

TESLIN RIVER WATERSHED  
COMMUNITY SALMON STEWARDSHIP PROGRAM, 2006

The Yukon River Panel  
Restoration and Enhancement Fund  
CRE-47-06

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## **ABSTRACT**

The 2006 community salmon stewardship program in the Teslin River Watershed was the fourth year of salmon stewardship activities conducted by the Teslin Tlingit Council (TTC). Stewards participated in safety training courses including swift water rescue and wilderness first aid. Rearing streams in the Nisutlin River drainage investigated this year included Cottonwood Creek, Sidney Creek and Iron creek, a tributary of Sidney Creek. Streams investigated entering Teslin Lake between Teslin and Johnson's Crossing included Brooks Brook and Deadman Creek and streams along the Alaska Highway south of Teslin included Lower Hazel, Logjam, Partridge, Screw and Seagull creeks. Generally jcs movement into rearing streams appeared to be later than usual as no 0+ jcs were captured during early to mid July assessments. No jcs were captured in the streams south of Teslin entering the Morley and Swift Rivers. In Cottonwood Creek, a major rearing stream in the Nisutlin drainage, no jcs were captured during a late July assessment. The reason for this may have been a result of an obstruction near the mouth of the creek, however this was not investigated. DNA sampling in the aboriginal fishery on the lower Teslin River resulted in the collection of 158 samples. A total of 18 samples was collected from chinook captured in Teslin Lake in nets set near the mouth of the Jennings River. This proved to be a successful way to collect samples from the small spawning populations in the upper drainages of the Teslin River watershed.

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## **INTRODUCTION**

The Teslin Tlingit Council (TTC) in cooperation with federal and other agencies has conducted a Community Salmon Stewardship program annually since 2003 (Wilson, 2006). This program was developed as a long-term initiative to involve community members in efforts to conserve and restore wild salmon stocks and the habitats on which they depend in the Teslin River Watershed.

Stewardship activities and recommendations are compiled each year, by stream or lake, and entered in the Teslin Tlingit Council, Traditional Territory, Teslin Watershed Restoration and Enhancement Plan. Annual work plans are developed in consideration of work that has been conducted in the past, and of the recommendations made. The primary goal of the plan is to restore salmon stocks and habitats in the Teslin River Watershed. The secondary goal of the plan is to enhance salmon stocks and habitats in the Teslin River Watershed.

A key component of this program is to provide training for Teslin Tlingit Council members to build capacity within the community for effective implementation of stewardship initiatives. Field technicians involved in stewardship activities must have received certification in the 'Yukon Fisheries Field Technician Course' offered by Yukon College. On-going field training is provided by DFO personnel and other agencies retained by TTC. Technicians also attend and receive certification in applicable safety courses.

This report provides a summary of stewardship activities in 2006 and recommendations in the Teslin Watershed Restoration and Enhancement Plan. The specific objectives of the stewardship component were as follows:

- ensure that salmon habitats are accessible to returning adult salmon;
- assess rearing habitats and move juvenile chinook salmon above obstructions;
- investigate streams that have not been previously documented for juvenile chinook salmon utilisation and describe habitats;
- assist managers in the collection of biological or other samples for stock identification
- build technical capacity within the TTC Lands & Resources staff and the community of Teslin.

The Yukon River Panel Salmon Restoration & Enhancement Fund under the U.S./Canada Yukon River Agreement of the Pacific Salmon Treaty and the Teslin Tlingit Council Training Fund provided funding for this program.

## **STUDY AREA**

The Teslin River watershed (Fig. 1) drains an area of approximately 31,078 km<sup>2</sup> in south central Yukon and northern B.C. Chinook salmon are known to spawn in 24 streams and rivers in the watershed, with chum salmon utilising a smaller number of streams. The watershed is primarily located within the traditional lands of the Teslin Tlingit Council and straddles the Yukon-British Columbia border. The river downstream of Teslin Lake is known as the “Lower Teslin River” and the section upstream of Teslin Lake as the “Upper Teslin River.”

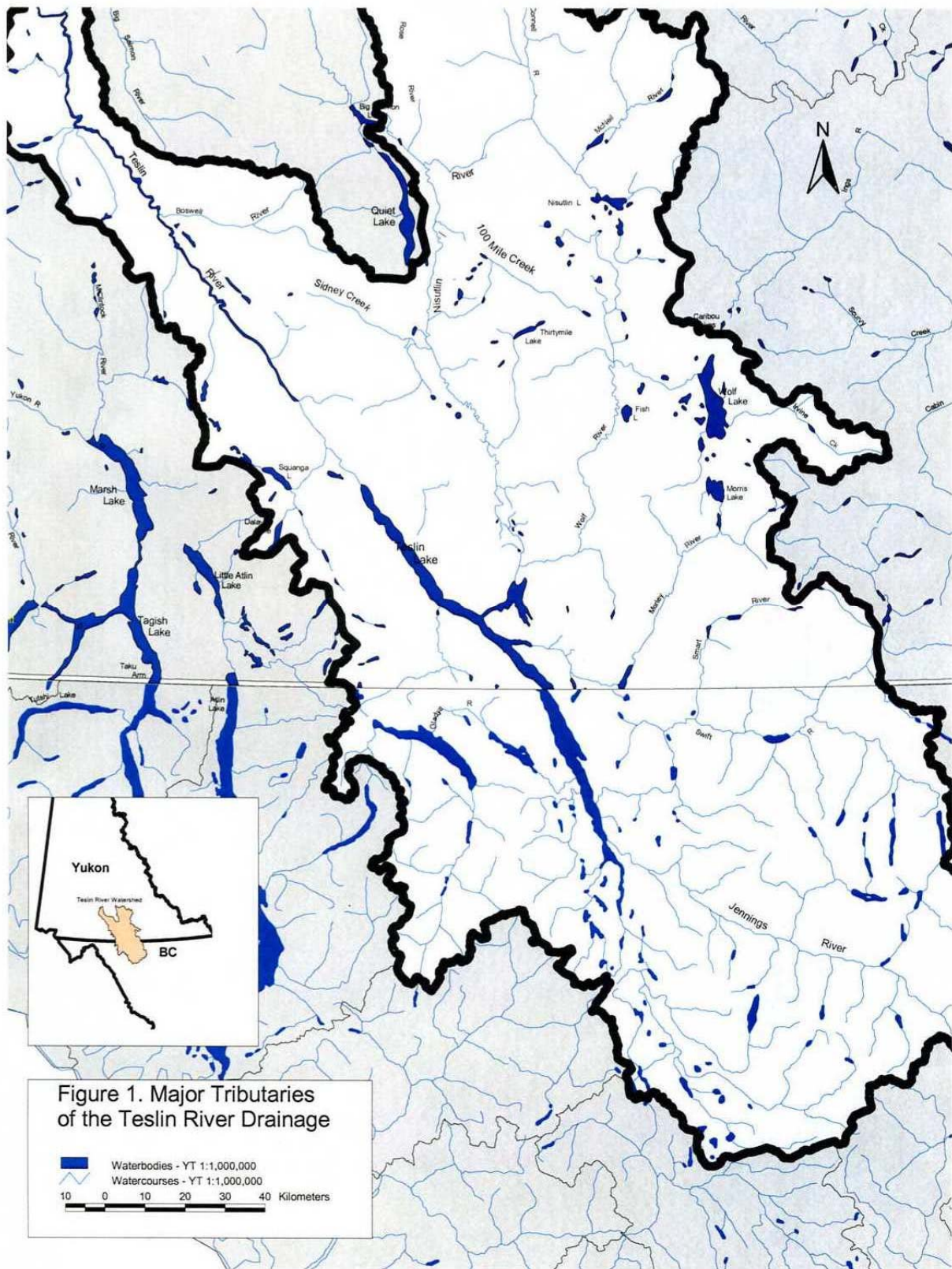


Figure 1. Major Tributaries of the Teslin River Drainage

■ Waterbodies - YT 1:1,000,000  
— Watercourses - YT 1:1,000,000  
 10 0 10 20 30 40 Kilometers

## **METHODS:**

### **Pre-season planning**

TTC Lands and Resources representatives and J. Wilson & Associates met on May 16 with DFO technical advisors to discuss plans for the 2006 field season. Management concerns and data gaps relating to salmon bearing streams in the drainage were identified, with guidance from the Teslin Tlingit Restoration & Enhancement Plan, and evaluated as to their importance and economic feasibility. Projects were given priority and incorporated into a work plan (see work plan Appendix 1). This plan was intended as a guide for scheduling work activities while allowing for some flexibility depending on environmental conditions.

A workshop was held in Teslin on July 7, led by J. Wilson & Associates, to provide TTC stewardship technicians with an overview of field procedures and Yukon River Panel (YRP) protocols. Al von Finster of DFO was also in attendance and provided an overview of stewardship objectives. Weekly activities were identified from the work plan and entered into a calendar to serve as a guide for field technicians. The workshop was followed by in-field demonstrations on July 8-9 on obstruction management, biological data collection and reporting procedures. Streams investigated at this time included: Brooks Brook and Deadman Creek flowing into Teslin Lake north of the village of Teslin.

### **Field methods**

Three technicians from the community of Teslin, all of who had successfully completed the Yukon Fisheries Field Technician Course, conducted field activities outlined in the work plan. The technicians recorded activities conducted in the field on field forms that were developed in accordance with the Yukon River Panel data reporting protocols.

TTC Lands and Resources representatives and the contractor held bi-weekly meetings with the field technicians to review work conducted and completed forms, as well as address logistical concerns and schedule adjustments required.

### **Ensure habitat accessibility to returning adult salmon**

Chinook spawning tributaries with identified obstructions in the past were identified prior to the field season. Efforts to ensure habitat accessibility to returning adult salmon were focused on the Swift River (north). Previous investigations of this river have indicated that beavers may dam the river, particularly when flows are low, and prevent adult chinook from accessing spawning grounds (Connor, et al., 1997). Ensuring that adult chinook have access to spawning grounds in the Swift River has been a priority in all stewardship programs since 2003.

An over-flight of the Swift River (north) was conducted on July 18, prior to the return of chinook spawners, to locate and map possible obstructions to migration. Obstruction management procedures abided by the 2006 *Yukon River Panel Protocol for Obstruction Management in Canadian YR R&E Projects*.

## **Assess rearing habitats and move juvenile chinook salmon above obstructions**

Chinook salmon rearing streams to be investigated in 2006 were identified prior to the field season. Streams were accessed by boat, from the Alaska Highway on foot, or by ATV. In streams where beaver dams or other barriers were observed, juvenile chinook salmon (jcs) were trapped downstream of the furthest downstream dam, counted and moved upstream of the colony. Streams were re-visited throughout the migration period when time and environmental conditions permitted. Obstruction management procedures in rearing streams were conducted in accordance with the *2006 Yukon River Panel Protocol for Obstruction Management in Canadian YR R&E Projects*.

Jcs were captured using Gee-type minnow traps baited with Yukon River salmon roe. Jcs were measured for fork length to the nearest millimeter and weighed to the nearest 0.1 gram. Collection procedures and documentation was conducted in accordance with the *2006 Yukon River Panel Protocol for Collection and reporting of data from Juvenile Salmon Sampled in Canadian R&E Projects*.

## **Collection of DNA samples for stock identification**

DNA samples were collected from adult chinook caught in the aboriginal fishery on the Lower Teslin River and Lower Teslin Lake and in the Upper Teslin Lake near the mouth of the Jennings River. Two steward technicians participated in DNA sample collection from the aboriginal fishery, visiting fish camps in the vicinity of Johnson's crossing and along the east shore of Teslin Lake regularly over a period of a week. One steward also assisted two Teslin Tlingit elders in a DNA sampling program in Upper Teslin Lake, funded by the DFO, Aboriginal Fishery Strategy (AFS). The Upper Teslin Lake was accessed by boat. Gillnets were set from the shore over a period of four days and tended on a regular basis. Fish caught in the net were immediately removed and sampled.

DNA sampling involved the removal of a small portion of tissue from the operculum of adult chinook using a paper punch. Fish were released immediately after sampling or kept by aboriginal fishers. Tissue samples were preserved in alcohol and sent to Rick Ferguson, DFO stock assessment technician, for DNA analysis.

## **Salmon Restoration & Enhancement plan**

Stewardship activities conducted during the season were compiled and entered in the Teslin River Watershed Restoration & Enhancement plan. Major tributaries are listed in order in relation to the Lower Teslin River from the furthest downstream to the furthest upstream. New streams and lakes are added as required. A brief description of each stream or lake is given. Recommendations for follow-up activities are made where applicable. Follow-up activities are given a priority rating of high, medium or low depending on their importance or ability to accomplish.



## **RESULTS**

### **Ensure habitat accessibility to returning adult salmon**

There were no obstructions observed in the Swift River (north) during the overflight on July 18.

### **Assess rearing habitats and move juvenile chinook salmon above obstructions**

Chinook rearing streams selected for investigation in the 2006 season included: tributaries of the Nisutlin River that were accessible from the south Canol Road; streams entering Teslin Lake between the village of Teslin and Johnson's Crossing; select streams along the west shore of Teslin Lake and select tributaries along the Alaska Highway south of Teslin. Tributaries of the lower Teslin River in the vicinity of the Swift River (north) were to be investigated if there was a necessity to remove and monitor obstructions in the Swift River.

Tributaries of the Nisutlin River that were investigated included Cottonwood Creek, Sidney Creek and Iron creek, a tributary of Sidney Creek. There were no jcs captured below the highway culvert in Cottonwood Creek in traps set on July 12 and July 21. The lower reaches near the mouth of the creek were not investigated to see if there were any obstructions that could have prevented jcs from moving upstream. A total of 6 jcs were captured in Sidney Creek below the highway culvert in traps set on July 12. No jcs were captured in Iron Creek on July 14 in traps set between the mouth and the waterfalls.

Streams investigated entering Teslin Lake between Teslin and Johnson's Crossing included Brooks Brook and Deadman Creek. There were no obstructions observed in Brooks Brook between the mouth and 250 m upstream of the highway culvert on July 8. No jcs were captured in traps set throughout this area. Traps set again on July 19 resulted in only 2 jcs captures, both >80 mm in length and likely age 1+ fish that had over-wintered in the creek. There were no jcs captured in Deadman Creek in traps set in the lower 1 km reach of the creek on July 8. The creek was not re-visited to determine when jcs moved into the creek.

Streams along the Alaska Highway south of Teslin investigated included Lower Hazel, Logjam, Partridge, Screw and Seagull creeks. Traps set in the lower reaches between July 24 and July 27 resulted in no jcs captures.

### **Collection of DNA samples for stock identification**

A total of 158 DNA samples was collected from chinook captured in the aboriginal fishery in the lower Teslin River. A total of 18 DNA samples was collected from chinook captured in Teslin Lake near the mouth of the Jennings River.

## **DISCUSSION**

The schedule of stewardship activities outlined in the workplan for the 2006 season in the Teslin River Watershed was adhered to in most instances. One exception was the inability to assess rearing streams

entering Teslin Lake on the west shore because of rough lake conditions. These conditions persisted throughout the early part of August and were deemed unsafe for crossing in the boat craft available. Local knowledge (Johnstone, pers comm.) suggests that lake conditions can tend to be worse later in the season. Although this may not always be the case it may be advisable in future stewardship programs to attempt projects involving assessments on the west shore of the lake earlier in the season if possible.

Sampling programs for the collection of DNA tissue from salmon stocks in the Teslin River watershed have been an important part of annual stewardship programs. This year, stewards collected DNA samples from the aboriginal fishery in the Teslin River near Johnson's Crossing and were successful at obtaining an adequate sample size for stock identification of the Teslin River mixed stock. In addition, a netting program in the upper Teslin Lake drainage, funded by the AFS program, proved to be a successful way to collect samples from the small spawning populations in the upper drainages of the Teslin River watershed.

The movement of 0+ jcs into rearing streams this year appeared to be later than usual. This was evidenced by the capture of only over-wintering (1+) jcs in Brooks Brook as late as July 19. Previous studies conducted in the Teslin River Watershed have indicated that 0+ jcs move into rearing streams by mid July (Connor et al., 1997, 1998). A later than usual arrival of 0+ jcs into rearing streams was also observed in other areas of the Yukon River drainage in 2006 (Al von Finster, DFO Whitehorse, Resource Restoration Biologist, pers.comm.). This late migration was likely a result of a later than usual spring thaw in 2006.

In 2006, the low number of jcs captured in tributaries of the Morley and Swift (south) rivers during late July investigations was possibly a result of low spawner escapements to these river systems in 2005. There were no aerial surveys conducted on these spawning areas in 2005 to validate this however. Limited fisheries assessments on these tributaries conducted by other agencies in the past have captured jcs only in the Smart River and Logjam creek (FISS database)<sup>1</sup>. Due to the relatively small spawning populations in these river systems and extensive rearing habitat potential in the drainage it is possible that jcs are more dispersed and less susceptible to capture in localized areas.

Although there was some improvement in the manner in which projects were conducted and forms completed from previous years, there continued to be some problem with daily organization and efficient use of time in the field. The result was that fewer streams were investigated this year than expected and follow up was inadequate in some cases. In addition, several of the stewards participated in safety training courses that were held during the middle of the season, causing disruptions in scheduled follow up assessments. It would be advisable in future programs to ensure that all training courses are taken prior to the field season and/or be made a prerequisite for employment.

There continued to be some misunderstanding of the process or intent of YRP protocols, particularly when conducting obstruction management programs in rearing streams. Although in-field training was provided at the start of the program, when left to conduct assessments on their own the procedures were not always followed thoroughly. This was evident in the failure to complete all required forms in many instances. The field supervisor selected for this year's program had participated in stewardship

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<sup>1</sup> Fisheries Information Summary System (FISS) (Fisheries & Oceans Canada & BC Ministry of Sustainable Resource Management).

programs in previous years. Unfortunately, it became apparent that the necessary skills to manage a crew, plan field activities and incorporate alternate plans when required were lacking. For future programs attempts should be made to provide a supervisor who has demonstrated experience in fisheries fieldwork and supervisory skills.

The following are recommendations to increase the overall effectiveness of future stewardship programs:

- A field supervisor should be hired who has demonstrated experience in fisheries fieldwork and supervisory skills.
- In-field training in fisheries assessments should be continued and provided by the contractor or other agencies. Training courses in fisheries or field safety should be completed by steward technicians prior to the field season.

## **ACKNOWLEDGMENTS**

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Appendix 1. Work Plan for Teslin River Watershed Community Stewardship Program, 2006.

| DATE           | ACTIVITY   |
|----------------|--|
| May – June     | <ul style="list-style-type: none"> <li>- Development of workplan and application for required permits.</li> <li>- Write letter to YTG Highways to address concerns about the culvert barrier to fish passage on Cottonwood Creek and initiate the process to mitigate the problem.</li> <li>- Conduct interviews for stewardship positions</li> <li>- Safety training certification for successful applicants</li> </ul> |
| July 3 – 7     | <ul style="list-style-type: none"> <li>- Orientation workshop given by J.Wilson &amp; Assoc. &amp; DFO personnel.</li> <li>- In-field training on obstruction management and juvenile chinook monitoring, focusing on rearing streams at the north end of Teslin Lake.</li> </ul>  |
| July 10 – 14   | <ul style="list-style-type: none"> <li>- Obstruction management and juvenile chinook monitoring in rearing streams of the Nisutlin River.</li> </ul>   |
| July 17 – 21   | <ul style="list-style-type: none"> <li>- Obstruction assessment in Swift River (north) including over-flight and mitigation as required.</li> <li>- Monitoring juvenile salmon populations and obstruction management in rearing streams of the lower Teslin River if mitigation is required on the Swift River (north).</li> </ul>  |
| July 24 – 28   | <ul style="list-style-type: none"> <li>- Monitoring juvenile salmon populations and obstruction management in rearing streams of the Swift River (south).</li> </ul>   |
| July 31- Aug 4 | <ul style="list-style-type: none"> <li>- week off to extend program season to accommodate DNA sample collection.</li> </ul>  |
| Aug 7 - Aug 18 | <ul style="list-style-type: none"> <li>- Follow up on obstruction management in rearing and spawning streams and juvenile salmon monitoring programs.</li> </ul>   |
| Aug 21 - 25    | <ul style="list-style-type: none"> <li>- DNA sample collection with the Morley River and Lower mainstem Teslin River as priorities.</li> </ul>   |

## **Appendix 2.**

TESLIN TLINGIT COUNCIL TRADITIONAL TERRITORY TESLIN WATERSHED SALMON RESTORATION AND ENHANCEMENT PLAN (including portions of the Yukon River Mid – Mainstem Watershed).

### **LOWER TESLIN RIVER**

The lower Teslin River drains Teslin Lake and flows in a north-westerly direction for 192 km to its confluence with the Yukon River. Chinook spawning occurs in a number of areas, with the best known and most stable at the “rapids” approximately 3 km downstream of Johnson’s crossing. Chum spawning occurs in at least two locations, both some distance downstream from Johnson’s Crossing. Access to the river is gained by boat from Johnson’s Crossing or by a road that leads to the bank above the rapids.

#### **2005**

*August 25-26*– surveyed river by boat to obtain DNA samples from post-spawned chinook. Looked for carcasses and angled for live post-spawned chinook between Johnson’s Crossing and the confluence of Boswell Creek. No chinook carcasses were observed and angling captured no chinook. High water and turbid conditions hampered the ability to see fish and spawning areas.

#### **Recommendations for 2006**

Investigate other means of obtaining DNA samples from chinook salmon in the Lower Teslin River.

#### **2006**

*August 21-25*– Collected DNA samples from chinook salmon caught in the Aboriginal Fisheries near Johnson’s Crossing and Lower Teslin Lake. A total of 158 samples was collected and sent to Rick Ferguson (DFO).

#### **Recommendations for 2007**

Continue to collect samples for DNA analysis if requested by DFO – Priority rating: **medium.**

### **Tributaries:**

#### ***Dave Creek – 8703727***

*drainage area:* 70 km<sup>2</sup>

Dave Creek enters the Teslin River from the east approximately 29 km downstream of Johnson's Crossing. Chinook salmon rear in the creek. Beavers may dam the creek. Access to the creek is by boat.

#### **2005**

*July 20* – surveyed lower 200 m of creek on foot. Breached active beaver dam located at the mouth of creek. No minnow traps were set.

#### **Recommendations for 2006**

Check stream for beaver activity. Monitor utilisation by jcs.

#### **2006**

No survey conducted. As per the 2006 workplan, drainages in the lower Teslin River in the vicinity of the Swift River confluence were to be investigated if a river trip was required to mitigate obstructions to migration on the Swift River (South). Since no obstructions were observed in the Swift River during an overflight, these drainages were not investigated.

Recommendations for 2007

Consider checking stream for beaver activity and monitoring utilisation by jcs if a river trip is required to mitigate obstructions to chinook migration on the Swift River – Priority rating: **medium.**

***Hundred Mile Creek –***

*drainage area:* 116 km<sup>2</sup>

Hundred Mile Creek enters the Teslin River from the east approximately 35 km downstream of Johnson's Crossing. Chinook salmon rear in the creek. Beavers may dam the creek.

Access to the creek is by boat.

**2005**

*July 20-21* – Surveyed lower 200 m of creek on foot. No obstructions observed. Set 5 minnow traps. Captured and sampled 12 jcs.

Recommendations for 2006

Check stream for beaver activity. Monitor utilisation by jcs.

**2006**

No survey conducted. As per the 2006 workplan, drainages in the lower Teslin River in the vicinity of the Swift River confluence were to be investigated if a river trip was required to mitigate obstructions to migration on the Swift River (South). Since no obstructions were observed in the Swift River during an overflight, these drainages were not investigated.

Recommendations for 2007

Consider checking stream for beaver activity and monitoring utilisation by jcs if a river trip is required to mitigate obstructions to chinook migration on the Swift River – Priority rating: **medium.**

***Swift River - 8703271***

*(note: there is another Swift River, which is tributary to Teslin Lake)*

*drainage area:* 256 km<sup>2</sup>

The Swift River enters the Teslin River from the east approximately 47 km downstream of Johnson's Crossing. Chinook salmon spawn and rear in the river. Adults may have difficulty entering the river at low flows. Beaver may dam the river, particularly when flows are low.

Access to the river is by boat.

**2003**

*June 8* – flew creek. No beaver dams or obstructions observed.

Recommendations for 2004

Check stream for beaver activity. Collect DNA samples

**2004**

No over-flight was conducted. Local floatplanes were not available in late July as a result of extensive forest fire activity in the area.

Recommendations for 2005

Check stream for beaver activity. Collect DNA samples

**2005**

*July 19* – flew creek. Observed one old beaver dam/logjam near the mouth of the river.

*July 20* – went by boat to mouth of river. Manually removed woody debris that had collected on old beaver dam [above].

*July 20-21* – set 5 minnow traps in the vicinity of the beaver dam/logjam. Captured and sampled 8 jcs.

Recommendations for 2006

Check stream for beaver activity. Collect DNA samples if feasible.

**2006**

*July 18* – flew creek. No beaver dams or other obstructions observed.

Recommendations for 2007

Conduct an overflight to check river for beaver activity and remove obstructions – Priority rating: **High**

**TESLIN LAKE**

***Teslin Lake - 870***

Teslin Lake is a major headwater lake of the Yukon River and the largest lake in the Teslin River drainage. The lake lies across the Yukon-British Columbia border. It is 126 km long, averages 3.2 km in width and has an average depth of 59 meters. The Alaska Highway follows the northeast lakeshore and crosses an arm of the lake, Nisutlin Bay, near the town of Teslin.

**2004**

*July 8* - beach seined at outlet of Teslin Lake (Teslin River) along west bank. Captured a total of 28 jcs from 3 sets. Other fish species captured included 153 juvenile whitefish, 6 arctic grayling and 3 slimy sculpins. Sampled subset of the total jcs captured.

*July 13* - beach seined shoreline at mouth of Grayling Creek. Captured a total of 285 jcs. Sampled subset of the total jcs captured.

*July 19 & 20* - distributed fishing licenses, buoys, catch calendars and weekly DFO salmon fishery updates to Teslin Tlingit members fishing in Teslin Lake and Teslin River.

*Oct - Nov* - set gillnets for chum salmon. Two chum salmon were captured in the Teslin Tlingit food fishery; one on November 3<sup>rd</sup> near the outlet of 10 Mile Creek and the other near the village of Teslin on November 17. Took samples for DNA analysis.

Recommendations for 2005

Conduct a mark-recapture study to determine if jcs migrate from the Teslin River to tributaries of Teslin Lake.

**2005**

A mark-recapture study was deferred and not identified as a priority project in the 2005 work plan.

Recommendations for 2006

Determine methods for a mark-recapture study in consultation with DFO personnel. If feasible, implement a mark-recapture study to determine if jcs migrate from the Teslin River to tributaries of Teslin Lake.

**2006**

*Aug 14-18* – Assisted Teslin Tlingit elders with DNA sample collection program funded by the DFO, AFS program. Set and tended gillnets from the east shore near the mouth of the Jennings River to capture chinook salmon for sampling. Collected 18 samples and sent to Rick Ferguson (DFO).

Recommendations for 2007

Consider participation in DNA sampling programs – Priority rating: **low**



## **Tributaries:**

### ***Beaver Creek #1 -***

Beaver Creek #1 enters Teslin Lake along the east shore approximately 7 km south of the village of Teslin. Nothing is known about chinook utilisation in this creek. Access is from the Alaska Highway crossing near the mouth. Beavers may dam the creek.

#### **2005**

*July 27* - Surveyed creek on foot between the mouth and 500 m upstream of highway. No obstructions observed. Observed numerous unidentified fish (no traps set).

#### **Recommendations for 2006**

Check stream for beaver activity. Check for jcs utilisation

#### **2006**

No survey conducted due to time constraints.

#### **Recommendations for 2007**

Consider monitoring obstructions and jcs utilisation – Priority rating: **high**.

### ***Beaver Creek #2 -***

Beaver Creek #2 enters Teslin Lake along the east shore approximately 9 km south of the village of Teslin. Nothing is known about chinook utilisation in this creek. Access is from the Alaska Highway crossing near the mouth. Beavers may dam the creek.

#### **2005**

*July 27* - Surveyed creek on foot between the mouth and 500 m upstream of highway. No obstructions observed. Observed numerous unidentified fish (no traps set).

#### **Recommendations for 2006**

Check stream for beaver activity. Check for jcs utilisation

#### **2006**

No survey conducted due to time constraints.

#### **Recommendations for 2007**

Consider monitoring obstructions and jcs utilisation – Priority rating: **high**.

### ***Brooks-Brook (Gantiyakw)– 8704665***

*drainage area:* 60 km<sup>2</sup>

Brooks-Brook (Tlingit name 'Gantiyakw') enters Teslin Lake along the east shore approximately 38 km north of the village of Teslin. Chinook salmon rear in the creek. The Alaska Highway crosses the creek near the mouth. The highway culvert is a barrier to small fish during high and low flow conditions. Beavers may dam the creek.

#### **2003**

*June 23* -- Surveyed creek on foot. Saw active beaver dam 200 meters upstream of mouth. Breached dam. Saw fresh beaver tracks.

*July 15-16* -- set minnow traps above and below culvert. Captured jcs below culvert but none above. Saw adult grayling above culvert.

#### **Recommendations for 2004**

Check stream for beaver activity. Monitor utilisation by jcs. Assess culvert.

#### **2004**

*June 8* - set 5 minnow traps below highway culvert. Captured one over-wintering jcs (1+).

*July 15* - set 4 minnow traps below highway culvert (Captured 1 jcs). Set 5 minnow traps above highway culvert (Captured 2 jcs). Sampled all jcs captured.

#### Recommendations for 2005

Check stream for beaver activity. Monitor utilisation by jcs.

#### **2005**

*July 12-13* – surveyed creek on foot. Saw two beaver dams between mouth and highway culvert. The first beaver dam upstream of the mouth (BD-1) was older/inactive and located approximately 250 m downstream of the highway culvert. The second dam (BD-2) was active and located approximately 50 m upstream of BD-1. Set 6 minnow traps above BD-2 and 5 below BD-1. Captured one jcs above BD-2 and 14 jcs below BD-1. Sampled all jcs captured. Breached both beaver dams.

*July 14* - revisited creek to monitor beaver activity. Observed that breached dams had remained open. Observed unidentified juvenile fish above dams.

*August 9-10* - set 3 minnow traps below breached beaver dams [above] and 5 above. Captured 8 jcs below dams and none above. Sampled all jcs captured.

#### Recommendations for 2006

Check stream for beaver activity. Monitor utilisation by jcs.

#### **2006**

*July 8-9* – observed 2 old breached beaver dams below highway culvert but no recent beaver activity. Set 10 minnow traps below highway culvert and 5 above. No jcs were captured.

*July 19* – set 5 minnow traps below highway culvert (No jcs captured). Set 5 minnow traps above highway culvert (captured 2 jcs). The two jcs captured were >80 mm in length indicating that they were likely age 1+ fish that had over-wintered in the creek.

#### Recommendations for 2007

Consider monitoring obstructions and jcs utilisation – Priority rating: **high**.

### ***Deadman Creek – 8704909***

*drainage area:* 150 km<sup>2</sup>

Deadman Creek enters Teslin Lake along the east shore approximately 27 km north of the village of Teslin. Chinook salmon rear in the creek. Anecdotal information suggests previous utilisation by chinook spawners. Access is from the Alaska Highway crossing near the mouth. Beavers may dam the creek. The creek is a good candidate for community/education enhancement projects.

#### **2003**

*June 24* -- Survey creek on foot. No active beaver dams observed in lower reaches.

*July 9-10* --Set minnow traps. No juvenile chinook captured at this time.

#### Recommendations for 2004

check stream for beaver activity. Monitor jcs utilisation. Initiate riparian planting project. Investigate methods to reintroduce chinook spawning population.

#### **2004**

*June 17* - Survey creek on foot. No active beaver dams observed between highway bridge and 1 km upstream. Observed a logjam approximately 400 meters upstream of bridge, however, it did not appear to be a barrier.

*July 14* - set 5 minnow traps between highway bridge and logjam located 400 m upstream of bridge (captured 7 jcs). Set 4 minnow traps above same logjam (captured 19 jcs). Sampled all jcs captured.

Recommendations for 2005

check stream for beaver activity. Monitor jcs utilisation. Initiate riparian planting project. Investigate methods to reintroduce chinook spawning population.

**2005**

Riparian planting project was not identified as a priority in the 2005 work plan.

Investigations of methods to reintroduce a chinook spawning population was not initiated.

*July 5* - Surveyed creek on foot between the mouth and approx. 500 m upstream of highway bridge. No active beaver dams observed. Set 5 minnow traps throughout area surveyed.

Captured and sampled 2 jcs.

*August 9-10* - set 10 minnow traps between mouth and 500 m upstream of highway bridge.

Captured and sampled 11 jcs.

Recommendations for 2006

check stream for beaver activity. Monitor jcs utilisation. Initiate riparian planting project. Investigate methods to reintroduce chinook spawning population.

**2006**

Investigations of methods to reintroduce a chinook spawning population was not initiated.

*July 8* - Surveyed lower 1 km of creek on foot. Material from large breached beaver dam has collected downstream forming a logjam approximately 600 m upstream of the highway bridge. No active beaver dams were observed. Set 4 minnow traps above logjam [above] and 2 below. No jcs were captured.

Recommendations for 2007

Consider monitoring obstructions and jcs utilisation – Priority rating: **high**.

***Lone Tree Creek – 8705099***

*drainage area:* 41 km<sup>2</sup>

Twelve Mile creek enters Teslin Lake along the east shore approximately 10 km north of the village of Teslin. Rearing potential is limited. The creek has a steep gradient. Access is from the Alaska Highway crossing near the mouth.

**2003**

*June 24* - Surveyed creek on foot. Observed very little good rearing habitat.

Recommendations for 2004

Check for utilisation by jcs.

**2004**

*June 17* - surveyed creek from highway downstream to mouth. No obstructions observed.

*July 6* - set 5 minnow traps below highway culvert (no jcs captured). Set 4 minnow traps above highway culvert (no jcs captured).

Recommendations for 2005

Check for jcs utilisation.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to monitor jcs utilisation.

**2006**

No survey conducted due to time constraints.

Recommendations for 2007

Consider monitoring obstructions and jcs utilisation – Priority rating: **low**.

### **Ten Mile Creek – 8705187**

*drainage area:* 33 km<sup>2</sup>

Ten Mile Creek enters Teslin Lake along the east shore approximately 13 km north of the village of Teslin. Chinook rear in the creek. Access is from the Alaska Highway crossing near the mouth. Beavers may dam the creek.

#### **2003**

*June 24* - Survey creek on foot. Logjam/old beaver dam complex located 200 meters upstream of lake. Took photos. Breached obstruction. Good rearing habitat observed. Culvert not likely a barrier to fish.

*July 15-16* - set minnow traps. No jcs captured at this time.

#### **Recommendations for 2004**

Check stream for beaver activity. Monitor jcs utilisation

#### **2004**

*June 16* - surveyed creek on foot. No obstructions observed between mouth and highway culvert and immediately upstream of culvert.

*July 5* - set 5 minnow traps below highway culvert (no jcs captured). Set 4 minnow traps above highway culvert (no jcs captured).

#### **Recommendations for 2005**

Monitor jcs utilisation.

#### **2005**

No survey conducted due to time constraints.

#### **Recommendations for 2006**

Effort should be made to monitor jcs utilisation.

#### **2006**

No survey conducted due to time constraints.

#### **Recommendations for 2007**

Consider monitoring obstructions and jcs utilisation – Priority rating: **high**.

### **Fox Creek – 8705359**

*drainage area:* 56 km<sup>2</sup>

Fox Creek enters Teslin Lake along the east shore approximately 4 km north of the village of Teslin. Chinook salmon rear in the creek. The creek is susceptible to current and future development. The town sewage lagoons are located near the creek upstream of the Alaska Highway. The highway culvert may restrict fish passage during low flows. Access is by the Alaska Highway crossing near the mouth or by the entrance road to sewage lagoons. Beaver may dam the creek.

#### **2003**

*June 24* - Surveyed creek on foot. No beaver dams observed.

*July 8-9* - Conducted stream assessment in lower reaches. Took photos. Took water sample and sent to Norwest Labs for analysis. Collected benthic sample and sent to Bonnie Burns (Laberge Environmental Services) for identification. Set minnow traps. No jcs captured at this time.

#### **Recommendations for 2004**

initiate riparian planting project. Monitor jcs utilisation. Initiate culvert passage mitigation.

**2004**

*June 16* - surveyed creek on foot. No obstructions observed between mouth and highway culvert and immediately upstream of culvert.

Recommendations for 2005

initiate riparian planting project. Monitor jcs utilisation.

**2005**

No survey conducted due to time constraints. The riparian planting project was not identified as a priority project in the 2005 work plan.

Recommendations for 2006

Effort should be made to monitor jcs utilisation. Initiate a riparian planting project

**2006**

No survey conducted due to time constraints. The riparian planting project was not identified as a priority project in the 2006 work plan.

Recommendations for 2007

Consider monitoring obstructions and jcs utilisation – Priority rating: **high**.

***Grayling Creek -***

*drainage area:* 83 km<sup>2</sup>

Grayling Creek enters Teslin Lake along the west shore. Chinook salmon rear in the creek. Beavers may dam the creek. Access is by boat from Teslin Lake.

**2003**

*July 2* - Saw a number of beaver dams in the lower reaches of creek and a considerable amount of large debris throughout. Took photo

Recommendations for 2004

Check stream for beaver activity. Monitor jcs utilisation.

**2004**

*July 13* - beach seined along shore at mouth of creek. Captured a total of 285 jcs in 2 sets. Sampled subset of the total jcs captured.

Recommendations for 2005

Conduct mark-recapture study to determine origin of jcs. Check stream for beaver activity. Monitor jcs utilisation.

**2005**

*August 11* – surveyed lower 250 m of creek on foot. Observed high active beaver dam (at least 3 m high) approximately 250 m upstream of mouth (BD-1). This dam held back a considerable amount of water and resulted in reduced flows downstream. Breached dam.

Recommendations for 2006

Check stream for beaver activity. Monitor jcs utilisation.

**2006**

No survey conducted. Lake conditions were too rough to cross safely.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **low**

***Fat (Flat) Creek – 8705232***

*drainage area:* 800 km<sup>2</sup>

This creek is referred to as Fat Creek on some topographic maps but is known locally as Flat Creek. The creek enters Teslin Lake along the west shore. Chinook salmon rear in the creek. Beavers may dam the creek. Access is by boat from Teslin Lake.

**2003**

*July 2* - saw large beaver dam in the lower reaches of creek. Took photos.

*October 23* - conducted aerial survey of lower reaches with DFO personnel to investigate chum salmon spawning potential. No chum spawners observed.

Recommendations for 2004

Check stream for beaver activity. Monitor jcs utilisation.

**2004**

*June 28* - survey lower reaches of creek by boat and on foot. No obstructions observed.

Recommendations for 2005

Check stream for beaver activity. Monitor jcs utilisation.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to check stream for beaver activity and to monitor jcs utilisation.

**2006**

No survey conducted. Lake conditions were too rough to cross safely.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **low**

***Sterlin Creek – 8705232022***

*drainage area:* 81 km<sup>2</sup>

Sterlin Creek is a tributary of Flat Creek. Chinook salmon rear in the creek. Beavers may dam the creek. Access is by boat from Teslin Lake.

**2003**

*July 2-3* - Saw 3 active beaver dams in lower reach. Took photos. Unidentified small fish observed below beaver dams.

Recommendations for 2004

Check stream for beaver activity. Monitor jcs utilisation.

**2004**

*June 28* - survey creek on foot. Active beaver dam located approximately 150 meters upstream from Flat Creek confluence. Took photos of dam. No minnow traps were set but did see unidentified adult fish above the dam.

*July 13* - set 5 minnow traps below beaver dam [above](captured 8 jcs). Set 4 minnow traps above this beaver dam (captured 5 jcs). Observed side channel around this dam that likely provided access for juvenile fish. Sampled jcs captured.

Recommendations for 2005

Check stream for beaver activity. Monitor jcs utilisation.

**2005**

*July 4* - surveyed lower 100 m of creek. Beaver dam observed approximately 100 m upstream of mouth. Observed adult grayling above dam and adult grayling and unidentified juvenile fish below. No action taken at this time.

July 27 – surveyed creek 200 m upstream. Beaver dam located approximately 100 m upstream was washed out. Observed large beaver dam approximately 200 m upstream of mouth. Unidentified juvenile fish were observed below beaver dam and adult grayling above dam. Breached beaver dam.

Recommendations for 2006

Check stream for beaver activity and monitor jcs utilisation.

**2006**

No survey conducted. Lake conditions were too rough to cross safely.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **low**.

**NISUTLIN RIVER**

***Nisutlin River – 874***

*drainage area:* 11,984 km<sup>2</sup>

The Nisutlin River enters Nisutlin Bay approximately 11 km from the town of Teslin. Chinook salmon spawn and rear in the river. Access to the river is by boat from Teslin, by vehicle from the Canol Road at Sidney Lake, or by boat from the Canol crossing of Rose River #1.

**2003**

*August 23* - Conducted aerial survey with DFO personnel to enumerate chinook spawners in index area.

*October 23* - Conducted aerial survey between mouth and Thirtymile creek confluence with DFO personnel to investigate chum salmon spawning potential. No chum spawners observed at this time.

Recommendations for 2004

continue to participate in aerial enumeration surveys. Collect DNA samples.

Check reaches above Thirtymile creek confluence for chum spawning potential.

**2004**

*August 18* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 330 chinook spawners was counted.

*October 7* - set gillnet for chum salmon at 'Crowknife Point' located approximately 2.3 km upstream of the mouth. Captured one whitefish but no chum salmon in one hour set.

Recommendations for 2005

participate in aerial enumeration surveys. Collect DNA samples. Check reaches above Thirtymile Creek confluence for chum spawning potential.

**2005**

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

*August 15* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 807 chinook spawners was counted.

Recommendations for 2006

Participate in aerial enumeration surveys. Collect DNA samples. Check reaches above Thirtymile Creek confluence for chum spawning potential.

**2006**

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

*August 16* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 601 chinook spawners was counted.

Recommendations for 2007

Participate in aerial enumeration surveys – Priority rating: **high**. Collect DNA samples – Priority rating: **high**.

**Tributaries:**

***Wolf River - 8740227***

*drainage area:* 3,954 km<sup>2</sup>

The Wolf River enters the Nisutlin River from the east 6 km upstream from the mouth. Chinook salmon spawn and rear in the river. Aerial surveys have been conducted by DFO and the Alaska Dept. of Fish and Game (ADF&G) to enumerate chinook since 1970. Access to the lower river is by boat from the Nisutlin River, and to the upper river is by floatplane to Wolf Lake.

**2003**

*August 23* - Conducted aerial survey with DFO personnel to enumerate chinook spawners.

*August 25-27* - Flew to Wolf Lake. Collected DNA samples from chinook spawners at lake outlet and sent to Pat Milligan (DFO).

Recommendations for 2004

Continue to participate in aerial enumeration surveys. Continue DNA sample collection.

**2004**

*August 18* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 226 chinook spawners was counted.

Recommendations for 2005

Participate in aerial enumeration surveys. Continue DNA sample collection.

**2005**

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

*August 15* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 260 chinook spawners was counted.

Recommendations for 2006

Participate in aerial enumeration surveys. Continue DNA sample collection.

**2006**

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

*August 16* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 114 chinook spawners was counted.

Recommendations for 2007

Participate in aerial enumeration surveys – Priority rating: **high**. Continue DNA sample collection – priority rating: **high**.

***Sidney Creek - 8743655129***

*drainage area:* 800 km<sup>2</sup>

Sidney Creek enters the Nisutlin from the west approximately 63 km upstream from the mouth. Chinook salmon spawn and rear in the creek. There is placer mining in and around



the upper drainage. There has been industrial forestry in the lower drainage basin. Access is by the Canol Road, which crosses the creek near the mouth. Iron Creek Road provides access to the upper creek at and above the mouth of Iron Creek.

### **2003**

*June 8* - flew creek. Saw two beaver dams 30 km upstream from Nisutlin River confluence.

*July 22-23* - set minnow traps above and below Canol Road culvert. Captured jcs both above and below culvert.

*August 29* - conducted ground survey of creek. No chinook spawners seen at this time. One adult chinook observed last week by Howard Smith (Teslin Habitat Steward) near the Canol Road culvert.

#### Recommendations for 2004

Check stream for beaver activity. Monitor spawning activity. Monitor jcs utilisation.

### **2004**

*June 20* - survey creek from mouth to approximately 1.3 km upstream. No obstructions observed.

*July 29* - set 4 minnow traps below highway culvert (captured 401 jcs). Set 5 minnow traps above highway culvert (captured 197 jcs (two jcs were 1+)). Sampled subset of total jcs captured.

#### Recommendations for 2005

Check stream for beaver activity. Monitor spawning activity. Monitor jcs utilisation.

### **2005**

No survey conducted due to time constraints.

#### Recommendations for 2006

Effort should be made to check stream for beaver activity and monitor utilisation by adult and juvenile chinook salmon.

### **2006**

*July 12* – surveyed 300 m below highway culvert. No obstructions observed. Set 5 minnow traps. Captured 6 jcs. Sampled all jcs captured.

#### Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **medium**

### **Tributaries:**

#### ***Iron Creek - 8743655129646***

##### *drainage area:*

Iron Creek enters Sidney Creek from the north approximately 23 km upstream from the mouth. A waterfall near the mouth obstructs all access to the upper creek. Access is from the Iron Creek road.

### **2003**

*July 22* - unable to drive to Iron Creek because of poor road conditions.

#### Recommendations for 2004

Check for jcs utilisation downstream of falls if road is accessible.

### **2004**

No survey conducted.

Recommendations for 2005

Check for jcs utilisation downstream of falls if road is accessible.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to check for jcs utilisation downstream of falls if road is accessible.

**2006**

*July 14* – Accessed creek from the South Canol Road by ATV. Set 9 minnow traps between mouth of creek and waterfall. No jcs captured.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **low**

***Evelyn Creek - 8743655129116***

*drainage area:* 210 km<sup>2</sup>

Evelyn Creek enters Sidney Creek from the south approximately 7 km from the mouth. Chinook salmon rear in the creek and there is anecdotal information of salmon spawning. Placer mining occurs in the drainage. Access is from the Canol Road crossing near the mouth. Evelyn Creek road provides access to the upper reaches.

**2003**

*June 8* - flew creek. No active beaver dams observed.

*July 21-22* - set minnow traps above and below Canol road bridge. No jcs captured.

Recommendations for 2004

Check stream for beaver activity. Monitor jcs utilisation.

**2004**

*June 16* - survey creek 400 meters d/s of highway bridge and 250 meters above bridge. No obstructions observed.

Recommendations for 2005

Check stream for beaver activity. Monitor jcs utilisation.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to check stream for beaver activity and to monitor jcs utilisation.

**2006**

No survey conducted due to time constraints.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **medium**

***Murphy Creek - 8743655***

*drainage area:* 210 km<sup>2</sup>

Murphy Creek enters Sidney Creek from the south approximately 4 km upstream from the mouth. Chinook salmon rear in the creek. Chinook spawning has not been documented but habitat may be suitable. Access is from the Canol Road crossing. This culvert is a barrier to fish passage during low flows.

**2003**

*June 8* - flew creek. No beaver dams observed.

*July 21-22* - set minnow traps above and below culvert. No jcs captured at this time.

Recommendations for 2004

Check stream for beaver activity. Monitor jcs utilisation above and below highway culvert.

**2004**

July 29 - conducted culvert assessment.

Recommendations for 2005

Check stream for beaver activity. Monitor jcs utilisation above and below highway culvert.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to check stream for beaver activity and monitor jcs utilisation.

**2006**

No survey conducted due to time constraints.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation – Priority rating: **medium**

***Sidney Lake Outlet Creek - 874395 (Sidney Lake)***

*drainage area:*

This creek enters the Nisutlin River approximately 68 km upstream from the mouth. Nothing is known about chinook utilisation in this creek. Access is by boat from Sidney Lake and Nisutlin River. Beavers may dam the creek.

**2003**

June 26 - took boat from Sidney Lake. Numerous logjams and old beaver dams seen throughout the creek.

Recommendations for 2004

Check for jcs utilisation

**2004**

June 20 - accessed mouth of creek by boat from Nisutlin River. Surveyed lower 600 meters of creek. No obstructions observed.

Recommendations for 2005

Check for jcs utilisation.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Check for jcs utilisation if time permits.

**2006**

No survey conducted due to time constraints.

Recommendations for 2007

Consider monitoring jcs utilisation – Priority rating: **low**.

***Cottonwood Creek - 874437***

*drainage area: 75.6 km<sup>2</sup>*

Cottonwood Creek enters the Nisutlin River from the west approximately 76 km upstream from the mouth. Chinook salmon rear in the creek. Access is by the Canol Road crossing near the mouth. Beavers may dam the creek. The highway culvert is a barrier for fish passage.

## 2003

*June 26* - ground survey of creek. Saw beaver dam downstream of culvert.

*July 23-24* - set minnow traps above and below culvert. Captured jcs below culvert and above beaver dam. No jcs captured above culvert. Good rearing habitat observed upstream of culvert. Culvert hung 1.5 meters above creek level. Took photos.

*August 12* - ground survey for chinook spawner utilisation. No spawners observed.

### Recommendations for 2004

Check stream for beaver activity. Monitor utilisation by jcs.

## 2004

*June 15* - set 5 minnow traps below highway culvert (no jcs captured). Set 4 minnow traps above highway culvert (no jcs captured).

*July 21* - set 4 minnow traps below highway culvert (captured 167 jcs). Sampled subset of jcs. Set 5 minnow traps above highway culvert (no jcs captured). Conducted culvert assessment.

### Recommendations for 2005

Initiate culvert passage mitigation. Check stream for beaver activity. Monitor utilisation by jcs.

## 2005

The process to mitigate culvert passage problem was not initiated in 2005.

*July 7* - surveyed creek 200 m upstream and 200 m downstream of highway culvert. No beaver dams observed. Set 5 minnow traps above highway culvert (no jcs captured). Set 5 minnow traps below highway culvert (no jcs captured).

### Recommendations for 2006

Initiate culvert passage mitigation. Check stream for beaver activity. Monitor utilisation by jcs.

## 2006

*July 12-13* - Surveyed creek 400 m downstream and 200 m upstream of highway culvert. No beaver dams observed below highway culvert. Observed 2 logjams and 2 active beaver dams above highway culvert. Set 10 minnow traps below highway culvert (no jcs captured).

*July 21-22* - Set 10 minnow traps below highway culvert (no jcs captured).

Drafted letter to the Department of Highways and Public Works, Teslin, to address concerns about the highway culvert that is a barrier to migrating jcs.

### Recommendations for 2007

Efforts to mitigate culvert passage for jcs should be continued – Priority rating: **high**. Check stream for beaver activity and monitor utilisation by jcs – Priority rating: **high**.

## *Coyote Creek -*

### *drainage area:*

Coyote Creek enters the Nisutlin River from the west approximately 73 km upstream from the mouth. Chinook salmon rear in the creek. Access is from the Canol Road crossing. Beaver may dam the creek.

## 2003

*July 23- 24* - set minnow traps above and below culvert. Captured jcs both above and below culvert. Saw lots of fresh beaver sign. Removed beaver sticks accumulated above culvert.

Took photos. Saw black bear.

### Recommendations for 2004

Check stream for beaver activity. Monitor jcs utilisation.

## 2004

July 22 - Removed logjam d/s of highway culvert. Observed scouring and erosion of stream banks below culvert. Conducted culvert assessment.

July 27 - set 5 minnow traps below highway culvert (no jcs captured). Set 4 minnow traps above highway culvert (no jcs captured) - possible barrier downstream not investigated.

### Recommendations for 2005

Check stream for beaver activity. Monitor jcs utilisation. Initiate measures to stabilize stream banks at culvert outfall.

## 2005

No survey conducted due to time constraints. The stabilisation of stream banks at the culvert outfall was not given priority in the 2005 work plan.

### Recommendations for 2006

Effort should be made to check stream for beaver activity and monitor jcs utilisation. Re-investigate stream to determine the extent of bank destabilisation. Options for stabilising banks should be explored if necessary.

## 2006

No survey conducted due to time constraints. The stabilisation of stream banks at the culvert outfall was not given priority in the 2006 work plan.

### Recommendations for 2007

Consider checking stream for beaver activity and monitoring jcs utilisation – Priority rating: **medium**. Consider re-investigating stream to determine the extent of bank destabilisation and consider options for stabilisation – Priority rating: **low**.

## **MORLEY RIVER**

### *Morley River – 875*

#### *drainage area:*

The Morley River enters Morley Bay approximately 16 km south of the town of Teslin. The lower river extends from the mouth to Morley Lake, and the upper river extends from Morley Lake to the outlet of Morris Lake. Chinook salmon spawn and rear in the lower river. Less is known of the upper river, with questionable accounts of spawning upstream as far as Morris Lake. The Alaska Highway follows the river to Morley Lake and provides multiple accesses to the river. Access can also be gained by boat from Teslin Lake and Morley Lake; however, there is a set of falls between the lakes. There is potential for forestry and hydro development in the watershed.

## 2003

August 15 - Collected DNA samples from chinook spawners and sent to Pat Milligan (DFO).

### Recommendations for 2004

continue DNA sample collection. Investigate spawning potential and jcs utilisation above Morley Lake.

## 2004

June 8 - set 5 minnow traps between highway bridge and Morley Lake (captured one overwintering jcs (1+)).

August 13 & 16 - angled for adult salmon to collect DNA samples.

August 17 - assisted DFO personnel with egg-take for 'Salmon in the Classroom' program. Collected DNA samples from adult salmon.

*August 19* - set 1 minnow trap at outlet of Morley Lake (captured 1 jcs). Sampled jcs captured. Set 1 minnow trap at inlet of Morley Lake (no jcs captured). Set minnow traps and beach-seined shoreline of Morley Lake to demonstrate fish collection techniques to children participating in the Teslin community recreational 'Youth Environment camp'. Captured juvenile whitefish, burbot, northern pike and sculpins (no jcs captured).

Recommendations for 2005

continue DNA sample collection. Investigate spawning potential and jcs utilisation above Morley Lake. Collect baseline information on habitat and salmon utilisation in tributaries to Morley Lake.

**2005**

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

*July 25* – conducted stream assessments on two unnamed tributaries of Morley Lake. Set minnow traps in both tributaries. No jcs captured.

Recommendations for 2006

Continue DNA sample collection in Morley River. Investigate spawning potential and jcs utilisation above Morley Lake.

**2006**

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

Recommendations for 2007

Continue DNA sample collection – Priority rating: **high**. Consider investigating spawning potential and jcs utilisation above Morley Lake – Priority rating: **Low**

**Tributaries:**

***Hays Creek – 8750541***

*drainage area:*

Hays Creek enters the Morley River from the north, approximately 4.6 km upstream from the mouth. Chinook salmon rear in the stream. The culvert is a velocity barrier to juvenile fish. Reaches above the culvert have good rearing potential. Access is from the Alaska Highway crossing.

**2003**

*July 17* - Set minnow traps above and below culvert. Juvenile chinook captured only below culvert. High water velocity observed through culvert.

Recommendations for 2004

Investigate methods to mitigate culvert passage problem. Monitor jcs utilisation.

**2004**

no survey conducted.

Recommendations for 2005

Investigate methods to mitigate culvert passage problem. Monitor jcs utilisation.

**2005**

no survey conducted due to time constraints.

Recommendations for 2006

Conduct stream habitat assessment upstream of highway culvert to determine extent of rearing potential. Consider moving some jcs from below culvert to reaches above if habitat is suitable for rearing.

**2006**

July 26 - Set minnow traps upstream of highway bridge. No jcs captured

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **high**

***Strawberry Creek - 8750909***

*drainage area:*

Strawberry creek enters the Morley River approximately 9 km upstream from the mouth. Chinook salmon rear in the creek. Access is from the Alaska Highway crossing.

**2004**

June 21 - survey creek on foot. No obstructions observed downstream to mouth and immediately upstream of highway culvert. Culvert does not appear to be a barrier but this was not verified.

Recommendations for 2005

check stream for jcs utilisation.

**2005**

No survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to check stream for jcs utilisation.

**2006**

No survey conducted due to time constraints.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **high**

***Lower Hazel Creek - 8407132***

*drainage area:*

Lower Hazel Creek enters Morley Lake from the south approximately 10 km from the outlet. Little is known of this small stream. Access is from the Alaska Highway crossing near the mouth. Beavers may dam the creek.

**2003**

July 3 - Survey creek on foot. Saw 3 active beaver dams. Took photos. Culvert appears passable by fish.

Recommendations for 2004

check stream for jcs utilisation. Check stream for beaver activity.

**2004**

June 9 - beaver dam assessment training with DFO personnel. Observed series of four active beavers dams upstream of highway culvert approximately 50 meters upstream of highway culvert.

Recommendations for 2005

check stream for jcs utilisation and remove obstructions to maintain upstream migration for jcs if necessary.

**2005**

no survey conducted due to time constraints.

Recommendations for 2006

Effort should be made to check stream for jcs utilisation.

**2006**

July 26 – set minnow traps upstream and downstream of highway culvert. No jcs captured.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **high**

## GLADYS RIVER

### *Gladys River - 817*

Gladys River enters Teslin Lake from the west. Chinook salmon spawn and rear in the river, primarily in the lower section of the river downstream of Hall Lakes. A falls approximately 6 kms upstream of the mouth is negotiable by adult chinook but would be a barrier to upstream migrating jcs. Access to the lower river is by boat from Teslin Lake, and to the upper river is by floatplane to one of the lakes.

#### 2003

*August 13* - Went by boat to mouth of river to collect DNA samples. No adult chinook observed.

*August 18-20* - flew into Hall Lakes. Collected DNA samples and sent to Pat Milligan (DFO). Saw 10 chinook spawners at the outlet. Set five minnow traps overnight. Captured jcs downstream of lake outlet.

#### Recommendations for 2004

continue DNA sample collection.

#### 2004

no survey conducted

#### Recommendations for 2005

continue DNA sample collection.

#### 2005

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

#### Recommendations for 2006

Collect DNA samples.

#### 2006

DNA sample collection was deferred to accommodate other DNA collection projects in the Teslin River Watershed.

#### Recommendations for 2007

Consider collecting DNA samples from post spawn chinook. Priority rating: **medium**

## SWIFT RIVER

(note: there is another Swift River, which enters the Lower Teslin River)

### *Swift River - 878*

*drainage area:* 4,202 km<sup>2</sup>

The Swift River enters Teslin Lake from the east approximately 57 km from the town of Teslin. Chinook salmon spawn and rear in the river. The Alaska Highway follows the river to the headwaters and provides multiple accesses. Access to the lower reaches can be gained by boat from Teslin Lake, and to the upper reaches from Swan Lake. The section of river below Swan Lake is a popular corridor for boaters particularly during the moose hunting season.



### **2003**

*August 13* - Went by boat to mouth of river to collect DNA samples. No adult chinook observed.

*August 21-22* - surveyed areas accessible from highway. Attempted to collect DNA samples but no chinook observed.

#### Recommendations for 2004

Continue DNA sample collection

### **2004**

no survey conducted due to extensive forest fires in the drainage.

#### Recommendations for 2005

Continue DNA sample collection. Conduct fisheries assessments in tributaries of the Swift River upstream of Swan Lake to determine utilisation by jcs. Determine extent of utilisation upstream of Swan Lake by chinook salmon spawners.

### **2005**

Fisheries assessments were deferred to accommodate other projects

#### Recommendations for 2006

Conduct fisheries assessments in tributaries of the Swift River upstream of Swan Lake to determine utilisation by jcs. Determine extent of utilisation upstream of Swan Lake by chinook salmon spawners. Collect DNA samples if feasible.

### **2006**

*July 27* – Set minnow traps upstream and downstream of highway culvert. Captured one jcs upstream and one jcs downstream of culvert.

#### Recommendations for 2007

Consider collecting DNA samples from post-spawn chinook. Priority rating: **low**

## **Tributaries:**

### ***Smart River - 8783927***

#### *drainage area:*

The Smart River enters Swift River from the north approximately 40 km upstream from the mouth. Chinook salmon spawn and rear in the river, but little is known of utilisation in the upper reaches. Mineral exploration occurs in the upper drainage. Access to the lower reaches is from the Alaska Highway crossing at the mouth. The upper reaches can be accessed from mining roads, which follow both sides of the creek.

### **2003**

*August 28* - surveyed area above highway bridge on foot. Saw no sign of beaver activity. Observed adult grayling and whitefish species.

Attempted to collect DNA samples but no chinook observed.

#### Recommendations for 2004

Collect DNA samples. Conduct aerial survey to locate spawning areas.

### **2005**

fisheries assessments were deferred to accommodate other projects.

#### Recommendations for 2006

Conduct aerial survey to locate spawning areas and collect DNA samples if feasible.

### **2006**

fisheries assessments were deferred to accommodate other projects.

Recommendations for 2007

Consider an aerial survey to locate spawning areas and collect DNA samples if feasible.

Priority rating: **low**

***Log jam Creek – 8784206***

*drainage area:*

Logjam creek enters the Swift River from the north approximately 53.5 km upstream of the mouth. Chinook salmon rear in the creek. Salmon utilisation of the upper drainage basin is obstructed by falls. Access is from the Alaska Highway crossing.

**2003**

*June 24* - Survey creek from mouth to highway bridge on foot. No beaver dams observed.

Recommendations for 2004

check stream for jcs utilisation.

**2004**

*June 18* - surveyed creek on foot. No obstructions observed downstream to mouth and immediately upstream of highway culvert.

Recommendations for 2005

check stream for jcs utilisation.

**2005**

no survey conducted due to time constraints

Recommendations for 2006

Effort should be made to check stream for jcs utilisation.

**2006**

*July 24* – set minnow traps above and below beaver dam located downstream of highway culvert. No jcs captured.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **high**

***Partridge Creek – 8786496***

*drainage area:*

Partridge creek enters the Swift River from the north approximately 5 km upstream of Swan Lake. The extent of chinook salmon rearing is not known. Access is from the Alaska Highway crossing.

**2006**

*July 25* – Set minnow traps in vicinity of highway bridge. No jcs captured.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **low**

***Screw Creek – 8785074***

*drainage area:*

Screw creek enters the Swift River from the north approximately 2 km upstream of Swan Lake. The extent of chinook salmon rearing is not known. Rearing potential may be limited due to the shallow nature of the stream. Access is from the Alaska Highway crossing.

**2006**

*July 24* – Set minnow traps downstream of highway culvert. No jcs captured.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **low**

### ***Seagull Creek – 8787237***

*drainage area:*

Seagull Creek enters the Swift River from the north approximately 10 km upstream of Swan Lake. The extent of chinook salmon rearing is not known. Access is from the Alaska Highway crossing.

**2006**

*July 27* – Set minnow traps in vicinity of highway culvert. No jcs captured.

Recommendations for 2007

Consider monitoring for obstructions and jcs utilisation. Priority rating: **low**

## **YUKON RIVER MID-MAINSTEM WATERSHED**

(The Teslin Tlingit Council Traditional Territory includes much of the Big Salmon River drainage)

### **BIG SALMON RIVER**

#### ***Big Salmon River - 860***

*drainage area:* 6,760 km<sup>2</sup>

The Big Salmon River is the outlet stream of the Quiet Lake/Big Salmon Lake chain. Chinook salmon spawn and rear in the river. Aerial enumeration surveys of an index area have been conducted by DFO and ADF&G since 1970. The river can be accessed by boat from Quiet Lake along the Canol Road or from the Yukon River along the Robert Campbell and the Klondike Highways near Carmacks or from Whitehorse.

**2003**

*August 23* - Conducted aerial survey with DFO personnel to enumerate chinook spawners in index area.

Recommendations for 2004

continue to participate in aerial enumeration surveys. Collect baseline information on habitat and salmon utilisation in tributaries to Quiet Lake.

**2004**

*August 18* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 762 chinook spawners was counted.

Recommendations for 2005

participate in aerial enumeration surveys.

**2005**

*August 16-18* - Collected tissue samples for DNA analysis and age-sex-length data from post-spawned chinook salmon with assistance from DFO personnel. Samples were collected downstream of Big Salmon Lake by angling. Access was by ATV to boat launch on Big Salmon Lake and by inflatable boat to collection site. Collected 17 samples.

*August 15* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 952 chinook spawners was counted. The total run size determined from sonar operations at the mouth of the river was 5,618 chinook salmon.

Recommendations for 2006

Participate in aerial enumeration surveys. Collect DNA samples.

## **2006**

*August 16* - Aerial chinook enumeration survey of index area conducted by DFO. A total of 1,140 chinook spawners was counted. The total run size determined from sonar operations at the mouth of the river was 7,308 chinook salmon.

### Recommendations for 2007

Consider participation in aerial enumeration surveys. Priority rating: **medium**

## ***Quiet Lake - 860***

### *drainage area:*

Quiet Lake is a headwater lake of the Big Salmon River. The lake is 31 km in length, has an average width of 1.7 km and an average depth of 32.9 m. Access is from the South Canal Road following the east shore. Boats can be launched at the YTG campground.

## **2004**

*August 10* - beach seined along lakeshore. Captured one jcs from 2 sets. Other fish species captured included juvenile whitefish (41) and slimy sculpins. Set minnow traps at lake outlet; captured and sampled one jcs.

### Recommendations for 2005

Collect baseline information on habitat and salmon utilisation in tributaries to Quiet Lake.

## **2005**

*August 1-3* - conducted stream assessments of tributaries to Quiet and Sandy Lake.

Tributaries investigated included: the inlet creek (unnamed) and Crater Creek flowing into Quiet Lake; and Brown Creek flowing into Sandy Lake. Minnow traps were set in all 4 tributaries. No jcs captured.

### Recommendations for 2006

Collect baseline information on habitat and salmon utilisation in tributaries of the upper reaches of the Big Salmon River.

## **2006**

Tributaries to Quiet Lake and upper reaches of the Big Salmon River were not re-visited in 2006.

### Recommendations for 2007

Consider collection of baseline information on habitat and salmon utilisation in tributaries of the upper reaches of the Big Salmon River. Priority rating: **low**

## BROOKS BROOK

|  |   |
|--|---|
|  |   |
| <b>Stream/River Name:</b> <i>Brooks Brook</i>  | <b>Date:</b> <i>July 8-9, 2006</i>          |
| <b>Crew:</b> <i>G. Wolfe, D. Dewhurst, R. Douville, J. Wilson</i>  | <b>R&amp;E Fund Project #:</b> <i>47-06</i> |
| <b>Type of Activity:</b> <span style="background-color: yellow;">assessment</span> transport of juveniles    obstruction removal for adults    monitoring  |   |
| <b>Type of Obstruction:</b> Beaver Dam        Log jam <span style="background-color: yellow;">other</span> ( <i>specify</i> ) <i>Culvert</i>   |   |
| <b>Location of Obstruction</b> (describe or number): <i>culvert at Alaska Hwy crossing</i>   |   |
| <b>UTM Northing</b> (or latitude): <i>6699662</i> <b>UTM Easting</b> (or longitude): <i>08599511</i>   |   |
| <b>Fish above obstruction</b> (captured/observed): <span style="background-color: yellow;">yes</span> no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):<br><i>captured 1 Slimy Sculpin</i>  |   |
| <b>Fish below obstruction</b> (captured/observed): <span style="background-color: yellow;">yes</span> no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):<br><i>captured 7 Slimy Sculpins; 2 juvenile Burbot</i><br><b>Number of Juveniles transported upstream of obstruction:</b> <i>none</i> |   |
| COMMENTS/description of activities: <i>walked from mouth to highway culvert and 200 m upstream. Saw 2 old breached beaver dams below culvert. Set 5 traps above culvert and 10 traps below. Culvert may be a velocity barrier to migrating jcs.</i>  |   |

|  |   |
|--|---|
|  |   |
| <b>Stream/River Name:</b> <i>Brooks Brook</i>  | <b>Date:</b> <i>July 18-19, 2006</i>        |
| <b>Crew:</b> <i>G. Wolfe, P. B, R. Douville,</i>   | <b>R&amp;E Fund Project #:</b> <i>47-06</i> |
| <b>Type of Activity:</b> assessment    transport of juveniles    obstruction removal for adults <span style="background-color: yellow;">monitoring</span>  |   |
| <b>Type of Obstruction:</b> Beaver Dam        Log jam <span style="background-color: yellow;">other</span> ( <i>specify</i> ) <i>Culvert</i>   |   |
| <b>Location of Obstruction</b> (describe or number): <i>culvert at Alaska Hwy crossing</i>   |   |
| <b>UTM Northing</b> (or latitude): <i>6699662</i> <b>UTM Easting</b> (or longitude): <i>08599511</i>   |   |
| <b>Fish above obstruction</b> (captured/observed): <span style="background-color: yellow;">yes</span> no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):<br><i>captured 1 Slimy Sculpin and 2 juvenile chinook</i>   |   |
| <b>Fish below obstruction</b> (captured/observed): <span style="background-color: yellow;">yes</span> no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):<br><i>captured 2 juvenile Burbot</i><br><b>Number of Juveniles transported upstream of obstruction:</b> <i>none</i> |   |
| COMMENTS/description of activities: <i>Set 5 G-traps above culvert and 5 G-traps below. Juvenile chinook captured may have overwintered in the creek.</i>  |   |

## COTTONWOOD CREEK

|  |  |  |  |
|--|--|--|--|
| <b>Stream/River Name:</b> <i>Cottonwood Creek</i>  |  | <b>Date:</b> <i>July 12-13, 2006</i>               |  |
| <b>Crew:</b> <i>G. Wolfe, D. Dewhurst, R. Douville,</i>  |  | <b>R&amp;E Fund Project #:</b> <i>47-06</i>        |  |
| <b>Type of Activity:</b> <span style="background-color: yellow;">assessment</span> transport of juveniles    obstruction removal for adults    monitoring  |  |  |  |
| <b>Type of Obstruction:</b> Beaver Dam            Log jam <span style="background-color: yellow;">other</span> (specify) <i>Culvert</i>  |  |  |  |
| <b>Location of Obstruction</b> (describe or number): <i>culvert at South Canol Road crossing</i>   |  |  |  |
| <b>UTM Northing</b> (or latitude): <i>6752054</i>  |  | <b>UTM Easting</b> (or longitude): <i>08609869</i> |  |
| <b>Fish above obstruction</b> (captured/observed):            yes <span style="background-color: yellow;">no</span><br>List fish species captured/observed: (specify adults (A) &/or juveniles (J)):   |  |  |  |
| <b>Fish below obstruction</b> (captured/observed): <span style="background-color: yellow;">yes</span> no<br>List fish species captured/observed: (specify adults (A) &/or juveniles (J)):<br><i>captured 1 juvenile Burbot and 2 Slimy Sculpin</i> |  |  |  |
| <b>Number of Juveniles transported upstream of obstruction:</b> <i>none</i>  |  |  |  |
| COMMENTS/description of activities: <i>walked 400 m downstream of hwy culvert and 200 m upstream. Saw 2 active beaver dams upstream of culvert. Water was silty. Banks silty below culvert. Set 5 G-traps below hwy culvert and 5 above.</i>       |  |  |  |

## DEADMAN CREEK

|   |  |  |  |
|---|--|--|--|
| <b>Stream/River Name:</b> <i>Deadman Creek</i>  |  | <b>Date:</b> <i>July 8-9, 2006</i>                 |  |
| <b>Crew:</b> <i>G. Wolfe, D. Dewhurst, R. Douville, J. Wilson</i>   |  | <b>R&amp;E Fund Project #:</b> <i>47-06</i>        |  |
| <b>Type of Activity:</b> <span style="background-color: yellow;">assessment</span> transport of juveniles    obstruction removal for adults    monitoring   |  |  |  |
| <b>Type of Obstruction:</b> Beaver Dam <span style="background-color: yellow;">Log jam</span> other (specify)   |  |  |  |
| <b>Location of Obstruction</b> (describe or number): <i>upstream of Hwy bridge about 600 m</i>  |  |  |  |
| <b>UTM Northing</b> (or latitude): <i>6690691</i>   |  | <b>UTM Easting</b> (or longitude): <i>08607648</i> |  |
| <b>Fish above obstruction</b> (captured/observed):            yes <span style="background-color: yellow;">no</span><br>List fish species captured/observed: (specify adults (A) &/or juveniles (J)):  |  |  |  |
| <b>Fish below obstruction</b> (captured/observed):            yes <span style="background-color: yellow;">no</span><br>List fish species captured/observed: (specify adults (A) &/or juveniles (J)):  |  |  |  |
| <b>Number of Juveniles transported upstream of obstruction:</b> <i>none</i>   |  |  |  |
| COMMENTS/description of activities: <i>walked creek 1 km upstream of mouth. Old large beaver dam has been washed out. Material from this dam has collected about 100 m below in a logjam. Logjam may be an obstruction to migrating juvenile chinook. Set 5 traps above logjam and 2 below.</i> |  |  |  |

## IRON CREEK

|   |  |  |  |
|---|--|--|--|
| <b>Stream/River Name:</b> <i>Iron Creek</i>   |  | <b>Date:</b> <i>July 14-15, 2006</i>               |  |
| <b>Crew:</b> <i>G. Wolfe, D. Dewhurst, R Douville</i>   |  | <b>R&amp;E Fund Project #:</b> <i>47-06</i>        |  |
| <b>Type of Activity:</b> <span style="background-color: yellow;">assessment</span> transport of juveniles    obstruction removal for adults    monitoring   |  |  |  |
| <b>Type of Obstruction:</b> Beaver Dam            Log jam <span style="background-color: yellow;">other</span> ( <i>specify</i> ) <i>Waterfalls</i>   |  |  |  |
| <b>Location of Obstruction</b> (describe or number): <i>about 200 m upstream of mouth</i>   |  |  |  |
| <b>UTM Northing</b> (or latitude): <i>6748461</i>   |  | <b>UTM Easting</b> (or longitude): <i>08591651</i> |  |
| <b>Fish above obstruction</b> (captured/observed):            yes            no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):<br><i>No traps set above falls</i>                            |  |  |  |
| <b>Fish below obstruction</b> (captured/observed): <span style="background-color: yellow;">yes</span> no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):<br><i>captured 4 juvenile Burbot</i> |  |  |  |
| <b>Number of Juveniles transported upstream of obstruction:</b> <i>none</i>   |  |  |  |
| COMMENTS/description of activities: <i>Got into creek from S. Canol Road by 4-wheeler. Set 9 G-traps below waterfalls about 200 m upstream of mouth. Waterfalls is about 10 ft. high. Water is fast and clear with lots of boulders.</i>    |  |  |  |

## SYDNEY CREEK

|   |  |   |  |
|---|--|---|--|
| <b>Stream/River Name:</b> <i>Sydney Creek</i>   |  | <b>Date:</b> <i>July 12-13, 2006</i>        |  |
| <b>Crew:</b> <i>G. Wolfe, D. Dewhurst, R. Douville,</i>   |  | <b>R&amp;E Fund Project #:</b> <i>47-06</i> |  |
| <b>Type of Activity:</b> <span style="background-color: yellow;">assessment</span> transport of juveniles    obstruction removal for adults    monitoring   |  |   |  |
| <b>Type of Obstruction:</b> Beaver Dam            Log jam            other ( <i>specify</i> ) <i>no obstructions</i>  |  |   |  |
| <b>Location of Obstruction</b> (describe or number): <i>N/A</i>   |  |   |  |
| <b>UTM Northing</b> (or latitude):  |  | <b>UTM Easting</b> (or longitude):          |  |
| <b>Fish above obstruction</b> (captured/observed):            yes            no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):   |  |   |  |
| <b>Fish below obstruction</b> (captured/observed):            yes            no<br>List fish species captured/observed: ( <i>specify adults (A) &amp;/or juveniles (J)</i> ):   |  |   |  |
| <b>Number of Juveniles transported upstream of obstruction:</b>   |  |   |  |
| COMMENTS/description of activities: <i>walked downstream of culvert at S. Canol Road to Evelyn Creek confluence. Culvert is not likely a barrier to fish. Set 5 G-traps. Captured 6 juvenile chinook and 1 juvenile burbot. .</i> |  |   |  |

## Yukon River Panel Projects - Juvenile Salmon Sampling Form

|   |           |                               |              |                                      |        |                                 |        |        |
|---|-----------|-------------------------------|--------------|--------------------------------------|--------|---------------------------------|--------|--------|
| Stream/River name: SWIFT RIVER (SOUTH)                        |           |                               |              |                                      |        | Date: July 27, 2006             |        |        |
| Sampling station location (describe or number):               |           |                               |              |                                      |        |                                 |        |        |
| UTM Northing (or Latitude): 6659902                           |           |                               |              | UTM Easting (or Longitude): 09389820 |        |                                 |        |        |
| Persons sampling: G. Wolfe, D. Dewhurst, R. Douville          |           |                               |              |                                      |        |                                 |        |        |
| Sampling method: <u>G-traps</u> Seine net Other (specify)     |           |                               |              |                                      |        | Collection license #            |        |        |
| Number of traps or seines set: 10 G-traps                     |           |                               |              |                                      |        | R&E Fund Project # : CRE- 47-06 |        |        |
| Date traps set: July 27                                       |           | Time traps set: 1:30 p.m.     |              | Water temp :                         |        | Air temp:                       |        |        |
| Date traps pulled: July 28                                    |           | Time traps pulled: 12:00 p.m. |              | Water temp:                          |        | Air temp:                       |        |        |
| Stream flow (circle one):                                     |           |                               | LOW          | MEDIUM                               |        |                                 | HIGH   |        |
| Water clarity (circle one):                                   |           |                               | CLEAR        | SOMEWHAT TURBID<br>(cloudy)          |        |                                 | TURBID |        |
|   |           |                               |              |                                      |        |                                 |        |        |
| Fish Species  | LENGTH    | WEIGHT                        | Fish Species | LENGTH                               | WEIGHT | Fish Species                    | LENGTH | WEIGHT |
| <i>CK (Chinook)</i>   | <i>mm</i> | <i>grams</i>                  |              |                                      |        |                                 |        |        |
| <b>BB (1)</b>   |           |                               |              |                                      |        |                                 |        |        |
| <b>CK</b>   | -         | -                             |              |                                      |        |                                 |        |        |
| <b>CK</b>   | -         | -                             |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
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|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
|   |           |                               |              |                                      |        |                                 |        |        |
| <b>TOTAL Number of CHINOOK captured: 2</b>                    |           |                               |              |                                      |        |                                 |        |        |
| <b>Other species captured &amp; totals: 1 juvenile burbot</b> |           |                               |              |                                      |        |                                 |        |        |