILP 1007, as mentioned above in Block 73, contains a fish barrier on the lower end of the creek. There is no resident population of fish in the stream system. ILP 1007 and ILP 1009 are classified as S6.

ILP 1009 (Photo 22) is a moderate to high gradient stream (average 12%) with an average channel width of 0.72 m. The channel was dry at the time of survey. ILP 1009 is a tributary to the S6 section of ILP 1007 and therefore classified as S6 (see ILP 1007 above).

ILP 1006 (Photos 23 and 24) flows at a moderate to low gradient (~5%) for approximately 800 m along the west boundary of Block 74, and then drops down into Corral Creek at gradients averaging 25% for 500 m. There are many small falls throughout this high gradient stretch that constitute barriers to migrating fish. The low gradient section of stream along the edge of the block has an average channel width of 1.3 m. Extensive electroshocker sampling confirmed that there are no resident populations of fish upstream of the barriers. ILP 1006 is classified as S6.

Photo 13 -Ironside Creek looking upstream from the sample site at the excellent fish habitat (S2).

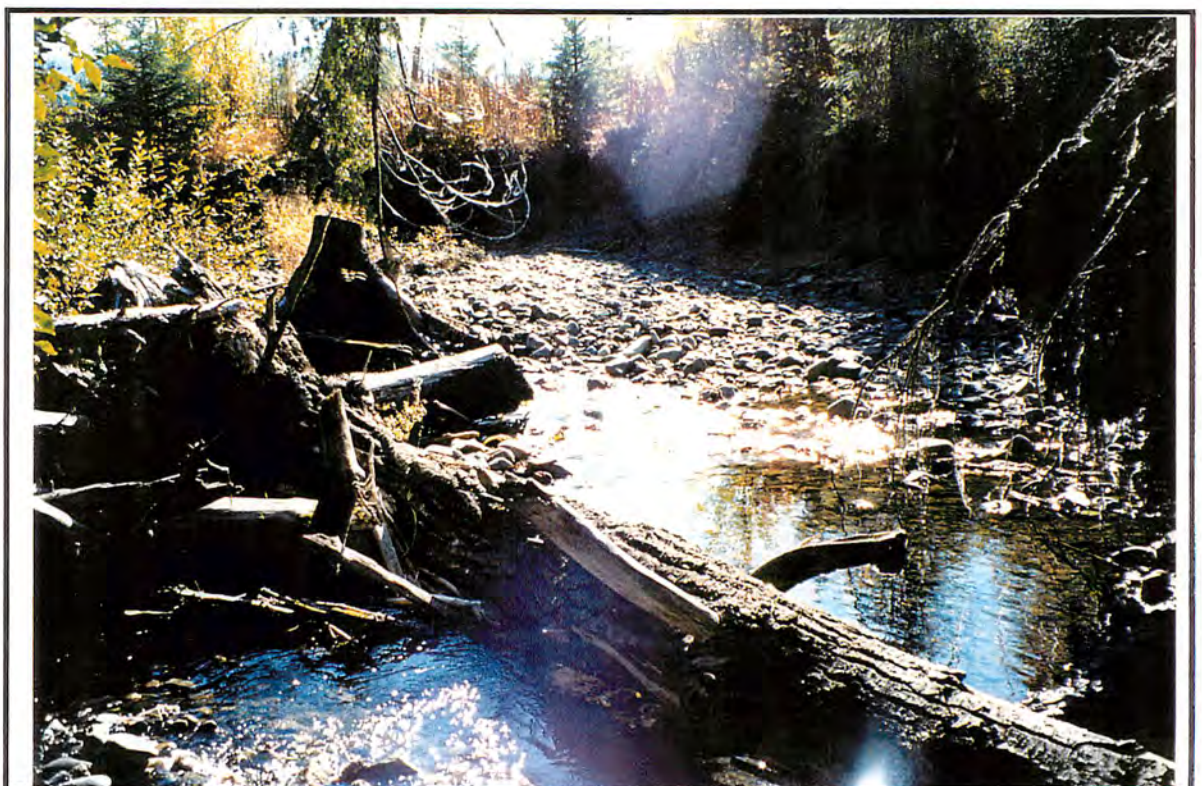

Photo 14 - A view of a log jam and an eroding bank downstream of the sample site in Ironside Creek (S2).

Photo 15 - A view of the downstream end of the culvert on stream 11010. This stream was classified as S4.

Photo 16 - A view of ILP 11010 looking downstream at the area where the cutthroat trout was caught (S4).

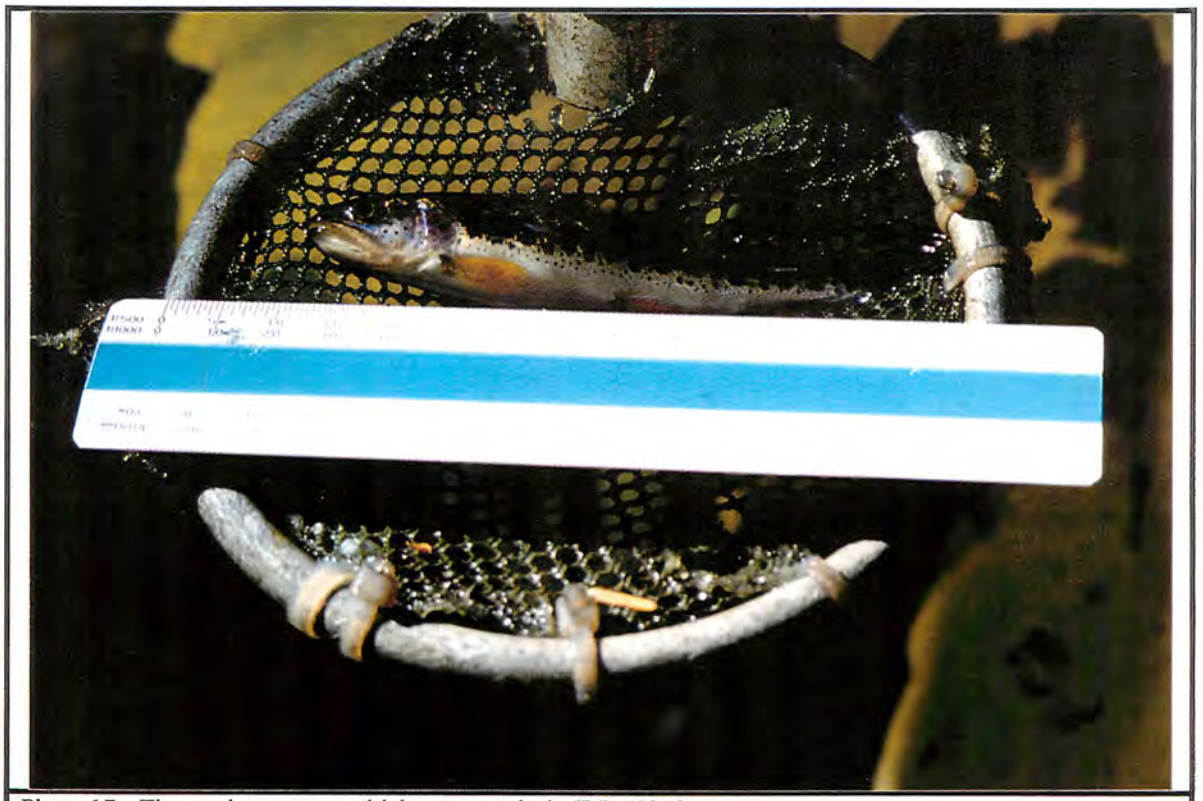

Photo 17 - The cutthroat trout which was caught in ILP 11010.

Photo 18 - A view of ILP 1007 looking downstream from a spur road crossing (classified S6).

Photo 19 - Sections of ILP 1007 were dry or contained little water during the time of the survey (S6).

Photo 20 - A view of the 10 m high and 15 m long cascade located on ILP 1007 ~200 m upstream from the mouth.

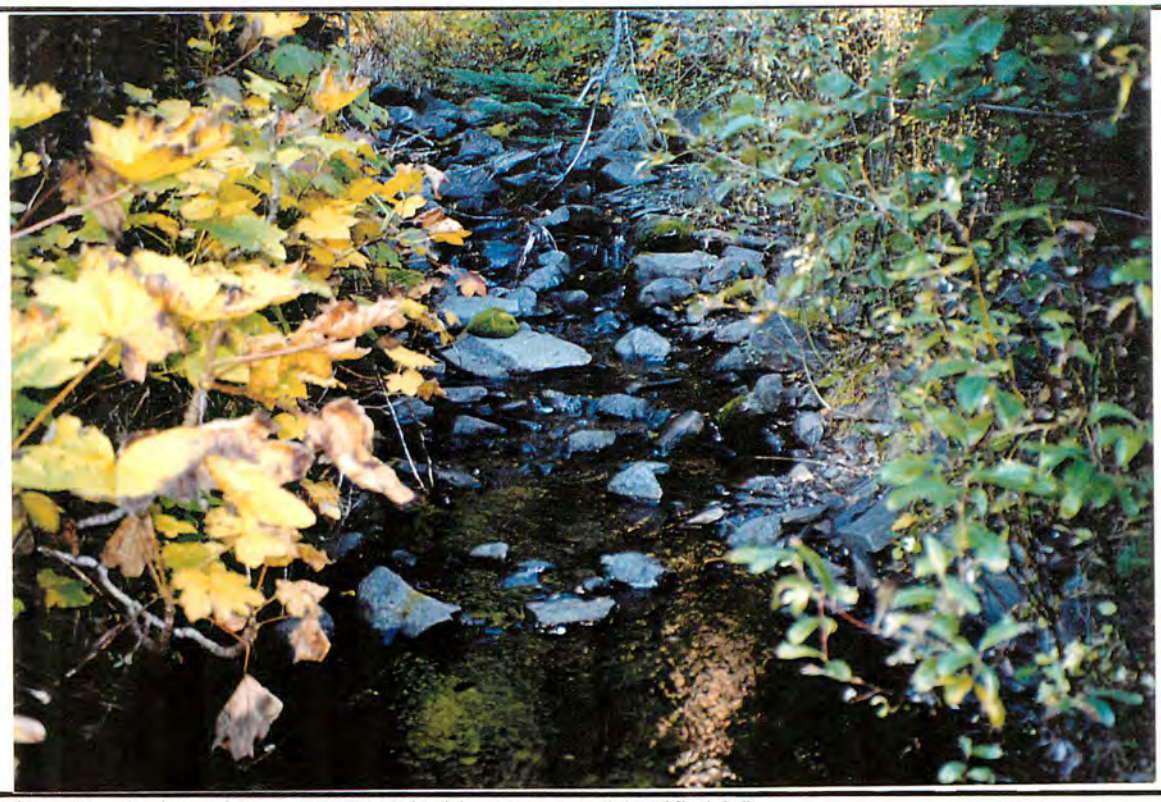

Photo 21 - A view of upper ILP 1007 looking upstream (classified S6).

Photo 22 - A view of ILP 1009 from the road within the proposed cutblock. This stream was classified as S6.

Photo 23 - A view of ILP 1006 looking upstream (classified S6).

Photo 24 - A view of ILP 1006 looking downstream from the road (classified S6).

Table 3: Summary of Stream Assessments for the Ironside Stream Sampling Area

Block	TRIM Map No.	Stream ILP (Reach)	Stream NID	Avg Chan Width (m)	RMA Class.	Grad. (%)	Location of End of Fish Use	Fish Present	Photo Numbers	Habitat Comments
72	103P.070	Ironside	22012	6.60	S2	1.5	Unknown	CO CT DV RB	13,14	Excellent spawning and rearing values.
72	103P.070	11010	22010	1.23	S4	4.5	U/s of the cutblocks.	CT	15,16,17	Poor spawning yet good rearing values.
72	103P.070	11013	22013	n/a	NVC	-	n/a			No visible channel.
73	103P.070	11011	22111	.88	S4/S6	2	150 m u/s of mouth	[CT]		Poor spawning and rearing values.
73	103P.070	1007	2007	2.07	S6	7.5	~200 m u/s of mouth	None	18,19,20	Moderate potential fisheries values.
73	103P.070	1007 (2)	22007	1.1	S6	16	~200 m u/s of mouth	None	21	Poor potential fisheries values.
73	103P.070	1008	2008	<3m	S6	-	n/a	None		
74	103P.070	1006	2006	1.3	S6	5	At the mouth.	None	23,24	Good potential fisheries values.
74	103P.070	1009	2009	.72	S6	12	~200 m u/s of mouth on ILP 1007	None	22	Poor potential fisheries values. The stream was dry at time of survey.

3.3 Beaverlodge Study Area (Mitten Area - CP 379)

CP 379, the Beaverlodge stream sampling area contains Blocks 94, 95, 96 and 97. Blocks 94, 95 and 97 are located within the drainages of small first and second order streams which flow directly into the Kispiox River (found on TRIM mapsheets 103P.069 and 103P.070). Block 96 is located along the south bank of Beaverlodge Creek, a larger third order stream. The blocks were accessed by crossing the Kispiox River from the Trail Main to the Mitten Main. Each block is located in close proximity to the Mitten Main and easily reached by spur roads.

3.3.1 Block 94

Block 94 is located on a gradual north facing slope at an elevation of approximately 650 m. The south-east corner of the block angles towards the south and is approximately 600 m from Hilltop Lake. The Mitten Main crosses along the north boundary of the block between it and a previously harvested block.

Block 94 has three streams identified within or in the vicinity of its boundaries on TRIM mapsheet 103P.069 (ILP 1011, 1010 and 1145). ILP 1011 is a first order stream which flows along the north east edge of the block and is joined by another first order stream (ILP 1010) which flows from within the block. ILP 1145 is also a first order stream which flows south from close to the block boundary into Hilltop Lake.

ILP 1010 (Photos 25 and 26) is a low gradient (avg. 2%) stream with an average channel width of 0.54 m. There is a rock falls 6 m in height located approximately 300 m downstream of the cutblock which is a barrier to upstream fish migrations. Extensive electroshocker sampling confirmed that there are no resident populations of fish upstream of the barrier. ILP 1010 and ILP 1011 are classified as S6. There was no sampling done downstream of the barrier.

ILP 1011 (Photo 27) is a moderate gradient (avg. 3.5%) stream with an average channel width of 0.86 m. It flows from within the cutblock into ILP 1010 at the northern corner of the block. There were no fish caught in ILP 1011 and due to a downstream barrier no fish can access this section of the stream. Stream ILP 1011 is classified as S6.

ILP 1145 was mapped as flowing from the cutblock yet after ground assessing the stream it was determined that the stream did not exist within the cutblock and was therefore classified as 'no visible channel'.

3.3.2 Block 95

Block 95 is located south of the Mitten Main on a north exposed slope at an elevation of 600 m between Beaverlodge and Brown Paint Creeks. It is bordered by four separate streams which flow along the boundaries of the block (TRIM 103P.069). ILP 1003 and 1004 are first order streams which flow into Beaverlodge Creek (ILP 1004 enters ILP 1005 before flowing into Beaverlodge). ILP 1005 is joined by ILP 1004 and flows along the north east edge of the block and into Beaverlodge Creek, a third order stream containing populations of cutthroat trout and Dolly Varden char (Biolith, 1996)

ILP 1003 (Photo 28) flows for approximately 250 m along the block boundary at a low gradient (~2%), down a steep ~30 m pitch (~23%) and crosses under the road. It continues to flow along the block boundary at a low gradient (~3%) for ~60 m and into Beaverlodge Creek. The ~30 m slope is a barrier to fish upstream migration. Upstream of the barrier there is no suitable fish habitat. The EFU is the steep section alongside the road 60 m from Beaverlodge Creek where the stream classification changes from S4 to S6 (average channel width of 0.8 m).

ILP 1004 (Photos 29 and 30) flows from a swampy area along the south east edge of the block at a gradient of 2% for approximately 120 m before entering ILP 1005. There was no spawning habitat observed and the rearing values were moderate. Electroshocking caught two Dolly Varden juveniles downstream of the road crossing. The average channel width is 0.9 m. ILP 1004 is classified as S4 up to the swampy area 120 m from the mouth, and "not a stream" as there was no visible channel upstream of the swampy area.

ILP 1005 (Photos 31 and 32) is joined by ILP 1004 and flows along the north eastern edge of the cutblock for approximately 400 m and into Beaverlodge Creek. ILP 1005 flows at a gradient of ~2% and has an average channel width of 1.28 m. The stream provides limited habitat for spawning but rearing habitat is abundant. ILP 1005 is a fish bearing stream, classified as S4, as there were Dolly Varden caught upstream in ILP 1004.

Beaverlodge Creek was sampled in 1996 by Biolith Scientific Consultants Inc. (1996) and classified as S2.

3.3.3 Block 96

Block 96 is located on a north facing slope along the Mitten Main at an elevation of 480 m. The Kispiox River is located 200 m from the block boundary at an average gradient of 25%. Block 96 has two streams identified within or in the vicinity of its boundaries on TRIM mapsheets 103P.069 and 103P.070 (ILP 1001 and 1002). Both streams are mapped as first order drainages that flow directly into the Kispiox River. ILP 1001 followed outside of the west boundary, and ILP 1002 was mapped as flowing through the block exiting at the south east corner.

ILP 1001 (Photo 33) was dry at the time of survey and contained limited fisheries values. There were no spawning gravels and fish cover was limited. Access into the stream was obstructed by a steep gradient section downstream of the road (>20% for 5 m). Due to the limited habitat and the obstruction this stream was classified as S6.

ILP 1002 did not exist and was classified as "no visible channel".

3.3.4 Block 97

Block 97 is the most eastern block within the Beaverlodge (Mitten) stream sampling area. It is located south west of a small lake, running over a steep ridgeline at an elevation of approximately 500 m. It is bordered by a stream to the north (TRIM 103P.070). ILP 1000 (Photo 34) is a first order stream which flows into the small lake and then from the lake directly into the Kispiox River. It is a low gradient (average 1%) stream with an average channel width of 1.1 m. The stream had limited spawning values and moderate rearing values. There were no obstructions to fish migrations between the lake and the sample site (located adjacent to the cutblock). Fish (species unknown) were observed in the lake and even though the stream was dry at the time of survey fish likely utilise the stream seasonally. ILP 1000 is classified as S4.

Photo 33 - A view of ILP 1001 looking downstream from the road. There were poor fisheries values throughout this section of stream (classified S6).

Photo 34 - A view of ILP 1000 looking downstream from the road (classified S4).

Table 4: Summary of Stream Assessments for the Beaverlodge Stream Sampling Area

Block	TRIM Map No.	Stream ILP (Reach)	Stream NID	Avg Chan Width (m)	RMA Class.	Grad. (%)	Location of End of Fish Use	Fish Present	Photo Numbers	Habitat Comments
94	103P.069	1010	2010	.53	S6	2	300m d/s of the block	None	25, 26	Limited potential spawning and rearing values.
94	103P.069	1011	2011	.86	S6	3.5	300m d/s of the block	None	27	Limited potential spawning and rearing values.
94	103P.069	1145	2145	0	NVC	-	n/a	None		No stream within the block.
95	103P.069	1003	2003	.78	S4/S6	5	60m u/s of Beaverlodge	[CT]	28	Moderate to poor fisheries values in the lower end of the stream and poor potential values upstream of the barrier.
95	103P.069	1004	2004	.8	S4	2	120m from the mouth	DV	29, 30	Moderate rearing values and poor spawning values.
95	103P.069	1005	2005	1.28	S4	2	n/a	DV	31, 32	Moderate spawning and rearing values.
95	103P.069	Beaver-lodge		>5m	S2	-	n/a	CT, DV		Good fisheries values.
96	103P.069	1001	2001	.57	S6	2	n/a	None	33	No fish habitat.
96	103P.070	1002	2002	n/a	NVC	-	n/a	None		No stream within the block.
97	103P.070	1000	2000	1.1	S4	1	Upstream of the cutblock.	[SP]	34	Moderate fisheries values.

3.4 Nangeese Study Area

The Nangeese stream sampling area contains Block 1, 75 and 76 (Block 75 and 76 are part of CP 385). Block 1 is split by the watershed boundaries of Nangeese Creek and Swordgrass Creek (found on TRIM mapsheet 103P.078). Block 75 is within the Nangeese Watershed and Block 76 is split by the Sweetin River and the Nangeese Watersheds. Due to time and budget limitations only Block 1 of this sampling area was surveyed.

3.4.1 Block 1

Block 1 is located at approximately 90 km on the Trail Main at the north end of Swordgrass Lake. The terrain surrounding the cutblock is relatively flat and marshy. Numerous lakes are located in the general vicinity including Hodder and Footsore Lakes. A small unnamed lake is located on the north-east side of the block, which is known to contain Dolly Varden, coho salmon and cutthroat trout (FISS, 1990). Swordgrass Lake contains populations of Dolly Varden, coho salmon, rocky mountain whitefish and rainbow trout (FISS, 1990).

There was one stream located within the boundaries of Block 1 (TRIM 103P.078). ILP 1030 is a first order stream which flows into Swordgrass Lake. The outlet of Swordgrass Lake flows for approximately 700 m into the Kispiox River. ILP 1030 is a low gradient (average 2%) stream with an average channel width of 0.60 m. The stream provides limited spawning and overwinter habitat yet has moderate rearing values. The stream was sampled with an electroshocker for 100 seconds and no fish were caught. Fish (species unknown) were observed in Swordgrass Lake which may utilise ILP 1030 seasonally. The end of fish use on the stream is located 300 m upstream from the lake where the stream channel disappears marking the end of the S4 stream (EFU).

Table 5: Summary of Stream Assessments for the Nangeese Stream Sampling Area

Block	TRIM Map No.	Stream ILP (Reach)	Stream NID	Avg Chan Width (m)	RMA Class.	Grad. (%)	Location of End of Fish Use	Fish Present	Photo Numbers	Habitat Comments
1	103P.078	1030	2030	.60	S4	2	300m u/s of the lake	[SP]		Poor to moderate fisheries values.

4. FOLLOW-UP SAMPLING

No reaches were identified during the study that required second sampling.

5. NON-FISH BEARING REACHES

Non-fish bearing reach reports are provided for relevant reaches including intermittent streams (Table 6). 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.

Table 6: Non-Fish Bearing Status Report for Select Streams in the Kispiox Forest District

Initial Sampling Date	Follow-up Sampling Date	Watershed Code or ILP number	Reach Number	Site Number	Map Sheet Number	Capture Method (electrofishing settings)	Area covered (sq. m)	Sampling Effort (seconds)	Cond.	Water Temp. (deg. Celsius)	Flow Stage (VO)	Turbidity (VO)	Known Fish Presence (u/s-d/s)	Obstructions to Fish Migration	Location of End of Fish Use	Seasonal Fish Use
98/09/16	None	1001	1	2001	103P.069	none	-	-	-	-	Dry	-	Kispiox R.	Steep, channel disappears near road crossing	Downstream of Block	None
98/09/16	None	1003	1	2003	103P.069	none	-	-	-	-	Low	-	CT,DV-d/s	>30% slope for ~5m	At road crossing	None
98/09/16	None	1004	1	2004	103P.069	EF-500/80/5	100	53	100	8	Mod	C	Beaverlodge Creek - CT-d/s	*Fish habitat decreases to "not suitable for fish"	~120m upstream of mouth	None
98/09/17	None	1006	1	2006	103P.070	EF-500/70/5	1600	303	30	8	Mod	C	Corral Creek-probable fish presence d/s	30% slope for 40m at the mouth	At the mouth	None
98/09/17	None	1007	1	2007	103P.070	EF-400/70/6	800	319	20	8	Mod	C	Corral Creek-probable fish presence d/s	Cascade 10m high and 15m long	~200m from mouth	None
98/09/17	None	1009	1	2009	103P.070						Dry		Trib to ILP 1007	see ILP 1007	-	None
98/09/18	None	1010	1	2010	103P.069	EF-400/60/5	180	247	-	8	Low	L	Kispiox R.	Cascade 6m high and 6m long	~300m d/s from block	None
98/09/18	None	1011	1	2011	103P.069	EF-400/60/6					Mod	C	Trib to ILP 1010		~300m d/s from block	None
98/09/22	None	11011	1	22011	103P.069	-	-	-	140	9	Low	L	CT d/s in ILP 11010	*Fish habitat decreases to "not suitable for fish"	~150m u/s of mouth	None
v98/09/23	None	1015	1	2015	103P.070	-	-	-	40	8	Low	L	Trib to ILP 1014	*Fish habitat decreases to "not suitable for fish"	~150m u/s of mouth	None
98/09/23	None	1016	1	2016	103P.070	-	-	-			Dry	-	Trib to ILP 1014	*Fish habitat decreases to "not suitable for fish"	~200m u/s of mouth	None

* "not suitable for fish" refers to a stream with no fish habitat (eg. fine substrate, low water levels and no cover) and is explained fully in the stream description.

Table 6: Non-Fish Bearing Status Report for Select Streams in the Kispiox Forest District (Continued)

Initial Sampling Date	Follow-up Sampling Date	Watershed Code or ILP number	Reach Number	Site Number	Map Sheet Number	Capture Method (electrofishing settings)	Area covered (sq. m)	Sampling Effort (seconds)	Cond.	Water Temp. (deg. Celsius)	Flow Stage (VO)	Turbidity (VO)	Known Fish Presence (u/s-d/s)	Obstructions to Fish Migration	Location of End of Fish Use	Seasonal Fish Use
98/09/24	None	1019	2	2019	93M.061	EF-400/60/5	250	200	40	8	Low	M	Cullon Creek-d/s	*Fish habitat is "not suitable for fish"	Downstream of cutblock	None
98/09/25	None	1030	3	2030	103P.078	EF-400/70/5	50	100	40	7.5	Low	L	Swordgrass Lake-d/s	*Fish habitat decreases to "not suitable for fish"	~300m u/s of mouth	None

* "not suitable for fish" refers to a stream with no fish habitat (eg. fine substrate, low water levels and no cover) and is explained fully in the stream description.

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Appendix I: TRIM Maps 103P.070, 103P.069, 103P. 078 and 93M.061.

Photo 25 - A view of the 6m high and 6m long cascade located on ILP 1010 approximately 300 m below the Mitten Mainline.

Photo 26 -Lower section of previous photo.

Photo 27 - A view of ILP 1011 looking downstream from the road crossing (classified S6).

Photo 28 - A view of ILP 1003 looking upstream from the road at the fish barrier (S4 d/s-S6 u/s).

Photo 29 - A view of ILP 1004 looking downstream at where two Dolly Varden were caught (S4).

Photo 30 - A view of ILP 1004 looking downstream (classified S4).

Photo 31 - A view of ILP 1005 looking downstream (classified S4).

Photo 32 - A view of ILP 1005 looking upstream. Overstream vegetation and LWD make up most of the cover (classified S4).

KISPIOX WATERSHED INVENTORY

MAP SHEET 103P.070
WSC 470-000000

LEGEND

Fish Species

CT	Cutthroat Trout	SP	Species Unknown
CO	Coho Salmon	NF	No Fish
PK	Pink Salmon	SU	Sucker
[ ]	Suspected Fish Presence		

9999 NIDs *99999* ILPS

Stream Type

Fish Streams / Non-fish Streams

Sample Site — Fish Species — DV — 1-2 | S1 (Gradient | Channel Width | Stream Class)

Reach Break

NFC	No Fish Caught
NF	No Fish
NVC	No Visible Channel

Historic Data

- Fish Observation-Salmon
- Fish Observation-Sport
- Fish Observation-Regional
- Dam-Beaver (BL)

Features

C	Cascades
F	Falls
BLK 00	Cut Blocks

2 C 5 (height (m) | length (m))

TRIM Features

- River/Stream
- Swamp/Marsh
- Lake
- Glacier
- Paved Road
- Gravel Road
- Index Contour
- Contours
- Indefinite/Intermittent

1:50000

500 0 500 1000 1500 2000 Meters

Source: 1:20 000 TRIM
Projection: UTM

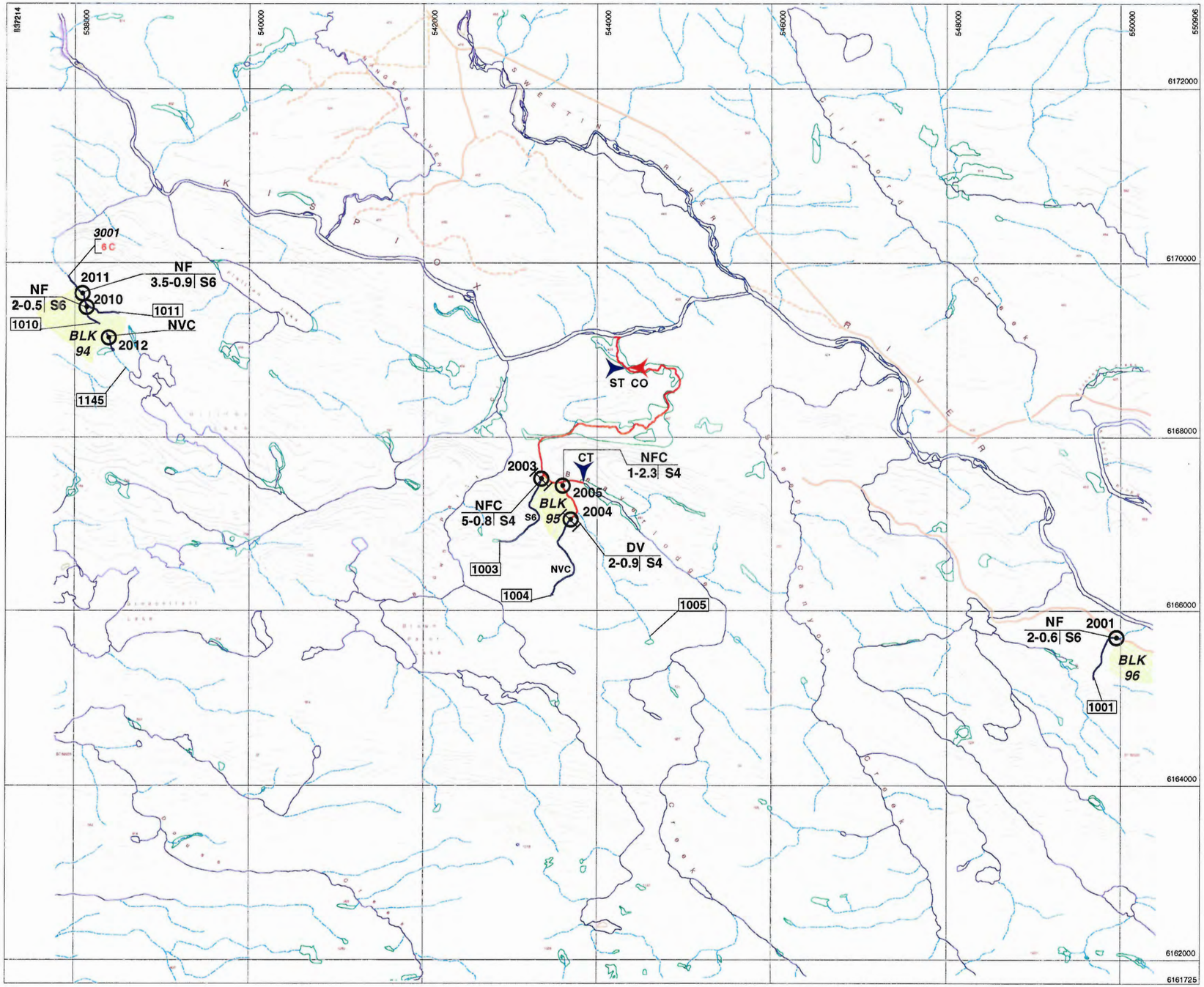
Date: December 11, 1998
Created by: KK Revised By: EL

TRITON Environmental Consultants Ltd.

MAP 268706301

KISPIOX WATERSHED INVENTORY

MAP SHEET 103P.069
WSC 470-000000



LEGEND

Fish Species

CT Cutthroat Trout	SP Species Unknown
CO Coho Salmon	NF No Fish
PK Pink Salmon	SU Sucker

[ ] Suspected Fish Presence

9999 NIDs *99999* ILPS

Stream Type

Fish Streams Non-fish Streams

Fish Species
DV
1-2 | S1
Sample Site
Reach Break
1
Gradient
Channel Width
Stream Class

NFC No Fish Caught
NF No Fish
NVC No Visible Channel

Historic Data

Fish Observation-Salmon
Fish Observation-Sport
Fish Observation-Regional
BL Dam-Beaver

Features

C Cascades
F Falls
BLK 00 Cut Blocks

2 C 5
height (m)
length (m)

TRIM Features

River/Stream
Swamp/Marsh
Lake
Glacier
Indefinite/Intermittent
Paved Road
Gravel Road
Index Contour
Contours

1:50000
500 0 500 1000 1500 2000 Meters

N
W E
S

Source: 1:20 000 TRIM
Projection: UTM

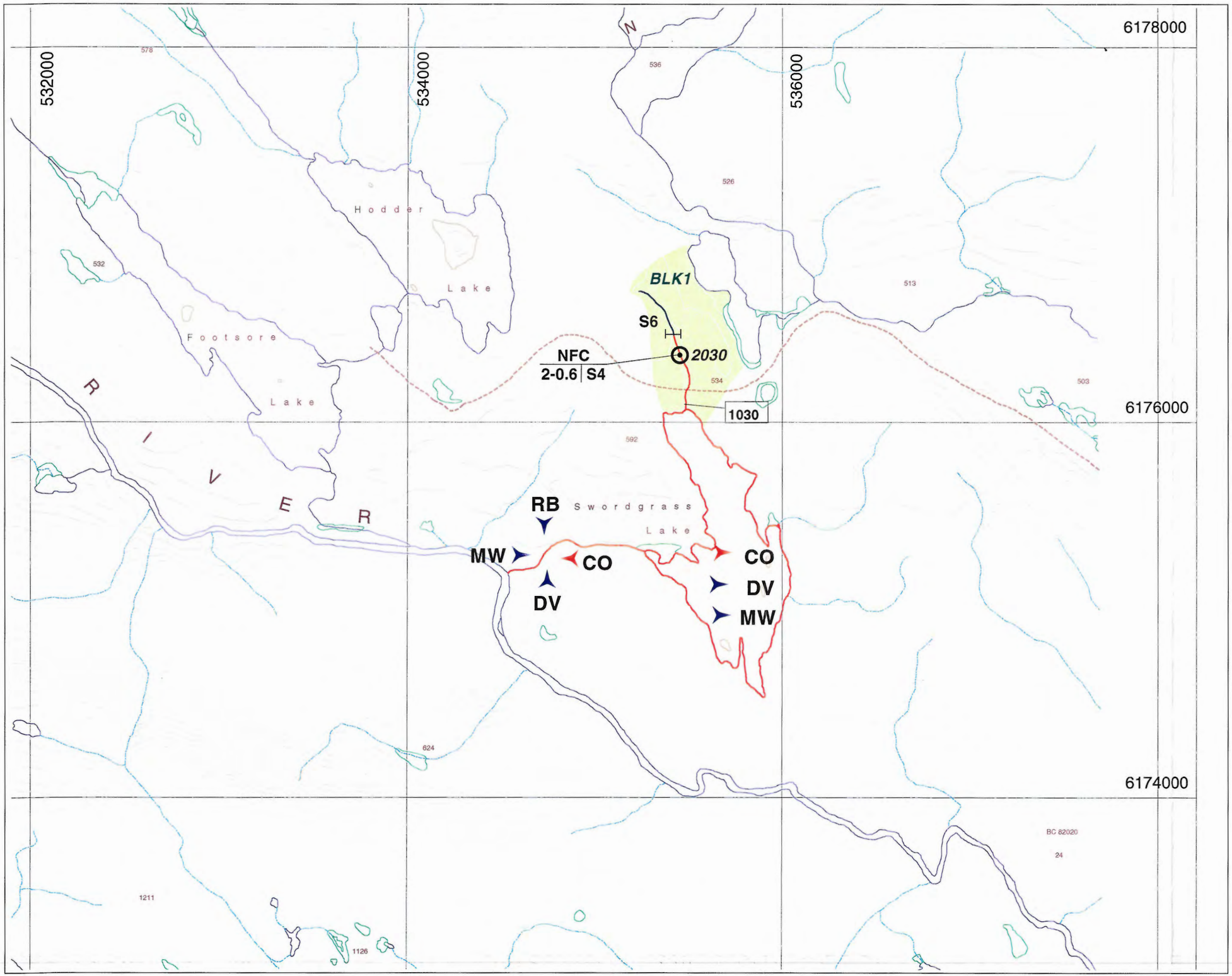
Date: December 11, 1998
Created by: KK Revised By: EL

TRITON
Environmental Consultants Ltd.

MAP 268706303

KISPIOX WATERSHED INVENTORY

MAP SHEET 103P.078
WSC 470-000000



LEGEND

Fish Species

CT Cutthroat Trout
CO Coho Salmon
PK Pink Salmon
SP Species Unknown
NF No Fish
SU Sucker
[ ] Suspected Fish Presence

9999 NIDs *99999* ILPS

Stream Type

Fish Streams
Non-fish Streams

Fish Species
DV
1-2 | S1
Sample Site
Reach Break
Gradient
Channel Width
Stream Class

NFC No Fish Caught
NF No Fish
NVC No Visible Channel

Historic Data

Fish Observation-Salmon
Fish Observation-Sport
Fish Observation-Regional
Dam-Beaver

Features

C Cascades
F Falls
BLK 00 Cut Blocks

2 C 5
height (m)
length (m)

TRIM Features

River/Stream
Swamp/Marsh
Lake
Glacier
Paved Road
Gravel Road
Index Contour
Contours
Indefinite/Intermittent

1:20000

200 0 200 400 600 800 Meters

Source: 1:20 000 TRIM
Projection: UTM

Date: December 11, 1998
Created by: KK Revised By: EL

TRITON Environmental Consultants Ltd.

MAP 268706304

KISPIOX WATERSHED INVENTORY

MAP SHEET 103P.061
WSC 470-000000

LEGEND

Fish Species

CT Cutthroat Trout
CO Coho Salmon
PK Pink Salmon
SP Species Unknown
NF No Fish
SU Sucker
[ ] Suspected Fish Presence

9999 **NIDs** *99999* **ILPS**

Stream Type

Fish Streams
Non-fish Streams

Fish Species
DV
1-2 | S1
Sample Site
Reach Break
Gradient
Channel Width
Stream Class

NFC No Fish Caught
NF No Fish
NVC No Visible Channel

Historic Data

Fish Observation-Salmon
Fish Observation-Sport
Fish Observation-Regional
Dam-Beaver

Features

C Cascades
F Falls
BLK 00 Cut Blocks

2 C 5
height (m)
length (m)

TRIM Features

River/Stream
Swamp/Marsh
Lake
Glacier
Indefinite/Intermittent
Paved Road
Gravel Road
Index Contour
Contours

1:50000
500 0 500 1000 1500 2000 Meters

Source: 1:20 000 TRIM
Projection: UTM

Date: December 11, 1998
Created by: KK Revised By: EL

TRITON Environmental Consultants Ltd.

MAP 268706302

Appendix II: Stream Site data from FDIS and Fish Collection Data

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
4	103P.060	242	22012

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside Creek

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.060 **ILP #** 242 **Reach #** 4

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
22012	103P.070	22012		120	HC	V4	☐

Date 1998/09/22 **Time** 14:59 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	5.2	5.4	6.6	8.8	7.6	6.4				
Wetted Width (m)	T	2.0	2.0	2.4	3.2	3.3	4.1				
Pool Depth (m)	MS	0.21	0.18	0.18	0.20	0.15	0.10				

	grad	grad	method
Method I	2.0	1.0	C
Method II			C

Wb Depth .2 .2 .2 **Method** MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER

	Total		M			
SWD	LWD	B	C	DP	OV	IV
S	D	D	S	T	S	N

CROWN CLOSURE 1 1-20%

LWD A

DIST E

LB SHP S

Texture ☐F ☐G ☒C ☐B ☐R ☐A

RB SHP S

Texture ☐F ☐G ☒C ☐B ☐R ☐A

INTREAM VEG ☒N ☐A ☐M ☐V

RIP D

STG PS

RIP M

STG MF

WATER

FLOOD SIGNS

Req #

EMS

		Method	GE		
Temp	7.5	Metho	T3	Cond. 140	Method: S4
pH	7.3	Method	FD	Turb. ☐T ☐M ☐L ☒C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: G

D95: 29 D (cm): 17 Morph: RP

Pattern IR

Islands N

Bars ☐N ☒SIDE ☐DIAG ☒MID ☐SPAN ☐BR

Coupling DC

Confinement OC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
4	103P.060	242	22012

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
Cover	Good cover.
OverWinter Habitat	Year round stream with some deep pools.
Rearing Habitat	Good cover and access up and downstream..
Spawning Habitat	Medium sized rounded gravels.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	8	STD	U	Showing Block 72 on left bank.
R 2	F	9	STD	D	Showing channel entering cut block.

WILDLIFE

COMMENT

Section	Comments
SITE CARD	Fish sampling not conducted due to existing info (RB,CT,CO,DV)
CHANNEL	Class: S2

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	251	2251

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 80

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 251 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2251	103P.070	2251		100	HC	V4	☐

Date 1998/09/24 **Time** 12:30 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)											
Wetted Width (m)											
Pool Depth (m)											

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER				Total		
SWD	LWD	B	C	DP	OV	IV

CROWN CLOSURE

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS

Req #

EMS

	Method		
Temp	Metho	Cond.	Method:
pH	Method	Turb. ☐T ☐M ☐L ☐C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: Subdom:

D95: D (cm): Morph:

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	251	2251

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The area that the stream should have been in was walked for approximately 250 m and no channel was found.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
3	103P.070	1000	2000

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 97

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1000 **Reach #** 3

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2000	103P.070	2000		100	HC	V4	☐

Date 1998/09/16 **Time** 10:30 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.9	1.1	1.6	0.8	1.2	1.0				
Wetted Width (m)	T	0.0	0.0	0.0	0.0	0.0	0.0				
Pool Depth (m)	MS	0.00	0.00	0.00	0.00	0.00	0.00				

	grad	grad	method
Method I	1.0		C
Method II			C

Wb Depth .2 .2 .2 **Method** MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ **Intermittent** ☒

Dw ☐ **Tribs.** ☐

COVER

	Total		A			
SWD	LWD	B	C	DP	OV	IV
S	T	N	N	N	D	S

CROWN CLOSURE

3 41-70%

LWD F

DIST E

LB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

RB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☐ A ☒ M ☒ V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS

NONE **Method** GE

Temp **Metho** T3

pH **Method** FD

Req #

EMS

Cond. **Method:** S4

Turb. ☐ T ☐ M ☐ L ☐ C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** F **Subdom:**

D95: 0.1 **D (cm):** 0.1 **Morph:** RP

Pattern SI

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling DC

Confinement UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
3	103P.070	1000	2000

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	none
Rearing Habitat	very marginal quality
Spawning Habitat	none

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	2	STD	D	channel
R 1	F	3	STD	U	channel

WILDLIFE

COMMENT

Section	Comments
CHANNEL	almost undistinguishable at the road crossing but walking downstream to the block edge the channel became more defined (Dry the length though).
MORPHOLOGY	Airphoto and map analysis did not show barrier evidence between the lake and the block. Barrier presence between lake and Kispiox River is unknown but fish were observed in lake.
CHANNEL	Class: S4

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1001	2001

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 96

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.069 **ILP #** 1001 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2001	103P.069	2001		120	HC	V4	☐

Date 1998/11/16 **Time** 13:18 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.6	0.4	0.7	0.4	0.7	0.5				
Wetted Width (m)	T	0.0	0.0	0.0	0.0	0.0	0.0				
Pool Depth (m)	MS	0.00	0.00	0.00	0.00	0.00	0.00				

	grad	grad	method
Method I	2.0		C
Method II			C

Wb Depth .1 .1 .1 **Method** MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ **Intermittent** ☒

Dw ☐ **Tribs.** ☐

COVER	Total	M
SWD LWD B C DP OV IV	3	41-70%
S N N N N D N		

LWD N

DIST

LB SHP V

Texture ☒F ☐G ☐C ☐B ☐R ☐A

RB SHP V

Texture ☒F ☐G ☐C ☐B ☐R ☐A

CROWN CLOSURE

INTREAM VEG ☐N ☐A ☐M ☒V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

NONE **Method** GE

Temp **Metho** T3

pH **Method** FD

Req #

EMS

Cond. **Method:** S4

Turb. ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** G **Subdom:** C

D95: 10 **D (cm):** 5 **Morph:** RP

Pattern SI

Islands N

Bars ☒N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling CO

Confinement NA

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1001	2001

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	None
Rearing Habitat	Poor
Spawning Habitat	None

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	6	STD	U	Culvert at Mitten Mainline.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	Above the Mitten Mainline there is a barely discernable channel and downstream of the road there is some fluvial material present. The defined channel disappears beyond that. In its present condition this is not a fish stream.
MORPHOLOGY	There is no access to the Kispiox River, possibly due to road impacts.
CHANNEL	Class:S6-(bordering on "not a stream" status, but probably due to anthropogenic impacts.
COVER	d/s of road is shrubby riparian veg.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1002	2002

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish

Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name:

Local Name: Mitten-Block 96

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map#: 103P.069 ILP #: 1002 Reach #: 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2002	103P.070	2002		100	HC	V4	☐

Date: 1998/09/16 Time: 13:49 Agency: C172 Crew: MLP/BLW Incomplete ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width
Channel Width (m)										
Wetted Width (m)										
Pool Depth (m)										

	grad	grad	method
Method I			
Method II			

Wb Depth Method: MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ Intermittent ☐

Dw ☐ Tribs. ☐

COVER Total

SWD LWD B C DP OV IV

CROWN CLOSURE

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS

Req #

Method

EMS

Temp Metho

Cond. Method:

pH Method

Turb. ☐T ☐M ☐L ☐C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: Subdom:

D95: D (cm): Morph:

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1002	2002

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The location of the mapped stream was found yet there was no channel.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1003	2003

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 95

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.069 **ILP #** 1003 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2003	103P.069	2003		100	HC	V4	☐

Date 1998/09/16 **Time** 14:28 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.6	0.4	0.7	0.9	1.1	1.0				
Wetted Width (m)	T	0.4	0.1	0.6	0.4	0.5	0.4				
Pool Depth (m)	MS	0.02	0.08	0.06	0.02	0.03	0.06				

	grad	grad	method
Method I	5.0	23.0	C
Method II			C

Wb Depth .1 .1 .1 **Method** MS

Stage ☐L ☒M ☐H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER

		Total		M		
SWD	LWD	B	C	DP	OV	IV
D	S	N	S	N	D	N

CROWN CLOSURE 1 1-20%

LWD F

DIST E

LB SHP S

Texture ☐F ☒G ☐C ☐B ☐R ☐A

RB SHP S

Texture ☐F ☒G ☐C ☐B ☐R ☐A

INTREAM VEG ☒N ☐A ☐M ☐V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

NONE Method GE

Temp 12 **Metho** T3

pH 7.6 Method FD

Req #

EMS

Cond. 180 **Method:** S4

Turb. ☐T ☐M ☐L ☒C **Method:** GE

MORPHOLOGY

BED MATERIAL Dominant: G Subdom: C

D95: 15 D (cm): 5 Morph: RP

Pattern SI

Islands N

Bars ☐N ☒SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling PC

Confinement FC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1003	2003

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
Cover	Moderate cover.
OverWinter Habitat	No overwintering habitat yet the stream is adjacent to Beaverlodge Creek which has overwintering habitat.
Rearing Habitat	Moderate rearing habitat.
Spawning Habitat	Poor quality. Limited gravels suitable for spawning.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	7	STD	D	With Bryan.
R 1	F	8	STD	U	A >20% slope.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The End of Fish Use is located at the road ~60m u/s from Beaverlodge Creek (S4/S6 boundary). The stream upstream of the road is >20% and there is a >30% barrier. No fisheries values exist upstream of the road.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1004	2004

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 95

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.069 **ILP #** 1004 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2004	103P.069	2004		120	HC	V4	☒

Date 1998/09/16 **Time** 15:20 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.8	0.9	0.4	1.0	1.2	0.8				
Wetted Width (m)	T	0.8	1.9	0.4	1.0	1.2	0.8				
Pool Depth (m)	MS	0.08	0.06	0.04	0.04	0.02	0.04				

	grad	grad	method
Method I	2.0	2.0	C
Method II			C

Wb Depth .2 .2 .1 **Method** MS

Stage ☐L ☒M ☐H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	N	N	S	N	D	N

CROWN CLOSURE 4 71-90%

LWD N

DIST NA

LB SHP S

Texture ☒F ☐G ☐C ☐B ☐R ☐A

RB SHP S

Texture ☒F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☒M ☐V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS NONE **Method** GE

Temp 8 **Metho** T3

pH 7.9 **Method** FD

Req #

EMS

Cond. 100 **Method:** S4

Turb. ☐T ☐M ☐L ☒C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** F **Subdom:** NA

D95: 10 **D (cm):** 1 **Morph:** RP

Pattern SI

Islands N

Bars ☒N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling DC

Confinement UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1004	2004

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	None. Too shallow.
Rearing Habitat	Fair-abundant cover available.
Spawning Habitat	None observed.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	9	STD	U	Channel at spot where DV were captured.
R 1	F	10	STD	U	Channel at spot where DV were captured (w/spot af).
R 1	F	11	STD	D	Michelle on left bank writing.

WILDLIFE

Group	Observations
INV	Unidentified insects in water.

COMMENT

Section	Comments
CHANNEL	DV were caught downstream of the road. Upstream of the road the stream is 4 channels along the edge of the block before the end of fish use at gradient break. A management zone upstream should protect the downstream values.

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
1	103P.069	1004

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: **Local:** Mitten-Block 95

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 **Lake/Stream:** S

Waterbody ID: **ILP Map #:** 103P.069 **ILP #:** 1004

Project ID: 06-KISP-430000001-1998 **Reach #:** 1

Fish Permit #: 34770-20 **Date:** 1998/09/16 **To:** 1998/09/16 **Agency** C172 **Crew:** BLW/MLP **Resample:** ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2004	103P.069	2004		EF 1	8.0		C	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2004	EF 1	1	1998/09/16	15:20	1998/09/16	15:25	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2004	EF 1	1	O	53	100.0	1.0	500	85	5	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)		FishAct	Comment
2004	EF 1	1	DV	J		2	40	45	R	caught downstream of road

INDIVIDUAL FISH DATA

Site#	MTD/NO	H/P	Species	Length	Weight	Sex	Mat	Age Str/Smpl#/Age	Vch#	Genetic Str/Smpl#	Roll #	Frame#	Comment
2004	EF 1	1	DV	40		U	U						
2004	EF 1	1	DV	45		U	U						

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1005	2005

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 95

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.069 **ILP #** 1005 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2005	103P.069	2005		100	HC	V4	☐

Date 1998/09/16 **Time** 15:45 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	1.7	1.5	1.3	1.6	1.7	1.4	1.3	1.4	1.4	0.9
Wetted Width (m)	T	1.7	1.4	1.1	1.3	1.1	0.6	1.7	1.4	1.4	1.4
Pool Depth (m)	MS	0.38	0.21	0.17	0.20	0.30	0.24				

	grad	grad	method
Method I	2.0	2.0	C
Method II			C

Wb Depth .4 .4 .3 Method MS

Stage ☐ L ☒ M ☐ H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER

	Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	T	N	N	S	N

CROWN CLOSURE 3 41-70%

LWD A

DIST E

LB SHP V

Texture ☒ F ☐ G ☒ C ☐ B ☐ R ☐ A

RB SHP V

Texture ☒ F ☐ G ☒ C ☐ B ☐ R ☐ A

INTREAM VEG ☒ N ☐ A ☐ M ☐ V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS

NONE Method GE

Temp 8 Metho T3

pH 8.1 Method FD

Req #

EMS

Cond. 100 Method: S4

Turb. ☐ T ☐ M ☐ L ☒ C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: G

D95: 25 D (cm): 10 Morph: RP

Pattern SI

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling PC

Confinement CO

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1005	2005

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	The stream is too small.
Rearing Habitat	Nice cover.
Spawning Habitat	Substrate is sharply angular.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	12	STD	D	Showing channel with LWD across banks.
R 1	F	13	STD	U	Michelle on left bank writing.

WILDLIFE

COMMENT

Section	Comments
SITE CARD	Fish found at Site 2004 which is an upstream tributary to this creek.
CHANNEL	The creek is S4 along the block boundary (close to an S3). Extra width measurements-1.1, 1.0 and 0.8.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1006	2006

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 74

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1006 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2006	103P.070	2006		1600	HC	V4	☒

Date 1998/09/17 **Time** 12:00 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	1.2	1.7	2.0	0.7	1.0	0.9				
Wetted Width (m)	T	1.0	1.0	1.8	0.7	1.0	0.9				
Pool Depth (m)	MS	0.10	0.05	0.09	0.11	0.10	0.16				

	grad	grad	method
Method I	5.0	24.0	C
Method II	30.0		C

Wb Depth .4 .4 .4 Method MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER

SWD	LWD	B	C	Total DP	OV	M IV
S	T	N	T	N	D	N

CROWN CLOSURE 5 >90%

LWD F

DIST E

LB SHP V

Texture ☒ F ☐ G ☒ C ☐ B ☐ R ☐ A

RB SHP V

Texture ☒ F ☐ G ☒ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☐ A ☒ M ☐ V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

GRAVEL DISPLACED Method GE

Temp 8 Metho T3

pH 8.0 Method FD

Req #

EMS

Cond. 30 Method: S4

Turb. ☐ T ☐ M ☐ L ☒ C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: G

D95: 45 D (cm): 20 Morph: RP

Pattern SI

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling PC

Confinement OC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☒	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1006	2006

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

NID Map	NID	Type	Hgt	Method	Lg	Method	Comments
103P.070	9500	C	40.0	HC	40	HC	40 m cascade

Photo R	Photo F	UTM (Zone/East/North)	Method

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor. Too shallow.
Rearing Habitat	Good quality habitat above the gradient.
Spawning Habitat	Poor. The substrate is very angular and mostly too large.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	14	STD	U	Channel at base of steep gradient section upstream of Corral confluence.
R 1	F	15	STD	D	Immediately downstream of the road crossing.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	Nice, clearly defined stream alongside the block. D/S gradient is 30% and no fish were caught.
CHANNEL	Class:S6

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
1	103P.070	1006

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Ironside-Block 74

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 103P.070 ILP #: 1006

Project ID: 06-KISP-430000001-1998 Reach #: 1

Fish Permit #: 34770-20 Date: 1998/09/16 To: 1998/09/16 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2006	103P.070	2006		EF 1	8.0	30	C	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2006	EF 1	1	1998/09/16	12:00	1998/09/16	12:54	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2006	EF 1	1	O	303	1600.0	1.0	500	70	5	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)	FishAct	Comment
2006	EF 1	1	NFC			0			

INDIVIDUAL FISH DATA

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1007	2007

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 73

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1007 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2007	103P.070	2007		200	HC	V4	☒

Date 1998/09/17 **Time** 13:30 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	2.4	2.6	1.5	1.7	2.1	2.1				
Wetted Width (m)	T	1.2	1.3	1.5	1.7	1.9	1.9				
Pool Depth (m)	MS	0.21	0.31	0.09	0.15	0.20	0.15				

	grad	grad	method
Method I	6.0	9.0	C
Method II			C

Wb Depth .3 .4 .3 **Method** MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	S	N	T	D	T

CROWN CLOSURE 4 71-90%

LWD A

DIST E

LB SHP V

Texture ☒ F ☐ G ☒ C ☐ B ☐ R ☐ A

RB SHP V

Texture ☒ F ☐ G ☒ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☐ A ☒ M ☐ V

RIP C

STG MF

RIP S

STG SHR

WATER

FLOOD SIGNS

Req #

EMS

		Method	GE		
Temp	8	Metho	T3	Cond. 20	Method: S4
pH	8.2	Method	FD	Turb. ☐ T ☐ M ☐ L ☒ C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: G

D95: 39 **D (cm):** 10 **Morph:** RP

Pattern SI

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling PC

Confinement FC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1007	2007

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

NID Map	NID	Type	Hgt	Method	Lg	Method	Comments
103P.070	3000	C	10.0	HC	15	HC	Barrier upstream from Corral confluence.

Photo R	Photo F	UTM (Zone/East/North)	Method

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Too shallow.
Rearing Habitat	Good quality. Nice cover available with some shallow pools.
Spawning Habitat	Moderate quality. Gravel observed.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	16	STD	U	Chute barrier downstream of Block 73 w/anode pole in left corner of frame.
R 2	F	1	STD	D	Pool habitat in channel.
R 2	F	2	STD	U	Channel with abundant overstream vegetation.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	Creek runs along the west edge of the block. Stream is S6.
CHANNEL	200m from mouth is the NID 3000 barrier (based on map analysis).

FDIS Fish Form

Reach #	ILP Map #	ILP #
1	103P.070	1007

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: **Local:** Ironside-Block 73

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 **Lake/Stream:** S

Waterbody ID: **ILP Map #:** 103P.070 **ILP #:** 1007

Project ID: 06-KISP-430000001-1998 **Reach #:** 1

Fish Permit #: 34770-20 **Date:** 1998/09/17 **To:** 1998/09/17 **Agency** C172 **Crew:** BLW/MLP **Resample:** ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2007	103P.070	2007		EF 1	8.0	20	C	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2007	EF 1	1	1998/09/17	14:22	1998/09/17	15:46	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2007	EF 1	1	O	319	400.0	2.0	400	70	6	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)	FishAct	Comment
2007	EF 1	1	NFC			0			

INDIVIDUAL FISH DATA

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
2	103P.070	1007	22007

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 74

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1007 **Reach #** 2

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
22007	103P.070	22007		800	HC	V4	☐

Date 1998/09/17 **Time** 13:30 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.8	1.2	1.3	1.3	1.0	0.9				
Wetted Width (m)	T	0.8	1.0	1.2	1.3	0.9	0.8				
Pool Depth (m)	MS	0.20	0.30	0.15	0.17	0.08	0.21				

	grad	grad	method
Method I	16.0		C
Method II			C

Wb Depth .4 .4 .4 **Method** MS

Stage ☐L ☒M ☐H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	N	N	N	D	N

CROWN CLOSURE 4 71-90%

LWD A

DIST E

LB SHP V

Texture ☒F ☐G ☒C ☐B ☐R ☐A

RB SHP V

Texture ☒F ☐G ☒C ☐B ☐R ☐A

INTREAM VEG ☒N ☐A ☐M ☐V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

Req #

EMS

		Method	GE		
Temp	8	Metho	T3	Cond. 20	Method: S4
pH	7.3	Method	FD	Turb. ☐T ☐M ☐L ☒C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: G

D95: 13 **D (cm):** 13 **Morph:** RP

Pattern SI

Islands N

Bars ☐N ☒SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling CO

Confinement FC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
2	103P.070	1007	22007

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor habitat. Too shallow.
Rearing Habitat	Good quality habitat.
Spawning Habitat	Moderate habitat due to steep gradient.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	18	STD	U	Channel from road crossing.

WILDLIFE

COMMENT

Section	Comments
SITE CARD	No fish form because all shocking was conducted downstream along Block 73.
MORPHOLOGY	NID 3000 (see site 2007) = d/s barrier
CHANNEL	Class: S6

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1009	2009

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 74

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1009 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2009	103P.070	2009		800	HC	V4	☒

Date 1998/09/17 **Time** 17:00 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.6	0.7	0.6	0.9	0.7	0.7				
Wetted Width (m)	T	0.0	0.0	0.0	0.0	0.0	0.0				
Pool Depth (m)	MS	0.00	0.00	0.00	0.00	0.00	0.00				

	grad	grad	method
Method I	14.0	10.0	C
Method II			C

Wb Depth 1 .2 .1 **Method** MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ **Intermittent** ☒

Dw ☐ **Tribs.** ☐

COVER **Total** A

SWD	LWD	B	C	DP	OV	IV
S	T	N	N	N	D	T

CROWN CLOSURE

4 71-90%

LWD F

DIST E

LB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

RB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☐ A ☐ M ☒ V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

Req #

EMS

	Method	GE		
Temp	Metho	T3	Cond.	Method: S4
pH	Method	FD	Turb. ☐ T ☐ M ☐ L ☐ C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: F Subdom: C

D95: 10 **D (cm):** 10 **Morph:** RP

Pattern SI

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling PC

Confinement OC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1009	2009

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	None available.
Rearing Habitat	None available.
Spawning Habitat	None available.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	17	STD	U	Channel from the road crossing.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	There was little/no flowing water in the channel but the fine substrate is moist in many places.
WATER	Some standing water is present. There is no fish habitat present.
CHANNEL	Nothing shockable present.
CHANNEL	Class: S6

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1010	2010

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 94

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1010 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2010	103P.069	2010		100	HC	V4	☒

Date 1998/09/18 **Time** 12:32 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.4	0.7	0.3	0.7	0.5	0.6				
Wetted Width (m)	T	0.4	0.5	0.0	0.3	0.5	0.0				
Pool Depth (m)	MS	0.00	0.00	0.00	0.00	0.00	0.00				

	grad	grad	method
Method I	2.0	2.0	C
Method II			C

Wb Depth .1 .1 .1 Method MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	N	N	T	D	S

CROWN CLOSURE 4 71-90%

LWD F

DIST E

LB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

RB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☒ A ☒ M ☐ V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

NONE Method GE

Temp 8 Metho T3

pH 0.0 Method FD

Req #

EMS

Cond. Method: S4

Turb. ☐ T ☐ M ☒ L ☐ C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: G Subdom: C

D95: 15 D (cm): 3 Morph: RP

Pattern SI

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling DC

Confinement UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1010	2010

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

NID Map	NID	Type	Hgt	Method	Lg	Method	Comments
103P.069	3001	C	6.0	GE	6	GE	Barriea downstream on LP 1010 and 1011

Photo		UTM (Zone/East/North)	Method
R	F		

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
Rearing Habitat	Moderate habitat due to abundant cover but little water.
Spawning Habitat	Poor habitat. Lots of algea.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	19	STD	U	N3001-barrier cascade located 300m downstream of Block 94.
R 1	F	20	STD	U	N3001-barrier cascade located 300m downstream of Block 94.
R 1	F	21	STD	U	N3001-barrier cascade located 300m downstream of Block 94.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The channel is minimal within the block (devils club-wet area).
WATER	Minimal flows-standing water present and dry sections. Outside of the block in an existing cutblock the channel is more defined and habitat value increases.
MORPHOLOGY	Downstream from the block the channel is entrentched.
CHANNEL	Class: S6

FDIS Fish Form

Reach #	ILP Map #	ILP #
1	103P.069	1010

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Mitten-Block 94

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 103P.069 ILP #: 1010

Project ID: 06-KISP-430000001-1998 Reach #: 1

Fish Permit #: 34770-20 Date: 1998/09/18 To: 1998/09/18 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2010	103P.069	2010		EF 1	8.0		L	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2010	EF 1	1	1998/09/18	12:32	1998/09/18	13:05	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2010	EF 1	1	O	247	300.0	0.6	400	60	5	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)	FishAct	Comment
2010	EF 1	1	NFC			0			

INDIVIDUAL FISH DATA

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1011	2011

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 94

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.069 **ILP #** 1011 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2011	103P.069	2011		100	HC	V4	☐

Date 1998/09/18 **Time** 13:30 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.5	0.7	1.4	0.7	1.2	0.6				
Wetted Width (m)	T	0.5	0.7	1.4	0.7	1.0	0.5				
Pool Depth (m)	MS	0.10	0.07	0.15	0.05						

	grad	grad	method
Method I	4.0	3.0	C
Method II			C

Wb Depth .2 .2 .2 Method MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	N	N	N	D	N

CROWN CLOSURE 3 41-70%

LWD F

DIST E

LB SHP V

Texture ☒F ☐G ☒C ☐B ☐R ☐A

RB SHP V

Texture ☒F ☐G ☒C ☐B ☐R ☐A

INTREAM VEG ☒N ☐A ☐M ☐V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

Temp 8

pH

Method GE

Metho T3

Method FD

Req #

EMS

Cond. Method: S4

Turb. ☐T ☐M ☐L ☒C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: G

D95: 15 D (cm): 5 Morph: RP

Pattern SI

Islands N

Bars ☒N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling CO

Confinement CO

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.069	1011	2011

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Too shallow.
Rearing Habitat	Good cover and moderate to low flow.
Spawning Habitat	Poor habitat.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 1	F	22	STD	D	Channel from road crossing with boulder in centre of frame.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	This stream converges with ilp 1010 within the block. N3001 is a barrier cascade which is located 300m downstream of the block on LP 1010.
WATER	No electrofishing was conducted in LP 1011.
CHANNEL	Class: S6

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1013	2013

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 79

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1013 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2013	103P.070	2013		2013	HC	V4	☐

Date 1998/09/23 **Time** 10:30 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)											
Wetted Width (m)											
Pool Depth (m)											

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER **Total**

SWD	LWD	B	C	DP	OV	IV

CROWN CLOSURE

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS

Req #

Method

EMS

Temp **Metho**

Cond. **Method:**

pH **Method**

Turb. ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** **Subdom:**

D95: **D (cm):** **Morph:**

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1013	2013

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The Bridge Main crosses the channel location along the edge of Block 79. No channel was present after searching 200 m of roadside.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
4	103P.051	1014	2014

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish

Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name:

Local Name: Cullon-Block 79

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map#: 103P.051 ILP #: 1014 Reach #: 4

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2014	103P.070	2014		100	HC	V4	☒

Date: 1998/09/23 Time: 11:30 Agency: C172 Crew: MLP/BLW Incomplete: ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	2.4	2.9	2.7	2.7	3.1	2.1				
Wetted Width (m)	T	2.0	1.8	2.1	2.0	2.0	1.7				
Pool Depth (m)	MS	0.10	0.12	0.08	0.07	0.06	0.05				

	grad	grad	method
Method I	0.5	1.0	C
Method II			C

Wb Depth .2 .2 2 Method MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER				Total		M
SWD	LWD	B	C	DP	OV	IV
S	S	N	N	N	D	T

CROWN CLOSURE: 1 1-20%

LWD A

DIST E

LB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

RB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☒ A ☒ M ☒ V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS: NONE Method: GE

Temp: 9 Metho: T3

pH: 8.9 Method: FD

Req #:

EMS:

Cond.: 20 Method: S4

Turb. ☐ T ☐ M ☒ L ☐ C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: F

D95: 17 D (cm): 5 Morph: RP

Pattern: SI

Islands: N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling: DC

Confinement: UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☒	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
4	103P.051	1014	2014

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor-too shallow in channel-lake and beaver impoundment accessible.
Rearing Habitat	Good-low gradient with quality cover.
Spawning Habitat	Poor-no gravel.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	10	STD	NS	CT captured at lake outlet.
R 2	F	11	STD	D	Channel.
R 2	F	12	STD	U	Head of creek.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	This stream is shown on FDP map as being in an uncut section of the block. S3 classification

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
4	103P.070	1014

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Cullon-Block 79

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 103P.070 ILP #: 1014

Project ID: 06-KISP-430000001-1998 Reach #: 4

Fish Permit #: 34770-20 Date: 1998/09/23 To: 1998/09/23 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2014	103P.070	2014		EF 1	9.0	20	L	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2014	EF 1	1	1998/09/23	11:30	1998/09/23	11:40	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2014	EF 1	1	O	114	60.0	2.0	400	70	6	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)		FishAct	Comment
2014	EF 1	1	CT	J		1	83	83	R	

INDIVIDUAL FISH DATA

Site#	MTD/NO	H/P	Species	Length	Weight	Sex	Mat	Age Str/Smpl#/Age	Vch#	Genetic Str/Smpl#	Roll #	Frame#	Comment
2014	EF 1	1	CT	83		U	U				2	10	

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1015	2015

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 79

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1015 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2015	103P.070	2015		200	HC	V4	☐

Date 1998/09/23 **Time** 12:01 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.8	0.5	0.8	0.8	0.7	0.8				
Wetted Width (m)	T	0.8	0.5	0.0	0.7	0.7	0.7				
Pool Depth (m)	MS	0.00	0.00	0.00	0.00	0.00	0.00				

	grad	grad	method
Method I	0.5	0.5	C
Method II			C

Wb Depth .1 .1 .1 Method MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER

SWD	LWD	B	C	Total DP	OV	A IV
S	S	N	N	N	D	S

CROWN CLOSURE 3 41-70%

LWD F

DIST E

LB SHP S

Texture ☒F ☐G ☐C ☐B ☐R ☐A

RB SHP S

Texture ☒F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☒A ☒M ☒V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS

Req #

Method GE

EMS

Temp 8 Metho T3 Cond. 40 Method: S4

pH 8.2 Method FD Turb. ☐T ☐M ☒L ☐C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: F Subdom: C

D95: 10 D (cm): 2 Morph: RP

Pattern IR

Islands N

Bars ☒N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling DC

Confinement UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1015	2015

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor-too shallow.
Rearing Habitat	Poor-non-continuous of stagnant water.
Spawning Habitat	Poor-no gravel observed.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	13	STD	D	Skunk cabbage.
R 2	F	14	STD	U	

WILDLIFE

COMMENT

Section	Comments
CHANNEL	Very low gradient-swampy with little or no habitat quality but fish have access for 150m from the beaver pond/lake.
CHANNEL	S4-NCD break was blazed on a small maple 150m u/s of the lake.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1016	2016

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 78

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1016 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2016	103P.070	2016		200	HC	V4	☐

Date 1998/09/23 **Time** 13:42 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.8	1.0	0.6	0.5	0.7	0.7				
Wetted Width (m)	T	0.0	0.0	0.0	0.0	0.0	0.0				
Pool Depth (m)	MS	0.05	0.04	0.04	0.03	0.04	0.04				

	grad	grad	method
Method I	4.0	3.0	C
Method II			C

Wb Depth .1 .1 .1 **Method** MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ **Intermittent** ☒

Dw ☐ **Tribs.** ☐

COVER **Total** M

SWD	LWD	B	C	DP	OV	IV
T	S	T	D	N	S	N

CROWN CLOSURE 3 41-70%

LWD F

DIST E

LB SHP S

Texture ☒F ☐G ☐C ☐B ☐R ☐A

RB SHP S

Texture ☒F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☒M ☐V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

NONE

Temp

pH

Method GE

Metho T3

Method FD

Req #

EMS

Cond. **Method:** S4

Turb. ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL Dominant: F Subdom: C

D95: 10 D (cm): 4 Morph: RP

Pattern SI

Islands N

Bars ☒N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling DC

Confinement UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	1016	2016

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
Cover	Moderate.
OverWinter Habitat	Poor.
Rearing Habitat	Moderate-small obstructions limiting rearing values.
Spawning Habitat	Poor-no spawning values.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	15	STD	D	
R 2	F	16	STD	U	Small obstructions.

WILDLIFE

Group	Observations
MAM	Squirrel in tree.

COMMENT

Section	Comments
CHANNEL	Poor habitat quality. No spawning with some rearing. End of fish use (S4/S6 break) is 200m upstream from lake.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1017	2017

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 81

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 93M.061 **ILP #** 1017 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2017	93M.061	2017		100	HC	V4	☐

Date 1998/09/24 **Time** 10:00 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)											
Wetted Width (m)											
Pool Depth (m)											

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER				Total		
SWD	LWD	B	C	DP	OV	IV

CROWN CLOSURE

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS **Req #**

Method **EMS**

Temp **Metho** **Cond.** **Method:**

pH **Method** **Turb.** ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** **Subdom:**

D95: **D (cm):** **Morph:**

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1017	2017

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The hillside was searched for over 300 m for the channel.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1018	2018

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 81

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 93M.061 **ILP #** 1018 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2018	93M.061	2018		100	HC	V4	☐

Date 1998/09/24 **Time** 10:30 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)											
Wetted Width (m)											
Pool Depth (m)											

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER **Total**

SWD	LWD	B	C	DP	OV	IV

CROWN CLOSURE

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS **Req #**

Method **EMS**

Temp **Metho** **Cond.** **Method:**

pH **Method** **Turb.** ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** **Subdom:**

D95: **D (cm):** **Morph:**

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1018	2018

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The mapped location of the stream was found yet there was no channel present.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1019	2019

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 81

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 93M.061 **ILP #** 1019 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2019	93M.061	2019		140	HC	V4	☒

Date 1998/09/24 **Time** 11:30 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	1.4	0.8	0.6	1.1	1.3	1.1				
Wetted Width (m)	T	0.0	0.0	0.6	0.0	0.0	0.3				
Pool Depth (m)	MS	0.12	0.14	0.08	0.07	0.10	0.05				

	grad	grad	method
Method I	4.0	5.0	C
Method II			C

Wb Depth .1 .2 1 Method MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
T	S	N	N	N	D	T

CROWN CLOSURE 2 21-40%

LWD A

DIST E

LB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

RB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☐ A ☒ M ☐ V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

Req #

		Method	GE	EMS		
Temp	8	Metho	T3	Cond.	40	Method: S4
pH	8.9	Method	FD	Turb. ☐ T ☒ M ☐ L ☐ C		Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: F

D95: 15 D (cm): 5 Morph: RP

Pattern SI

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling PC

Confinement OC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1019	2019

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Too shallow.
Rearing Habitat	Moderate-Minimal pool/holding type habitat present.
Spawning Habitat	No gravel observed.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	21	STD	D	Downstream from road.
R 2	F	22	STD	U	Showing small channel upstream of road.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The channel is presently mostly dry except for a wide pool section present downstream of the road. This pool habitat was shocked.
CHANNEL	The channel is discontinuous in sections. Stream class-S6.
CHANNEL	U/s of the road the habitat deteriorates even more.

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
1	93M.061	1019

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Cullon-Block 81

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 93M.061 ILP #: 1019

Project ID: 06-KISP-430000001-1998 Reach #: 1

Fish Permit #: 34770-20 Date: 1998/09/24 To: 1998/09/24 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2019	93M.061	2019		EF 1	8.0	20	M	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2019	EF 1	1	1998/09/24	11:30	1998/09/24	11:49	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2019	EF 1	1	O	200	50.0	5.0	400	60	5	SMITH ROOT	12B

FISH SUMMARY

INDIVIDUAL FISH DATA

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1020	2020

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 81

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 93M.061 **ILP #** 1020 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2020	93M.061	2020		100	HC	V4	☐

Date 1998/09/24 **Time** 11:10 **Agency** C172 **Crew** MLP/BLW **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)											
Wetted Width (m)											
Pool Depth (m)											

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER **Total**

SWD	LWD	B	C	DP	OV	IV

CROWN CLOSURE

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS **Req #**

Method **EMS**

Temp **Metho** **Cond.** **Method:**

pH **Method** **Turb.** ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** **Subdom:**

D95: **D (cm):** **Morph:**

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	93M.061	1020	2020

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	19	STD	U	
R 2	F	20	STD	D	Log and devils club.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The mapped location of the stream was found yet there was no channel present.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
4	103P.070	1021	2021

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Cullon-Block 80

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 1021 **Reach #** 4

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2021	103P.070	2021		120	HC	V4	☒

Date 1998/09/24 **Time** 13:10 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.8	1.1	0.8	0.9	0.8	0.8				
Wetted Width (m)	T	0.3	0.7	0.5	0.3	0.7	0.3				
Pool Depth (m)	MS	0.05	0.09	0.10	0.05	0.10	0.09				

	grad	grad	method
Method I	2.0	1.0	C
Method II			C

Wb Depth .1 .2 1 Method MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ Intermittent ☐

Dw ☐ Tribs. ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	N	S	N	D	N

CROWN CLOSURE 2 21-40%

LWD F

DIST E

LB SHP V

Texture ☐ F ☒ G ☐ C ☐ B ☐ R ☐ A

RB SHP V

Texture ☐ F ☒ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☒ N ☐ A ☐ M ☐ V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

Req #

Method GE

EMS

Temp 8 Metho T3 Cond. 80 Method: S4

pH 7.3 Method FD Turb. ☐ T ☐ M ☐ L ☒ C Method: GE

MORPHOLOGY

BED MATERIAL Dominant: G Subdom: C

D95: 20 D (cm): 5 Morph: RP

Pattern SI

Islands N

Bars ☐ N ☐ SIDE ☒ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling CO

Confinement FC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
4	103P.070	1021	2021

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor-too shallow.
Rearing Habitat	Good-nice cover present.
Spawning Habitat	Good-gravel present, flows marginal.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	23	STD	U	Channel upstream from road.
R 2	F	24	STD	D	Channel location where CT caught.
R 2	F	222	STD	NS	CT on anode.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	Stream class-S4.

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
4	93M.061	1021

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Cullon- Block 80

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 93M.061 ILP #: 1021

Project ID: 06-KISP-430000001-1998 Reach #: 4

Fish Permit #: 34770-20 Date: 1998/09/24 To: 1998/09/24 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2021	93M.061	2021		EF 1	8.0	80	C	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2021	EF 1	1	1998/09/24	13:05	1998/09/24	13:10	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2021	EF 1	1	O	10	5.0	1.0	400	60	5	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)		FishAct	Comment
2021	EF 1	1	CT	J		1	45	45	R	

INDIVIDUAL FISH DATA

Site#	MTD/NO	H/P	Species	Length	Weight	Sex	Mat	Age Str/Smpl#/Age	Vch#	Genetic Str/Smpl#	Roll #	Frame#	Comment
2021	EF 1	1	CT	45		U	U				2	22	

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
3	103P.078	1030	2030

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Nangeese-Block 1

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.078 **ILP #** 1030 **Reach #** 3

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2030	103P.078	2030		300	HC	V4	☒

Date 1998/09/25 **Time** 09:52 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.6	0.5	0.6	0.6	0.9	0.4				
Wetted Width (m)	T	0.4	0.5	0.4	0.2	0.5	0.3				
Pool Depth (m)	MS	0.06	0.05	0.05	0.07	0.09	0.02				

	grad	grad	method
Method I	2.0		C
Method II			C

Wb Depth .1 .1 .1 **Method** MS

Stage ☒ L ☐ M ☐ H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER

SWD	LWD	B	C	Total DP	OV	A IV
S	S	N	N	N	D	N

CROWN CLOSURE 2 21-40%

LWD A

DIST E

LB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

RB SHP S

Texture ☒ F ☐ G ☐ C ☐ B ☐ R ☐ A

INTREAM VEG ☐ N ☐ A ☒ M ☐ V

RIP C

STG MF

RIP C

STG MF

WATER

FLOOD SIGNS

Req #

EMS

		Method	GE		
Temp	7.5	Metho	T3	Cond. 40	Method: S4
pH	7.2	Method	FD	Turb. ☐ T ☐ M ☒ L ☐ C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: F Subdom: G

D95: 5 **D (cm):** 3 **Morph:** RP

Pattern SI

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Coupling DC

Confinement UN

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
3	103P.078	1030	2030

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Too shallow-lake downstream available.
Rearing Habitat	Moderate-minimal habitat, discontinuous.
Spawning Habitat	Substrate almost entirely fines.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 3	F	1	STD	U	EFU (log accross centre of frame).
R 3	F	2	STD	D	Channel.

WILDLIFE

COMMENT

Section	Comments
WATER	The stream flows into Swordgrass Lake and is beaver impacted at the mouth. No fish were captured while shocking but they were visually observed in the lake (no barriers exist).
SITE CARD	FISS shows RB in Swordgrass lake outlet.
CHANNEL	EFU blazed ~150m u/s of road where channel becomes an NCD.
CHANNEL	Class: S4/S6 break located 150m u/s of road.
WATER	The lake is in close proximity to the Kispiox River.

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
3	103P.078	1030

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Nangeese-Block 1

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 103P.078 ILP #: 1030

Project ID: 06-KISP-430000001-1998 Reach #: 3

Fish Permit #: 34770-20 Date: 1998/09/25 To: 1998/09/25 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
2030	103P.078	2030		EF 1	7.5	40	L	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
2030	EF 1	1	1998/09/25	09:30	1998/09/25	09:35	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
2030	EF 1	1	O	100	50.0	1.0	400	70	5	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)	FishAct	Comment
2030	EF 1	1	NFC			0			

INDIVIDUAL FISH DATA

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
3	103P.069	1145	2012

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Mitten-Block 94

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.069 **ILP #** 1145 **Reach #** 3

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
2012	103P.069	2012		100	HC	V4	☐

Date 1998/09/18 **Time** 15:20 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)											
Wetted Width (m)											
Pool Depth (m)											

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER							Total	CROWN CLOSURE
SWD	LWD	B	C	DP	OV	IV		

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS **Req #**

Method **EMS**

Temp **Metho** **Cond.** **Method:**

pH **Method** **Turb.** ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** **Subdom:**

D95: **D (cm):** **Morph:**

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
3	103P.069	1145	2012

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The block boundary was walked throughout the stream area (200m) and no stream was found.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	11010	22010

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 73

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 11010 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
22010	103P.070	22010		300	HC	V4	☐

Date 1998/09/22 **Time** 13:00 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	1.2	1.8	0.9	0.7	1.3	1.5				
Wetted Width (m)	T	0.2	1.1	0.4	0.5	1.3	1.3				
Pool Depth (m)	MS	0.09	0.10	0.11	0.09	0.00	0.00				

	grad	grad	method
Method I	4.0	5.0	C
Method II			C

Wb Depth .2 .3 .4 **Method** MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	S	T	N	N	D	N

CROWN CLOSURE 3 41-70%

LWD A

DIST E

LB SHP V

Texture ☐F ☐G ☒C ☐B ☐R ☐A

RB SHP V

Texture ☐F ☐G ☒C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☒M ☐V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS

NONE **Method** GE

Temp 8 **Metho** T4

pH 8.1 **Method** FD

Req #

EMS

Cond. 100 **Method:** S4

Turb. ☐T ☐M ☐L ☒C **Method:** GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: B

D95: 31 **D (cm):** 10 **Morph:** RP

Pattern SI

Islands N

Bars ☐N ☐SIDE ☐DIAG ☒MID ☐SPAN ☐BR

Coupling CO

Confinement FC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	11010	22010

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

NID Map	NID	Type	Hgt	Method	Lg	Method	Comments
103P.070	3001	CV	.3	T		HC	

Photo R	Photo F	UTM (Zone/East/North)	Method

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor.Too shallow.
Rearing Habitat	Good. Abundant cover.
Spawning Habitat	Poor. Infrequent patches of gravel observed.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	3	STD	NS	CT shocked immediately downstream of the road.
R 2	F	6	STD	U	Showing perched culvert.
R 2	F	7	STD	D	Channel.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The site is blazed at top road crossing. The culvert at this crossing is perched ~25cm and poses a barrier to juvenile migration.
CHANNEL	Class: S4

FDIS Fish Form

99/02/16

Reach #	ILP Map #	ILP #
1	103P.070	11010

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: Local: Ironside-Block 73

WS Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000 Lake/Stream: S

Waterbody ID: ILP Map #: 103P.070 ILP #: 11010

Project ID: 06-KISP-430000001-1998 Reach #: 1

Fish Permit #: 34770-20 Date: 1998/09/22 To: 1998/09/22 Agency C172 Crew: BLW/MLP Resample: ☐

SITE / METHOD

Site#	NID Map	NID #	UTM:Zone/East/North/Mthd	MTD/NO	Temp	Cond	Turbid	Comment
22010	103P.070	22010		EF 1	8.0	100	C	

A. GEAR SETTINGS

Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time Out	Comment
22010	EF 1	1	1998/09/22	13:04	1998/09/22	13:15	

B. NET/TRAP SPECIFICATIONS

C. ELECTROFISHER SPECIFICATIONS

Site#	MTD/NO	H/P	Encl	Sec	Length	Width	Volt	Freq	Pulse	Make	Model
22010	EF 1	1	O	27	70.0	1.0	400	70	6	SMITH ROOT	12B

FISH SUMMARY

Site#	MTD/NO	H/P	Species	Stage	Age	Total #	Lgth (Min/Max)		FishAct	Comment
22010	EF 1	1	CT	J		1	85	85	R	

INDIVIDUAL FISH DATA

Site#	MTD/NO	H/P	Species	Length	Weight	Sex	Mat	Age Str/Smpl#/Age	Vch#	Genetic Str/Smpl#	Roll #	Frame#	Comment
22010	EF 1	1	CT	85		U	U						

COMMENTS

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	11011	22011

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 73

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 11011 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
22011	103P.070	22011		150	HC	V4	☐

Date 1998/09/22 **Time** 13:46 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width	width
Channel Width (m)	T	0.7	0.5	1.1	1.1	1.0	0.9				
Wetted Width (m)	T	0.0	0.5	0.8	0.0	1.0	0.0				
Pool Depth (m)	MS	0.00	0.00	0.00	0.00	0.00	0.00				

	grad	grad	method
Method I	3.0	1.0	C
Method II			C

Wb Depth .2 .3 .2 Method MS

Stage ☒L ☐M ☐H

No Vis.Ch. ☐ Intermittent ☒

Dw ☐ Tribs. ☐

COVER				Total		A
SWD	LWD	B	C	DP	OV	IV
S	T	T	T	N	D	S

CROWN CLOSURE 4 71-90%

LWD F

DIST E

LB SHP V

Texture ☒F ☐G ☐C ☐B ☐R ☐A

RB SHP V

Texture ☒F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☒M ☒V

RIP M

STG MF

RIP M

STG MF

WATER

FLOOD SIGNS

Req #

EMS

		Method	GE		
Temp	9	Metho	T3	Cond. 140	Method: S4
pH	8.3	Method	FD	Turb. ☐T ☐M ☒L ☐C	Method: GE

MORPHOLOGY

BED MATERIAL Dominant: C Subdom: F

D95: 0.3 D (cm): 8 Morph: RP

Pattern SI

Islands N

Bars ☒N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling PC

Confinement FC

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	11011	22011

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

Name	Comments
OverWinter Habitat	Poor. Too shallow.
Rearing Habitat	Moderate. Abundant cover.
Spawning Habitat	Poor. No gravels.

PHOTO DOCUMENTATION

Photo			Foc Lg	Dir	Comments
R 2	F	4	STD	U	Showing end of fish use.
R 2	F	5	STD	D	Showing channel with marginal habitat.

WILDLIFE

COMMENT

Section	Comments
CHANNEL	The stream is a trib to LP1010. The confluence occurs within the block. No barriers exist and the S4-S6 boundary occurs when a continuous channel very marginal habitat. S4-S6 is located within the block.
CHANNEL	The channel is dry except for standing water in the very low gradient sections near the end of fish use.
SITE CARD	150 m upstream of the confluence is the end of fish use.

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	11013	22013

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Gazetted Name **Local Name** Ironside-Block 72

Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map# 103P.070 **ILP #** 11013 **Reach #** 1

Site #	NID Map #	NID #	UTM(Zone/East/North/Method)	Site Lg	Method	Access	Fish Crd?
22013	103P.070	22013		100	HC	V4	☐

Date 1998/09/22 **Time** 15:53 **Agency** C172 **Crew** BLW/MLP **Incomplete** ☐

CHANNEL

	method	width	width	width	width	width	width	width	width	width
Channel Width (m)										
Wetted Width (m)										
Pool Depth (m)										

	grad	grad	method
Method I			
Method II			

Wb Depth **Method** MS

Stage ☐L ☐M ☐H

No Vis.Ch. ☒ **Intermittent** ☐

Dw ☐ **Tribs.** ☐

COVER **Total** **CROWN CLOSURE**

SWD	LWD	B	C	DP	OV	IV

LWD

DIST

LB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

RB SHP

Texture ☐F ☐G ☐C ☐B ☐R ☐A

INTREAM VEG ☐N ☐A ☐M ☐V

RIP

STG

RIP

STG

WATER

FLOOD SIGNS **Req #**

Method **EMS**

Temp **Metho** **Cond.** **Method:**

pH **Method** **Turb.** ☐T ☐M ☐L ☐C **Method:** GE

MORPHOLOGY

BED MATERIAL **Dominant:** **Subdom:**

D95: **D (cm):** **Morph:**

Pattern

Islands

Bars ☐N ☐SIDE ☐DIAG ☐MID ☐SPAN ☐BR

Coupling

Confinement

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

FDIS Site Card

Reach #	ILP Map #	ILP Number	Site
1	103P.070	11013	22013

99/02/12

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

FEATURE

TRIB ☐ SC ☐ FC ☐ SWP/SLG ☐ FL/BV ☐

HABITAT QUALITY

PHOTO DOCUMENTATION

WILDLIFE

COMMENT

Section	Comments
CHANNEL	There is a draw evident at this site with a possible drainage during melt etc. But no true visible channel is present therefore no fish habitat is present.

Appendix III: Reach Cards

FDIS Reach Card

Reach #	ILP Map #	ILP #
4	103P.060	242

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.060	242	4.0	103P.070	388	

Gazetted Name **Local Name** Ironside Creek **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 2.10 **US Elev** 630

DS Elev. 500 **Magnitude** 7

Gradient 6.19 **Order** 3 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-216

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	251

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish

Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	251	1.0	103P.070	407	

Gazetted Name: Local Name: Sample Type: B Wetland: ☐

SURVEY INFO

Date: 1998/08/12 Agency: C172 Crew: BLW/MLP

ATTRIBUTES

Length (km)	.30	US Elev	417	DS Elev.	415
Magnitude		Gradient	0.67	Order	1
BGC Zone	ICH	Setting	VW	Open water	A
Confinement	OC	Coupling	DC	Valley Flat	N C/D
Active Floodplain	Visible ☐ Est. Width:	Channel Pattern	ST		

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands: N

Bars: ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement: L

Riparian Veg.: C

Exposed/Eroded: N

Landuse: NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92093	05-108

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
3	103P.070	1000

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1000	3.0	103P.070	552	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 2.10 **US Elev** 450

DS Elev. 385 **Magnitude**

Gradient 3.1 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	99-102

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.069	1002

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish

Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.069	1002	1.0	103P.069	701	

Gazetted Name: Local Name: Sample Type: B Wetland: ☐

SURVEY INFO

Date: 1998/08/12 Agency: C172 Crew: BLW/MLP

ATTRIBUTES

Length (km)	70	US Elev	500	DISTURBANCE INDICATORS	O1 ☐ B1 ☐ B2 ☐ B3 ☐ D1 ☐ D2 ☐ D3 ☐
DS Elev.	415	Magnitude			C1 ☐ C2 ☐ C3 ☐ C4 ☐ C5 ☐ S1 ☐ S2 ☐ S3 ☐ S4 ☐ S5 ☐
Gradient	12.14	Order	1	BGC Zone	ICH
Setting	VW			Islands	N
Open water	A			Bars	☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR
Confinement	CO			Mass Movement	L
Coupling	DC			Riparian Veg.	C
Valley Flat	N C/D			Exposed/Eroded	N
Active Floodplain	Visible ☐ Est. Width:			Landuse	NO
Channel Pattern	SI				

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	04-106

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.069	1003

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.069	1003	1.0	103P.069	2058	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☒

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 1.20 **US Elev** 640

DS Elev. 470 **Magnitude**

Gradient 14.17 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling PC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.069	1995

AIR PHOTOS

Line	Number
BCB92093	04-106

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.069	1004

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.069	1004	1.0	103P.069	2059	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km)	1.30	US Elev	720		
DS Elev.	490	Magnitude			
Gradient	17.69	Order	1	BGC Zone	ICH
Setting	VW				
Open water	A				
Confinement	CO				
Coupling	DC				
Valley Flat	N	C/D			
Active Floodplain	Visible ☐	Est. Width:			
Channel Pattern	SI				

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.069	1995

AIR PHOTOS

Line	Number
BCB92093	TO 102

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.069	1005

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.069	1005	1.0	103P.069	2060	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km)	.40	US Elev	490	DISTURBANCE INDICATORS	O1 ☐ B1 ☐ B2 ☐ B3 ☐ D1 ☐ D2 ☐ D3 ☐
DS Elev.	470	Magnitude	4		C1 ☐ C2 ☐ C3 ☐ C4 ☐ C5 ☐ S1 ☐ S2 ☐ S3 ☐ S4 ☐ S5 ☐
Gradient	5	Order	2	BGC Zone	ICH
Setting	VW			Islands	N
Open water	A			Bars	☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR
Confinement	CO			Mass Movement	L
Coupling	PC			Riparian Veg.	C
Valley Flat	N	C/D		Exposed/Eroded	N
Active Floodplain	Visible ☐	Est. Width:		Landuse	NO
Channel Pattern	ST				

MAPS

Map Type	Map #	Year
TRIM	103P.069	1995

AIR PHOTOS

Line	Number
BCB92093	05-107

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	1006

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1006	1.0	103P.070	584	

Gazetted Name Local Name Sample Type: B Wetland ☐

SURVEY INFO

Date: 1998/08/12 Agency: C172 Crew: BLW/MLP

ATTRIBUTES

Length (km)	2.70	US Elev	820		
DS Elev.	580	Magnitude	4		
Gradient	8.89	Order	2	BGC Zone	ICH
Setting	VW				
Open water	A				
Confinement	CO				
Coupling	PC				
Valley Flat	N	C/D			
Active Floodplain	Visible ☐	Est. Width:			
Channel Pattern	SI				

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands: N

Bars: ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement: L

Riparian Veg.: C

Exposed/Eroded: N

Landuse: NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-213

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	1007

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish

Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1007	1.0	103P.070	579	

Gazetted Name: Local Name: Sample Type: B Wetland: ☐

SURVEY INFO

Date: 1998/08/12 Agency: C172 Crew: BLW/MLP

ATTRIBUTES

Length (km): 1.70 US Elev: 640

DS Elev.: 520 Magnitude: 3

Gradient: 7.06 Order: 2 BGC Zone: ICH

Setting: VW

Open water: A

Confinement: CO

Coupling: PC

Valley Flat: N C/D

Active Floodplain: Visible ☐ Est. Width:

Channel Pattern: SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands: N

Bars: ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement: L

Riparian Veg.: C

Exposed/Eroded: N

Landuse: NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92973	12-213

FEATURES

NID Map: 103P.070 NID: 3000

Type: C Height: 10.0 Method: GE

Length: 15 Method: GE

Photo: R F Comments: Triton

UTM (Zone/East/North)

PHOTOS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	1007

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
2	103P.070	1007

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1007	2.0	103P.070	580	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 3.40 **US Elev** 1110

DS Elev. 640 **Magnitude**

Gradient 13.82 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling CO

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92093	12-214

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.069	1011

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish

Project Code: 06-KISP-430000001-1998

Stream Name (gaz.): KISPIOX RIVER

Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.069	1011	1.0	103P.069	2416	

Gazetted Name: Local Name: Sample Type: B Wetland: ☐

SURVEY INFO

Date: 1998/08/12 Agency: C172 Crew: BLW/MLP

ATTRIBUTES

Length (km): .50 US Elev: 580

DS Elev.: 560 Magnitude: 6

Gradient: 4 Order: 2 BGC Zone: ICH

Setting: VW

Open water: A

Confinement: CO

Coupling: CO

Valley Flat: N C/D

Active Floodplain: Visible ☐ Est. Width:

Channel Pattern: SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands: N

Bars: ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement: L

Riparian Veg.: C

Exposed/Eroded: N

Landuse: NO

MAPS

Map Type	Map #	Year
TRIM	103P.069	1992

AIR PHOTOS

Line	Number
BCB92093	98-100

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	1013

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1013	1.0	103P.070	296	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) .40 **US Elev** 615

DS Elev. 590 **Magnitude**

Gradient 6.25 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-215

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.051	1014

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.051	1014	1.0	93M.051	274	

Gazetted Name **Local Name** **Sample Type** R **Wetland** ☒

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 1.40 **US Elev** 355

DS Elev. 352 **Magnitude** 16

Gradient 0.21 **Order** 3 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-215

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	1015

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1015	1.0	103P.070	298	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 1.30 **US Elev** 610

DS Elev. 595 **Magnitude**

Gradient 1.15 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-215

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	1016

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1016	1.0	103P.070	299	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) .90 **US Elev** 670

DS Elev. 598 **Magnitude**

Gradient 8 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-215

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	93M.061	1017

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
93M.061	1017	1.0	93M.061	2017	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 1.00 **US Elev** 760

DS Elev. 620 **Magnitude**

Gradient 14 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement UN

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	93M.061	1995

AIR PHOTOS

Line	Number
BCB92073	06-209

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	93M.061	1018

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
93M.061	1018	1.0	93M.061	71	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 1.10 **US Elev** 700

DS Elev. 620 **Magnitude**

Gradient 7.27 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	93M.061	1995

AIR PHOTOS

Line	Number
BCB92073	05-208

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	93M.061	1019

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
93M.061	1019	1.0	93M.061	61	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 2.80 **US Elev** 590

DS Elev. 470 **Magnitude** 10

Gradient 4.29 **Order** 3 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling PC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☐ N ☒ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	93M.061	1995

AIR PHOTOS

Line	Number
BCB92093	05-108

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	93M.061	1020

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
93M.061	1020	1.0	93M.061	72	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) .80 **US Elev** 720

DS Elev. 650 **Magnitude**

Gradient 8.75 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	93M.061	1995

AIR PHOTOS

Line	Number
BCB92093	05-108

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
4	103P.070	1021

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	1021	4.0	103P.070	403	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 3.20 **US Elev** 515

DS Elev. 420 **Magnitude** 4

Gradient 2.97 **Order** 3 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling CO

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☐ N ☐ SIDE ☒ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92093	05-108

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
3	103P.078	1030

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.078	1030	3.0	103P.078	2451	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) .70 **US Elev** 560

DS Elev. 519 **Magnitude** 1

Gradient 5.86 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.078	1995

AIR PHOTOS

Line	Number
BCB92092	87-190

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
3	103P.069	1145

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.069	1145	3.0	103P.069	2100	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☒

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) .50 **US Elev** 710

DS Elev. 681 **Magnitude** 1

Gradient 5.8 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement UN

Coupling DC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern ST

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.069	1995

AIR PHOTOS

Line	Number
BCB92093	16-218

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	11010

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name: Kipiox Fish
Project Code: 06-KISP-430000001-1998
Stream Name (gaz.): KISPIOX RIVER
Project Watershed Code: 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	11010	1.0	103P.070	452	

Gazetted Name: Local Name: Sample Type: B Wetland: ☐

SURVEY INFO

Date: 1998/08/12 Agency: C172 Crew: BLW/MLP

ATTRIBUTES

Length (km): .70
US Elev: 510
DS Elev.: 490
Magnitude:
Gradient: 2.86 Order: 1 BGC Zone: ICH
Setting: VW
Open water: A
Confinement: CO
Coupling: CO
Valley Flat: N C/D
Active Floodplain: Visible ☐ Est. Width:
Channel Pattern: SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands: N
Bars: ☐ N ☐ SIDE ☐ DIAG ☒ MID ☐ SPAN ☐ BR
Mass Movement: L
Riparian Veg.: C
Exposed/Eroded: N
Landuse: NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-214

FEATURES

PHOTOS

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	11011

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	11011	1.0	103P.070	453	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km) 2.70 **US Elev** 630

DS Elev. 500 **Magnitude**

Gradient 4.81 **Order** 1 **BGC Zone** ICH

Setting VW

Open water A

Confinement CO

Coupling PC

Valley Flat N C/D

Active Floodplain Visible ☐ Est. Width:

Channel Pattern SI

DISTURBANCE INDICATORS

O1	B1	B2	B3	D1	D2	D3
☐	☐	☐	☐	☐	☐	☐

C1	C2	C3	C4	C5	S1	S2	S3	S4	S5
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Islands N

Bars ☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR

Mass Movement L

Riparian Veg. C

Exposed/Eroded N

Landuse NO

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	12-214

FEATURES

NID Map 103P.069 **NID:** 3001

Type: F **Height:** 6.0 **Method:** GE

Length: **Method:**

Photo: R F **Comments:** Triton

UTM (Zone/East/North)

PHOTOS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	11011

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

COMMENTS

FDIS Reach Card

Reach #	ILP Map #	ILP #
1	103P.070	11013

99/02/16

Watershed Code: 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

PROJECT

Project Name Kipiox Fish **Project Code** 06-KISP-430000001-1998

Stream Name (gaz.) KISPIOX RIVER

Project Watershed Code 470-000000-00000-00000-0000-0000-000-000-000-000-000-000

WATERSHED

Reach Watershed Code 000-000000-00000-00000-0000-0000-000-000-000-000-000-000

ILP Map #	ILP #	Reach #	NID Map #	NID #	UTM(Zone/East/North/Method)
103P.070	11013	1.0	103P.070	455	

Gazetted Name **Local Name** **Sample Type** B **Wetland** ☐

SURVEY INFO

Date 1998/08/12 **Agency** C172 **Crew** BLW/MLP

ATTRIBUTES

Length (km)	1.60	**US Elev**	650	**DISTURBANCE INDICATORS**	O1 ☐ B1 ☐ B2 ☐ B3 ☐ D1 ☐ D2 ☐ D3 ☐
DS Elev.	515	**Magnitude**			C1 ☐ C2 ☐ C3 ☐ C4 ☐ C5 ☐ S1 ☐ S2 ☐ S3 ☐ S4 ☐ S5 ☐
Gradient	8.44	**Order** 1	**BGC Zone**	ICH	
Setting	VW			**Islands**	N
Open water	A			**Bars**	☒ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR
Confinement	OC			**Mass Movement**	L
Coupling	DC			**Riparian Veg.**	C
Valley Flat	N C/D			**Exposed/Eroded**	N
Active Floodplain	Visible ☐ Est. Width:			**Landuse**	NO
Channel Pattern	SI				

MAPS

Map Type	Map #	Year
TRIM	103P.070	1995

AIR PHOTOS

Line	Number
BCB92073	14-216

FEATURES

PHOTOS

COMMENTS

Appendix IV: Photo Documentation

Kispiox Stream Inventory, 1998 — *Project 2687 WP T-552*

Date	ILP	Site	Roll	Frame	Report Photo #	Project ID	Focal Length	Dir	Comments	CD#	CD image
98/09/18	242	22012	2	8	13	06-KISP-430000001-	STD	U	Showing Block 72 on left bank.	366	8
98/09/18	242	22012	2	9	14	06-KISP-430000001-	STD	D	Showing channel entering cut block.	366	9
98/09/16	1000	2000	1	2	34	06-KISP-430000001-	STD	D	channel	366	27
98/09/16	1000	2000	1	3		06-KISP-430000001-	STD	U	channel	366	28
98/09/16	1001	2001	1	6		06-KISP-430000001-	STD	U	Culvert at Mitten Mainline.	366	32
98/09/16	1003	2003	1	7	33	1998	STD	D	With Bryan.	366	n/a
98/09/16	1003	2003	1	8	28	06-KISP-430000001-	STD	U	A >20% slope.	366	33
98/09/16	1004	2004	1	10		06-KISP-430000001-	STD	U	Channel at spot where DV were captured (w/spot	366	35
98/09/16	1004	2004	1	11	29	06-KISP-430000001-	STD	D	Michelle on left bank writing.	366	36
98/09/16	1004	2004	1	9	30	06-KISP-430000001-	STD	U	Channel at spot where DV were captured.	366	34
98/09/16	1005	2005	1	12	31	06-KISP-430000001-	STD	D	Showing channel with LWD across banks.	366	37
98/09/16	1005	2005	1	13	32	06-KISP-430000001-	STD	U	Michelle on left bank writing.	366	38
98/09/17	1006	2006	1	14	23	06-KISP-430000001-1998	STD	U	Channel at base of steep gradient section upstream of Corral confluence.	366	39
98/09/17	1006	2006	1	15	24	06-KISP-430000001-	STD	D	Immediately downstream of the road crossing.	366	40
98/09/17	1007	2007	2	1	19	06-KISP-430000001-	STD	D	Pool habitat in channel.	366	1
98/09/17	1007	2007	1	16	20	06-KISP-430000001-1998	STD	U	Chute barrier downstream of Block 73 w/anode pole in left corner of frame.	366	41
98/09/17	1007	22007	1	18	18	06-KISP-430000001-	STD	U	Channel from road crossing.	366	43
98/09/17	1007	2007	2	2	21	06-KISP-430000001-	STD	U	Channel with abundant overstream vegetation.	366	2
98/09/17	1009	2009	1	17	22	06-KISP-430000001-	STD	U	Channel from the road crossing.	366	42
98/09/18	1010	2010	1	19	25	06-KISP-430000001-1998	STD	U	N3001-barrier cascade located 300m downstream of Block 74.	366	45
98/09/18	1010	2010	1	20	26	06-KISP-430000001-1998	STD	U	N3001-barrier cascade located 300m downstream of Block 74.	366	46
98/09/18	1011	2011	1	22	27	06-KISP-430000001-1998	STD	D	Channel from road crossing with boulder in centre of frame.	366	47
98/09/23	1014	2014	2	10	2	06-KISP-430000001-	STD	NS	CT captured at lake outlet.	366	10
98/09/23	1014	2014	2	11	3	06-KISP-430000001-	STD	D	Channel.	366	11
98/09/23	1014	2014	2	12	4	06-KISP-430000001-	STD	U	Head of creek.	366	12
98/09/23	1015	2015	2	13	6	06-KISP-430000001-	STD	D	Skunk cabbage.	366	13
98/09/23	1015	2015	2	14	5	06-KISP-430000001-	STD	U		366	14
98/09/23	1016	2016	2	15	1	06-KISP-430000001-	STD	D		366	15

Date	ILP	Site	Roll	Frame	Report Photo #	Project ID	Focal Length	Dir	Comments	CD#	CD image
98/09/23	1016	2016	2	16		06-KISP-430000001-	STD	U	Small obstructions.	366	16
98/09/24	1019	2019	2	21	10	06-KISP-430000001-	STD	D	Downstream from road.	366	21
98/09/24	1019	2019	2	22	11	06-KISP-430000001-	STD	U	Showing small channel upstream of road.	366	22
98/09/24	1020	2020	2	19		06-KISP-430000001-	STD	U		366	19
98/09/24	1020	2020	2	20	12	06-KISP-430000001-	STD	D	Log and devils club.	366	20
98/09/24	1021	2021	2	37	9	06-KISP-430000001-	STD	NS	CT on anode.	366	23
98/09/24	1021	2021	2	23	7	06-KISP-430000001-	STD	U	Channel upstream from road.	366	24
98/09/24	1021	2021	2	24	8	06-KISP-430000001-	STD	D	Channel location where CT caught.	366	25
98/09/25	1030	2030	3	1		06-KISP-430000001-	STD	U	EFU (log accross centre of frame).	366	n/a
98/09/25	1030	2030	3	2		06-KISP-430000001-	STD	D	Channel.	366	n/a
98/09/22	####	22010	2	3	17	06-KISP-430000001-	STD	NS	CT shocked immediately downstream of the road.	366	3
98/09/22	####	22011	2	4		06-KISP-430000001-	STD	U	Showing end of fish use.	366	4
98/09/22	####	22010	2	6	15	06-KISP-430000001-	STD	U	Showing perched culvert.	366	6
98/09/22	####	22010	2	7	16	06-KISP-430000001-	STD	D	Channel.	366	7
98/09/22	####	22011	2	5		06-KISP-430000001-	STD	D	Showing channel with marginal habitat.	366	5

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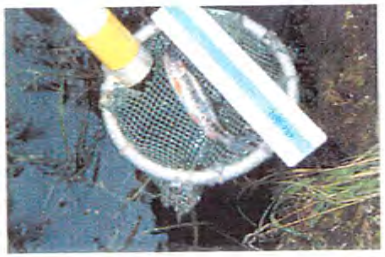

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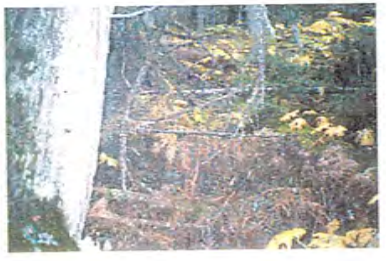

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Appendix V: Photo Survey Form 1

Survey start date: 1998/09/16 **Agency: C172**
Survey end date: 1998/09/25 **Crew:BLW/MLP**

Camera #1

Make & Model: Pentax Zoom90-WR	Lenses: A, B
Format: 135mm film	

Lenses

Focal Length (mm)	Focal Length (mm)
A 38	D
B 90	E
C	F

Roll Details

Roll#	Camera #	Output Medium	Film Type	ISO
1	1	neg	colour	200
2	1	neg	colour	200
3	1	neg	colour	200