

Tuya River Sockeye Salmon Harvest Mechanism Design, Year Five, April 2008-March 2010

Funded by the Pacific Salmon Commission, Northern Fund Project #TSB01

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Department of Fisheries and Oceans
Suite 100, 419 Range Road
Whitehorse Yukon Territory
Y1A 3V1

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Executive Summary

Funding provided by the Northern Fund of the Pacific Salmon Commission was let to DFO to develop a Tuya River fish trap design complete with an estimate of costs including blue prints, purchase, deployment, and demobilization of a structure. Funding was also provided to survey and to estimate the cost of a tote road leading from the Telegraph Creek road to the proposed fish trap site located approximately 2 km from the Telegraph Creek road. Funding was provided for the collection of baseline biological information from sockeye salmon, *Oncorhynchus nerka*, entering the Tuya River, and to assess success of the fish passage work conducted in November, 2008.

The initial project time frame was from 01 April 2008 - 31 March 2009. In October 2008 a request to extend the project through till 31 March 2010 was granted. The rationale for the extension was the proponent's inability to adequately address the two principal objectives of the project as listed above in the time frame allotted.

Meetings of the Tuya steering committee were held in Feb and June 2008. The committee laid the frame work toward addressing the objectives of this project. Some of the meeting time was focused on the Tuya fish passage project that was completed in November 2008 (DFO 2010).

In general, the plan to fully develop a conceptual fish harvest design, which was proposed to be a weir/fishtrap structure extended across the breadth of the Tuya River was not completed. Plans to visit existing weir sites located in the Lower Mainland, B.C. and in the state of Washington were aborted due to scheduling of personnel and transportation challenges. Engineers did, however, meet to flesh out a crude conceptual design. An estimated cost of \$1.2 mil was generated to purchase and install the trap; the cost did not include the road access work. It was recommended that an onsite visit to existing operations be made in order to better develop a conceptual design from which a detail structural plan, including costs, could be generated.

A proposed road routing from the Tuya River site to the Telegraph Creek road was surveyed in May, 2009. The route was mapped using GPS tracking applications. A detailed, professional survey that assesses road grade and other characteristics is proposed for the spring of 2010.

Baseline biological information (age, gender, size, stock origin) was collected from 214 sk salmon entering the Tuya River in 2009. In concert with biological sampling, fish behaviour at the new channel created by the 2008 fish passage project was assessed. It was determine that the blasting project resulted in the re-establishment of fish passage beyond the blast site.

(note: Both the results of the biological sampling and the fish passage assessment were previously addressed in the Tuya River Fish Passage Construction, March-November, 2008. report to the Pacific Salmon Commission (DFO, 2010). The summaries are also included in this report.)

It is recommended that the project be extended through till 31 March 2011. No additional funding beyond the \$214K allocated is required to complete the project objectives. The total expenditure to date is \$23.2K.

1.0 Introduction

From 1995-09 enhanced Tuya River sockeye salmon accounted for an average of 23 per cent of the total harvest of Stikine bound sockeye salmon, *Oncorhynchus nerka*, to the Canadian and US fishing fleets, Fig 1. All Tuya sockeye salmon are a product of the joint Canada/US enhancement agreement signed under the auspices of the Pacific Salmon Treaty, PST, (PSC, 2009). The enhancement agreement goal is to produce 100,000 Stikine enhanced sockeye of which both nations are entitled to 50 per cent of the harvestable production in existing fisheries as well a 50 per cent of the total allowable catch of wild Stikine sockeye production. (The catch share, post 2014, is predicated on the production of enhanced sockeye salmon; as such catch shares of wild and enhanced sockeye are subject to change based on the production enhanced fish.) Canada is also entitled to mount a terminal fishery to harvest Tuya sockeye entering the Tuya River. These fish cannot ascend the river beyond the lower 3.0 km (1.9 miles) of the river due to an 11 metre (36 ft) “chute falls”.

Mixed success of the terminal fishery resulted in cost overruns, low catch rates, and a major downstream distribution of Tuya sockeye that had entered the river and subsequently descended from same. The out migrants, often mutilated fish resulting from their attempts to ascend the Tuya River, are caught in existing fisheries and have been documented ascending some Stikine River salmon bearing tributaries located downstream from the Tuya River, (ACR, 2004).

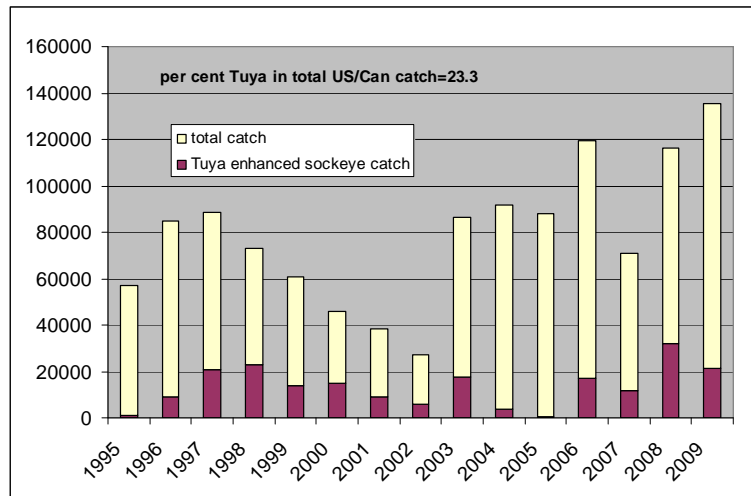


Figure 1. Total US and Canadian catch of Stikine bound sockeye salmon and total catch of enhanced Tuya River bound fish, 1995-09.

Since 1997, a suite of projects designed to improve sockeye harvest rates in the Tuya River were prosecuted. In 2004 through to 2007, monies from the Northern Fund of the PST were directed at developing a terminal harvest system, (DFO, 2007). A trap harvest system was deployed in 2005, with very marginal success, but with some promise contingent on trap redesign (DFO, 2006). In early July 2006 a rock slide

occurred adjacent to the fish trapping site used in 2005. The rock slide rendered the fishing site and fish trap unusable due to a constriction of river flow and enlightenment to managers as to the instability of rock slopes there and inherent dangers to the fishing crew operating the fish trap. Furthermore, the rockslide resulted in a total blockage to fish migration. The blockage was removed in November 2008, which resulted in the re-establishment of fish passage upstream to areas where a safe and efficient harvest mechanism may be deployed, (DFO, 2010). The safest option for a new harvest system is at a site located approximately 900 metres from the mouth of the river, labelled “site 2” in Figure 2.

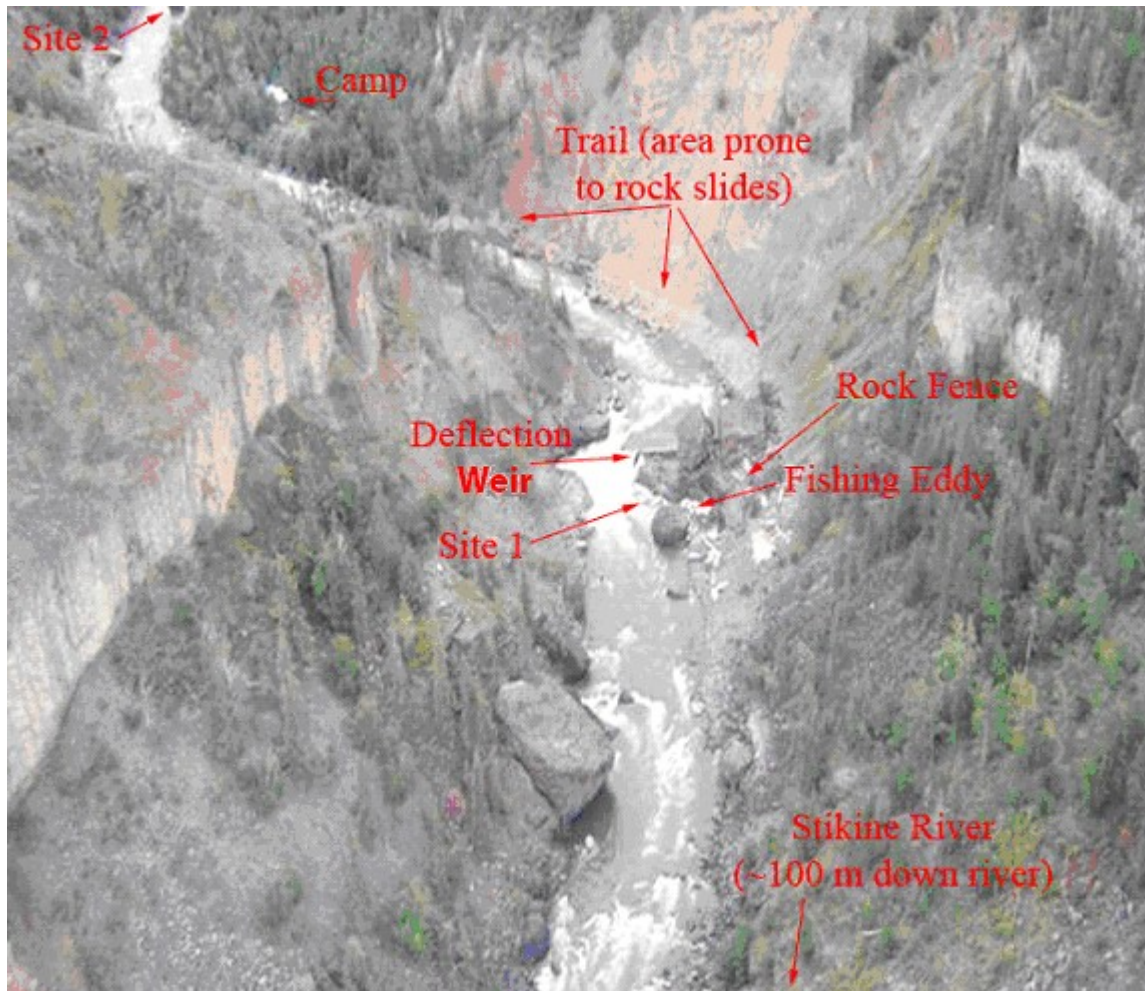


Figure 2. Lower Tuya River showing various reference sites, including site 2 where a proposed fishtrap will be place. Note that most of the rock face labelled as "deflection weir" was removed in November, 2008 in order to re-establish fish passage. Fishing is no longer conducted at site labelled "fishing eddy". This site was abandoned due to safety concerns emanating from the frequency of rock slides there and along the trail to camp.

The Tuya Steering Committee, formed in 2004 and consisting of Canadian and US technical, biological and engineering personnel provided a framework to proceed with plans to develop a fishtrap design as well as planning germane to establishing a tote road to provide access to the fishtrap site.

The following paper summarizes the activities and deliverables from April 2008 through to March 2010, and requests a one year extension required to complete the project.

2.0 Goals, Objectives, and Scope

The overarching goal of the Tuya projects since 2004 is to harvest in a safe and efficient manner a minimum of 80 per cent of the returning sockeye salmon entering the Tuya River. The objectives in reference to the present project include:

- a) To design a harvest structure that will provide for the harvest of a minimum of 80 per cent of the total immigrating sockeye salmon. The structure will be capable of withstanding flow regimes of >200 cubic metres per second in concert with major bed load dynamics, and so designed to be installed in the spring and dismantled in the late summer. The installation, operation (including fish holding), maintenance, and dismantling processes will be designed to maximize safety and minimize labour and other costs. The total cost of design, purchase, installation, and demobilization will be calculated.
- b) To design a tote road leading from the Telegraph Creek road to the harvest site located approximately 2 linear km. from the nearest point of the road. The road design will honour B.C. tote road construction standards and will be designed to provide for the movement of heavy equipment to the harvest site. The road will subsequently be used for transportation of fish captured in the proposed harvest structure. The total cost of design and construction will be calculated.

A permitting/licensing regime for both the road construction and the installation of the fish harvest structure will be summarized. The summary will include a list of the permits required and a reasonable approximation of the review period required for each. A consultation and accommodation process will also be developed in order to provide an avenue for meaningful input from local First Nations and the general public.

Ancillary to the main objectives are: a) the collection of baseline biological information including age, size, gender and origin of sockeye salmon entering the Tuya River; and b) assessing the efficacy of the fish passage construction (blasting) conducted in November 2008.

The scope of this project is limited to design and cost estimates as well as addressing the consultation and licensing imperatives. It is not anticipated that any major onsite work will be undertaken other than a physical survey of the road routing, including assessing grades and determining the nature of local materials that may be used for road construction. Other onsite work includes the collection baseline biological information

of sockeye entering the Tuya River as well as conducting a second consecutive assessment of the new fish passage channel.

3.0 Activities, 2008-2009

3.1 Tuya River Steering Committee Meetings

The Tuya River Steering Committee (TRSC) was established at the outset of the Tuya River Harvest Studies commencing in 2004. The committee's mandate remains unchanged since its inception; specifically, to develop a sockeye salmon harvest facility within the confines of the lower reach of the Tuya River. In the delivery of its mandate the committee has the means to solicit advice from experts in various fields such as river hydrology, geomorphology, fish behaviour and fisheries technology. All activity germane to the Tuya harvest activities originated from proceedings and recommendation of the committee. The core TRSC members consist of the following:

- Retired Senior DFO engineer (Roy McGechaen)
- Senior Engineer from the US (Ed Donahue, HDR Alaska Ltd)
- Senior DFO Engineer (Greg Brooke)
- DFO engineering support (Tori Soames)
- Consultant/Contractor from Canada (Jan Martenenson, Ampex Mining)
- Fisheries Biologist from Canada (Sandy Johnston 'chair', Peter Etherton)
- Fisheries Biologist from the US (Ron Josephson, Eric Prestegard)
- Tahltan/Iskut First Nations (Cheri Frocklage)

The TRSC met in Feb and June 2008. The engineering faction met on 26 Feb 2008. Minutes of the meetings are provided in Appendix A. There were many interactions of select committee members via e-mail or phone throughout the course of the project.

The meetings resulted in the development of a process to address the two objectives of the project: 1/ the design, cost, and installation of a fish trap, and 2/ the design and cost of an access road from the Tuya harvest site to the Telegraph Creek road. The meetings also addressed the opportunities and challenges in re-establishing fish passage around a rock slide that occurred in 2006.

In regards to objective 1, the TRSC recommended that a semi-permanent fish trap be constructed across the Tuya River at a site located just upstream from the camp quarters, site 2 highlighted in Figure 2. The key, and probably most challenging aspect the engineering design, is the placement of a permanent concrete sill at the base of the fish trap, which will require developing a means to divert the stream during the pouring of concrete. A conceptual design to serve as a guide in the drafting of detailed blue prints

and assessing cost is still required. Although a coarse conceptual plan, including a cost of \$1.2 mil, was developed TRSC engineers, it was recommended that a site visit to the Docee River in southern B.C., where a weir that may closely match the requirements for the Tuya project is presently deployed, would serve to assist TRSC in drafting an adequate concept design. Select members of the TRSC were assigned to conduct the site visit, but because of scheduling difficulties, including aircraft charters, the site visit did not come to fruition.

Upon receipt of the concept design, an engineering consultant will be contracted to draw a professional blue print complete with a materials list. The contractor will also be tasked with estimating the purchase, transport, installation, and demobilization costs of the fence. The contractor will be expected to be very thorough in his/her appraisal of the fence and must include, inter alia, a detailed description of equipment required to facilitate the project, the human resources, and the permitting/licences that must be acquired.

Objective 2 refers to the construction of an access road. The TRSC recommended that a tote road be constructed from the Telegraph Creek road to the proposed harvest site. The tote road design must accommodate heavy tracked vehicles required to haul fish fence materials and serve in the construction phase of the fence. It is expected that the tote road would be limited to use by personnel engaged in the Tuya project. A contractor (perhaps DFO facilities unit) will be tasked to survey the road routing and provide a cost estimate to the TRSC. The contractor will be responsible for the permitting and licensing requirements of the road, including the initiation of a Canadian Environmental Assessment Act review and a similar review process required by the province of B.C. , which may include a community consultation component. Tasks were assigned to select members of the committee to start the process. A summary of the activities germane to the tote road follows.

3.2 Tote Road Survey

Mr. Jan (Swede) Martensson, owner of Ampex Mining LTD, conducted both a helicopter and foot survey covering the ground between the proposed Tuya River fishing site and the Telegraph Creek Road from the 01-03 June 2009, with the objective of delineating a routing for a proposed tote road.

The routing was flagged with orange survey tape and frequent co-ordinates were taken along the road routing using a hand held Garmin Map 76 GPS. The co-ordinates (way points) were plotted on a map sheet as shown in Figure 3.

The direct distance from the Telegraph Creek road and the fishing site is 1.2 km (0.74 miles). The total distance of the proposed tote road is 2.9 km (1.8 miles) with an elevation change of approximately 304 metres (997 feet). The average grade, therefore, is 10.5 per cent. The maximum grade along the proposed tote road did not exceed 15 per cent (note: the maximum grade on the Telegraph Creek road is 15 per cent). It was also

noted by my Mr. Martensson that there appeared to be good building and road bed materials along the proposed route.

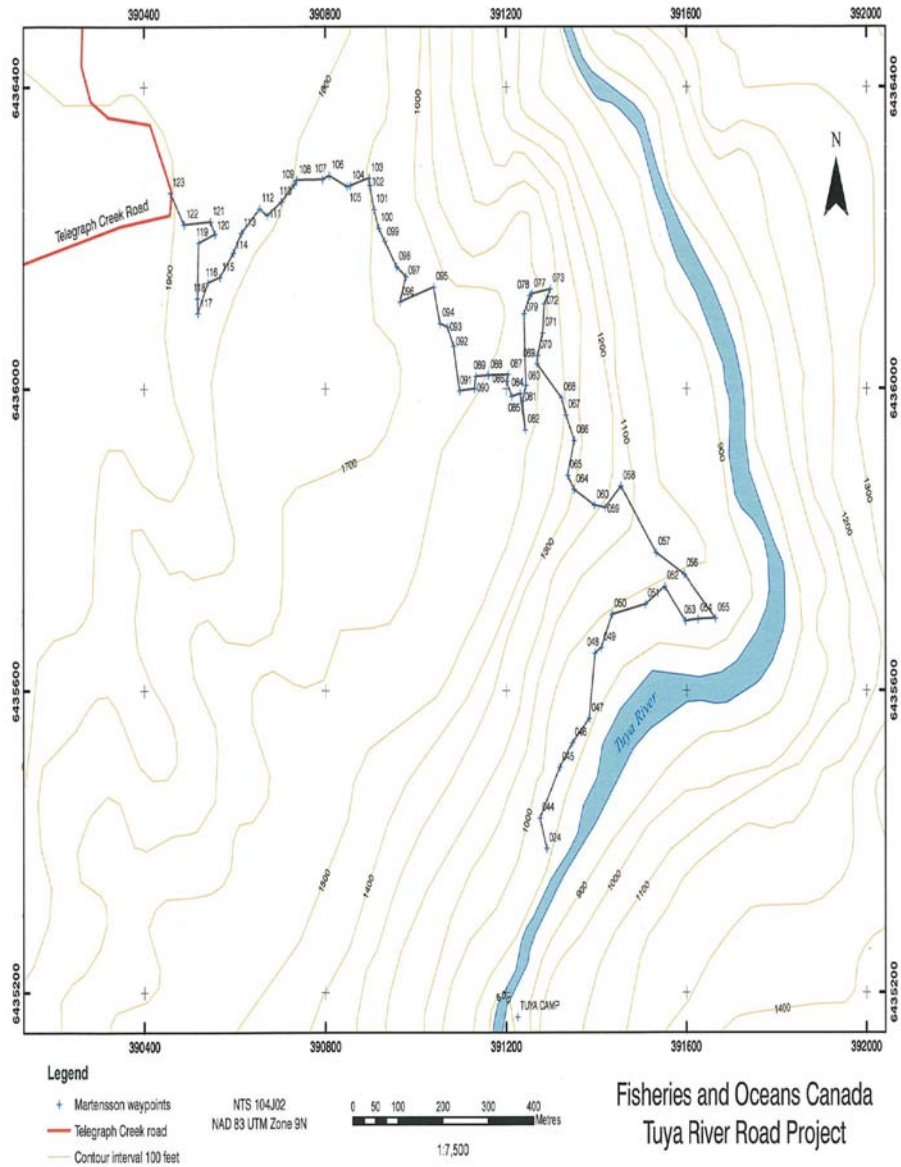


Figure 3. General routing of a proposed tote road from the Telegraph Creek road to the proposed Tuya River fishing site.

A refined survey of the tote road is proposed for the spring of 2010. DFO will research and acquire the necessary permits to undertake both the survey (some tree clearing will be required) and the environment review for the entire road project. DFO will conduct the survey; an engineering consultant firm may be contracted to provide a cost estimate for road construction.

3.3 Biological Sampling and Fish Passage Assessment

A total of 214 sockeye were captured, dispatched and sampled for stock origin, age, gender, and size information from 23-26 July, 2009. The majority of the catch was taken from below the blast site, from the confines of back eddy. Approximately 80 per cent of the fish were captured in gillnets, the balance were snagged using sport fish gear. An additional four chinook, *Oncorhynchus tshawytscha*, one rainbow trout, *Oncorhynchus mykiss*, six bull trout, *Salvelinus confluentus*, and five pink salmon, *Oncorhynchus gorbuscha*, were caught. Age five fish accounted for 85 per cent of the sample, well above the 1996-2008 avg contribution of 66 per cent (Table 1). Ninety-one per cent of the sample originated from Tuya Lake, 8 per cent were Tahltan enhanced fish, 2 per cent were Tahltan wild fish, and 1 per cent were mainstem spawning sockeye.

Table 1. Age structure of Tuya sockeye salmon taken from the Tuya River, 1996-97,1999-2009.

Year	Sample Size	Proportion by Age													Proportion 85	Female	
		32	41	42	43	52	53	62	63	64	65	73	74	75			
1996	263			0.076		0.635	0.285		0.004								0.520
1997	287		0.056			0.756	0.049		0.132	0.006							0.475
1998 ^a																	
1999	553			0.047	0.002	0.423	0.282	0.002	0.150	0.089			0.005				0.475
2000	283		0.001	0.128		0.047	0.490	0.002	0.088	0.197			0.006	0.039	0.003		0.566
2001	656			0.008		0.623	0.064	0.002	0.271	0.015			0.002	0.014	0.002		0.482
2002	462			0.418		0.043	0.169		0.048	0.318			0.002	0.002			0.561
2003	471		0.002	0.034		0.563	0.291		0.064	0.028			0.013	0.006			0.471
2004	238	0.004		0.021		0.345	0.193		0.387	0.038			0.008	0.004			0.455
2005	78		0.2							0.74	0.02		0.02	0.02			0.433
2006 no sampling																	
2007	150			0.230		0.679	0.075		0.015								0.500
2008	147			0.390		0.530	0.070		0.013	0.004							0.510
Average		0.102	0.020	0.150	0.002	0.464	0.197	0.002	0.117	0.159	0.020	0.002	0.010	0.012	0.003		0.495
Max		0.200	0.056	0.418	0.002	0.756	0.490	0.002	0.387	0.740	0.020	0.002	0.020	0.039	0.003		0.566
Min		0.004	0.001	0.008	0.002	0.043	0.049	0.002	0.004	0.004	0.020	0.002	0.002	0.002	0.003		0.433
2009	97	0.020		0.010	0.060	0.800	0.040		0.030	0.020							

a) scales samples were misplaced by field staff

(note: It should be acknowledged that age structure results as listed in Table 1 are not necessarily driven by the life history variation around sockeye salmon, but rather driven by the number of fish released into Tuya Lake on an annual basis. For example no fish were released into Tuya Lake in 2000 and 2001; hence, the age structure of fish returning in 2005 and 2006 (year + 5) would not include any Tuya Lake origin sockeye.)

An aerial survey of the Tuya River from sites located below the new blast area and sites above same yielded an estimated count of 1,000-1,500 sockeye. All of the observations were at sites located above the blast site; no fish were observed in location below the blast site.

The set net fishing immediately above the blasted site yielded a catch of approximately 20 sockeye and 1 chinook salmon over a three day fishing period. The set net below the

site yielded a catch of approximately 100 sockeye, 2 ck, and 10 pink salmon over a four day period.

Of the 396 breaches (jumps) of sockeye observed at the new blast site, 6.7 per cent of the breaches resulted in fish ascending the river, Table 2.

Table 2. Summary of the observation of Tuya River sockeye attempting to ascend the Tuya River at the constructed 2008 fish passage site (blast site), 23-26 July, 2009.

Date	breaches			successful		
	section A	section B	Total	section A	section B	Total
23-Jul	50	24	74	4	2	6
24-Jul	79	13	92	7	1	8
25-Jul	82	20	102	4	2	6
26-Jul	84	44	128	4	2	6
total	295	101	396	19	7	26

proportion of successful breaches

Date	breaches		
	section A	section B	Total
23-Jul	0.080	0.083	0.081
24-Jul	0.089	0.077	0.087
25-Jul	0.049	0.100	0.059
26-Jul	0.048	0.045	0.047
total	0.064	0.069	0.066

Distribution of breaches presented as a per cent

section A	section B
74.49%	25.51%

notes:

section A is the original channel located on river right. This section has a ~2.5 metre vertical falls
 section B is the new channel created by the 2008 blasting project. This section may be characterized as a low angle falls (~30-35°)
 Observations periods were daily between approximately 1600 and 1700 hrs.
 Water level was very low.

The majority of the fish used the original channel, located on the right side, section A (looking downstream) of the river (Figure 4). This section contained a vertical falls approximately 2 metres (6.6 ft) in height. It appeared that the pool located at the base of the falls served as a plunge pool from which sockeye had the requisite depth to leverage momentum required to negotiate (jump) the falls.

Several fish were observed ascending the river throughout the length (11 metres; 36 ft) of the blasted zone, section B; two fish were observed holding in the eddy created by the blast design in section B, (Figure 4).

The water velocity through the blast site (section B, Fig 3) measured on 24 July was 3.9 m/sec. (13 ft/sec). A water velocity of this magnitude is below the maximum burst speed 5.4 /m/sec (17.7 ft/sec) (Bell, 1973). Stream volume was below average during the study period, (Figure 5)



Figure 4. Migration corridors used by Tuya sockeye salmon ascending the river at the 2008 blast site.

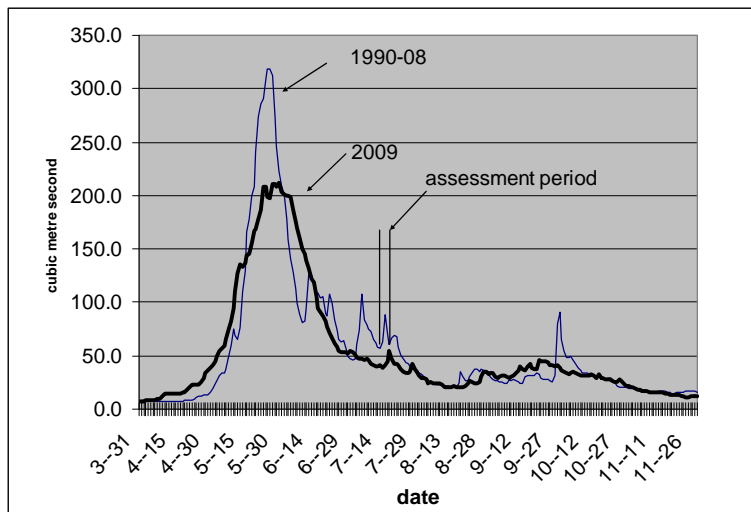


Figure 5. Tuya River flow, 2009 vs 1990-2008 average.

4.0 Budget

Table 3 below outlines the project expenditures to date. The remaining funds in the project are substantial, as is the remaining work required to fulfill project objectives.

Table 3 . Expenditures and remaining balance, Tuya River Fish Harvest structure, Year five.

Table. Expenditures to date for the Tuya Harvest Study, year five.

Item	Amount
Wages, salaries & labour costs	\$8,813.50
Contract services	\$7,475.62
Travel	\$1,886.71
Supplies & materials	\$2,506.98
Helicopter charter	\$8,698.94
Total	\$29,381.75
Northern Fund Allocation	\$214,400.00
Balance	\$185,018.25

A detailed summary of expenditures is located in Appendix C.

5.0 Proposed Activities in 2010-2011

Should the Northern Fund review panel agree to extending the project for a one year period beyond its original end date of 31 March 2010, Tuya River harvest structure and access research will continue according to the original goals and objectives of the project. No additional funding is required to execute the project for an addition year.

A summary of proposed project activities and scheduling follows.

- **March-June, 2010**
 - Convening of TRTC meetings to identify and assign tasks and to schedule project components;
 - If applicable, acquire appropriate land use permits to undertake a survey of the proposed tote road (some line cutting will be required);
 - Convene a meeting with the Tahltan Central Council or Chief and Councils of the Tahltan First Nations and the Iskut First Nations to seek opinions and recommendation germane to the road survey and overall project objectives (road construction, trap installation, harvest activities);
 - Conduct a detailed tote road survey and determine construction cost (may be done by DFO or contracted); document road survey details on the appropriate map sheet and appropriate scale;
 - Determine the required level of an environment impact study for the entire project, including road and weir construction. If applicable, commence the Canadian Environment Assessment Act (CEAA) review process.

- June-August, 2010
 - Site visit, if recommended by TRSC, to Docee River weir and other sites that may house a weir operation/design applicable to the Tuya River proposed plan (select members of the TRSC);
 - Drafting of a conceptual weir/fishtrap design to guide contract engineers in the drafting of detailed plans built around the conceptual design. The contract engineer will also provide a cost estimate for the purchase, transport, installation, and demobilization of the weir/fishtrap. (solicited bid?);
 - Site visit by contract engineer;
 - Site visit by DFO to collect baseline biological information from returning sockeye and to assess, for the second consecutive year, the behaviour of migrating salmon through the recently blasted river channel;
 - Northern Fund project submission for 2011-2012 project year;
 - Convene meetings via conference calls of the TRSC as required.

- September- December, 2010
 - Completion of weir/fishtrap design and tote road survey including estimated costs for all components of the projects;
 - Present results of the TCC or Chief and Council of the TFN and IFN;
 - Present results to members of the Stikine Fishers Advisory Board and to members of the Transboundary Rivers Technical Committee;
 - Seek potential funding sources to proceed with the project. It is anticipated that the project cost will approach ~\$ 2 million

- January- March, 2011
 - Present results to members of the Transboundary River Panel of the Pacific Salmon Commission for recommendations.

6.0 Recommendations

In light of the failure to address the objectives of the project as defined above in the time frame allocated, it is recommended that the project be extended for a period of one year, ending 31 March 2011.

A one year extension should result in the completion of a weir/fishtrap design and cost as well as a cost estimate to 'push' an access road to the proposed harvest site.

It is further recommended that a full time manager be assigned to the project in order to adequately address the broad and varied suite of project activities, including but not limited to drafting contract tenders, reviewing contract tenders, scheduling and

facilitating TRSC meetings and public meetings, address permitting and licensing requirements, and reporting to the Northern Panel.

7.0 Acknowledgements

Funding was provided by the Northern Fund of the Pacific Salmon Commission. Gratitude is extended to the review panel of the Northern Fund for approval of the application as well as permitting a one year extension to the original project agreement. The guidance through the project process(s) from Mr. Angus Mckay, Fund Coordinator, and Mr. Victor Keong, assistant Fund Coordinator was very much appreciated.

Acknowledgment is due to staff of Ampex Mining LTD for their flexibility in scheduling on site work, and for the valued advice given to the TRSC. DFO field staff including Mr. Mike Martin and Sean Stark dutifully and diligently conducted on site netting and sampling activities.

7.0 References

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Appendix A. Minutes from meetings of the Tuya River Steering Committee

Tuya Sub-Committee
Feb 14, 2008,
Wall Centre – Chartroom
Vancouver
10:00 – 16:50

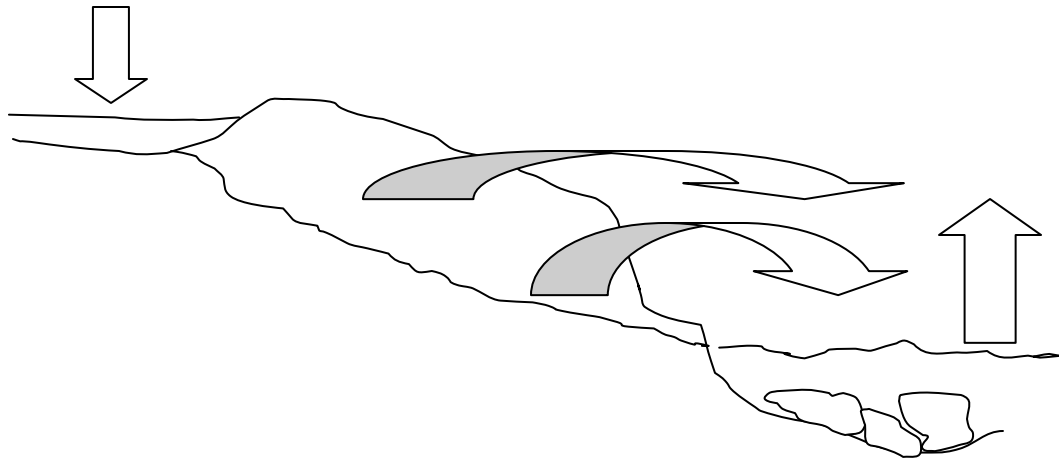
Tori Soames, Duncan Willie, Swede Martinsohn, Will Bergman, Martin Paish, Greg Brooke, Ron Josephson, Roy McGechaen, Ed Donohue, Sandy Johnston

Overview: Pete pwpt

- CEAA – BC wanted more info and senior review in Victoria –no response yet
- No formal response from TFN
- Site visits last summer – decision to blast
- Blasting design in progress
- Blasting Plans for 2008 - hope to blast mid march/April
- Slopes and velocities are high – Ed felt likelihood for success is marginal
- Review of proposals for 2008,

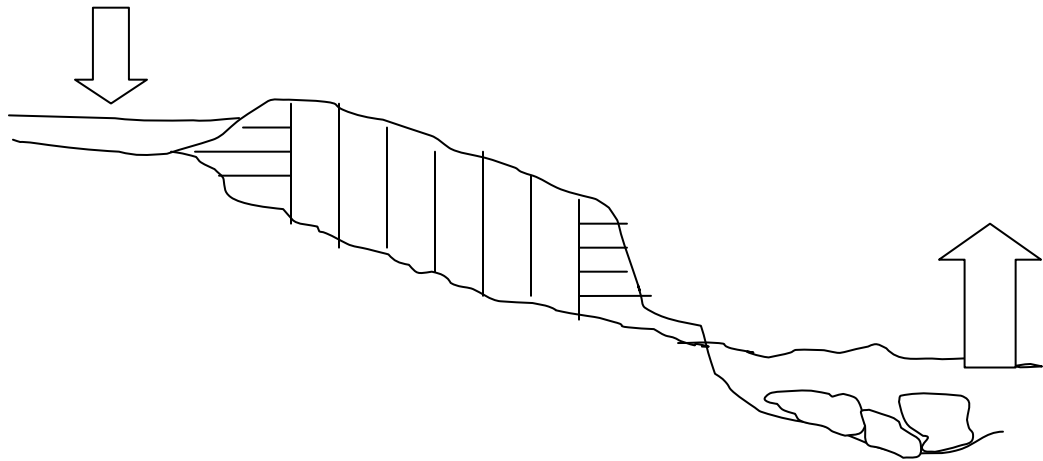
Options:

- Blast in central channel – design unclear – whole rock of just a chute?
 - Somewhat daunting to take whole rock mass
 - Possible to blast along weir location
 - What kind of blast – blast as much as possible at upstream margins – block size not important
 - Or trench through rock mass - Trenching could create velocity problems
 - Dease Lk decision was to blast as much of shelf as possible – 50/50 success likelihood – 300 cu m
 - Blast first along downstream margins, blast upstream margins at very end so that all other blasts are in the dry – could blast in 3 steps
 - Safety net for foot access to site – Duncan knows of Vexar type material – 6’ high rolls
 - Critical blast is last lip
 - Cost estimate \$40-\$60k

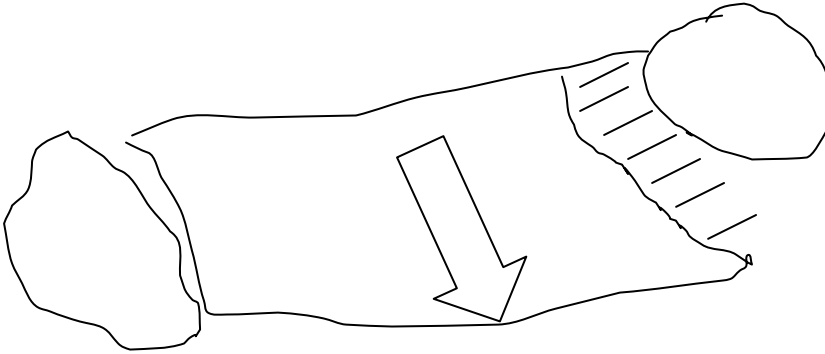


- Lower end to be blasted to surface water level
- Expect 13% grade after blasting – energy dissipation will be key since gradient is high for fish passage

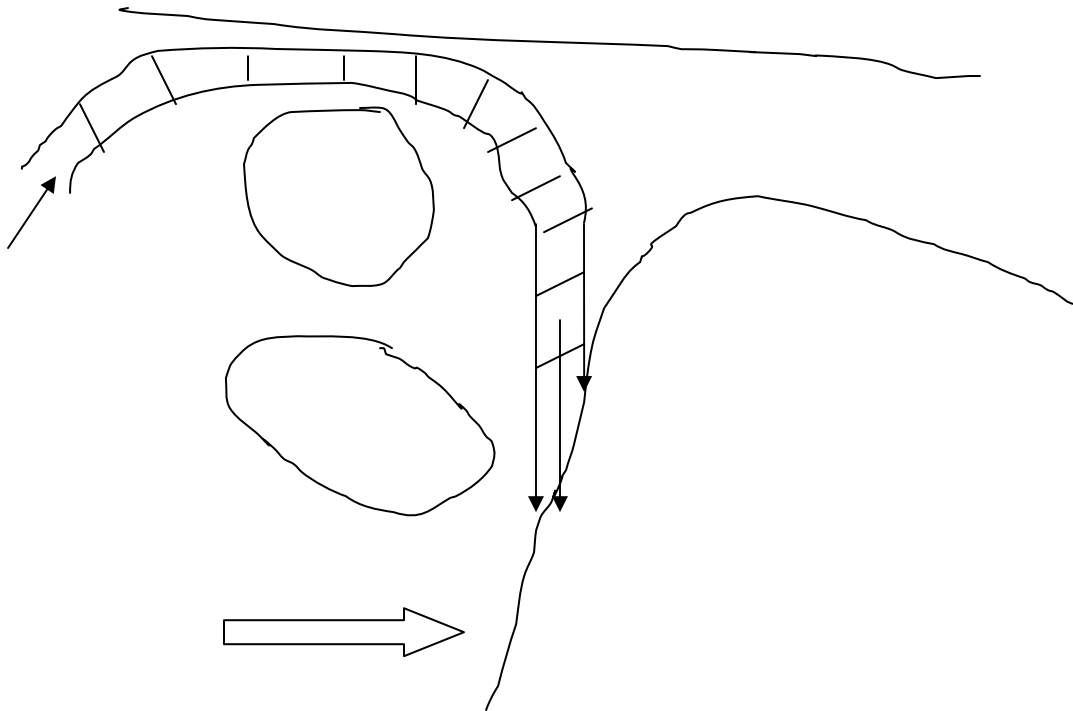
Drilling pattern concept



- Discussed inclusion of a steep pass – like structure along left hand margin of blasted area -



- Decided not put steep pass initially but need to ensure right side of blast area is smooth and capable of allowing a steep pass if required in future – this is a contingency option
- Discussed option of providing a fishway along the left bank around the big boulders and the thru debris field
 - Advantages: can get 6% grade; could control flows; could capture fish
 - Disadvantages: likelihood of high maintenance costs due to mass wastage along left bank – active slide/debris slope;
 - Will need to extend the topographical survey on left bank
 - Decided to save this as back up possibility if main blasting doesn't work



Action Items:

1. Swede/Tori to modify survey to reflect anecdotal knowledge of the area where the former siphon intake was;
2. Duncan to do up final blasting plan to remove as much material as possible;
3. Pete to follow up on permits

Permits:

- Tahltans have reviewed once and want to review
- Magazine licence – Swede to get
- Transport Canada
- No fly zone
- Land tenure

Plan for design of harvest structure

- Access trail for large equipment (excavator) should be separate design from harvest structure
- Access trail design – could try to include DFO engineering – put out to tender
- Check terminology for trail – “construction trail, access trail
- Bridge, weir – block off half river put in sill, then do other half
- Must be easy to operate, safe, strong, effective
- Ed and Roy to look at what required for tender documents – conceptual drawing
- Need to include Greg Brookes – crucial to use in house expertise
- Concept plans – one day meeting Ed and Roy (maybe Greg) – mid March or before April; produce concept
- Concept, then design, then tender docs
- Swede to send photos of upper site to Roy (Ron has panorama photo as well)

Notes of meeting

Date: February 26, 2008; 8:00 a.m. to 12:00 p.m.

Location: Fishpro Office, Gig Harbor, Washington

Attendees:

Ed Donahue - Fishpro
Carolyn Butchart - Fishpro

Tori Soames - DFO
Roy McGechaen – DFO

- 1) We began by reviewing the Tuya fish capture requirements and previous efforts made to date. We briefly reviewed the blasting plans aimed at improving fish passage over the downstream obstruction.
- 2) We noted that any civil works in the Tuya system must be able to withstand significant annual ice forces, frequent freshets and considerable bedload and woody debris movement. There is no extended low water/ warm weather season thus complicating construction and deployment activities.
- 3) Our discussion then focused on an old fish capture site with a fairly straight reach just upstream of the existing camp. This area has a bottom substrate of heavy, smooth boulders and one large, stationary rock fragment close to the left bank. It is attractive from the safety standpoint by having generally a far lower risk of rockfall than the lower site, and by being farther upstream, this site is closer to the Dease Lake – Telegraph Creek road. Further investigation is required at this site and upstream to pinpoint the best possible location for the proposed installation.
- 4) We discussed briefly the possible deployment of the existing aluminum fish capture apparatus in this reach with water supplied by one or more low lift – high volume pumps with diesel electric power generation. Key to this scheme is diversion of fish toward the aluminum fishway using conventional weighted nets or other light, easily deployable material. We believe successful diversion to be a near impossibility given existing site and flow conditions.
- 5) We then reviewed drawings of existing and planned diversion fence and fish capture works in both the U.S. and Canada. Considering the extent of civil works required, it remains clear that access from the main road to the right bank of the site, at least for tracked heavy equipment such as excavators, is a fundamental requirement.
- 6) The results of the review, along with consideration of the river conditions and probable required lifespan, led us to propose a fish diversion fence consisting of:
 - a) A permanent sill with cutoff wall using linked precast concrete or steel modular sections.

- b) Permanent abutments, one on each bank, possibly structural steel prefabricated boxes filled with rock or heavy granular material.
- c) An elevated permanent structural steel platform spanning the river, positioned high enough above the annual high water level to avoid damage from water, ice or debris.
- d) Diversion fence panels – framed aluminum tubular pickets – to provide the necessary fish barrier. These would be deployed from the platform, angled downstream, with contact tight to the sill.
- e) A fish capture area with handling facilities located on the right bank at or just upstream of the diversion structure.
- f) The current camp relocated to the opposite (right) bank at a suitable spot along the access track.

7) We made a very rough estimate of first phase costs as follows:

a) survey / site investigation	\$10K
b) design / approvals	50K
c) track / camp relocation	100K
d) abutments	250K
e) bridge	350K
f) sill	150K
g) panels, basic fish trap, handrails, ladders	100K
Total without contingencies	1,010K
Suggested contingencies	200K
Total project	\$1,210K

8) Fish handling in Phase 1 would be by manual dip net. A later Phase 2 could include mechanical lifting, sorting and processing as well as an improved access road.

9) Proposed schedule of technical events:

August / September 2008	Site investigation and survey
January – April 2009	Design
May – July 2009	Construction of site access, procurement of structural items, delivery to site, camp relocation
August – September 2009	On site installation
January – February 2010	Panel fabrication and delivery
July 2010	Fence complete and in service

Tuya Project

Conference call at 1030 hrs 13 June 2008

Ed
Roy
Sandy
Pete
Ron
Eric
Swede out of town
Greg Brooke regrets
Cheri regrets

Agenda

- Discuss blasting for August
- Tendering
- Weir design
- Road access
- Added agenda: Roy discussed fishway around

Pete reviewed the blasting for August.

Roy suggested an early trip to prepare a trip to repair trail.

May go in on November if August does not work due to high water

Weir Plans

- Roy summarized where we are
- Use existing weir design, use BC weir models to form a design. For example Docee fence and Puntledge hatchery
- Ed used a combination of floating fence and a standard fence?? Slip screen fence at Scocumchuk (1 hr from Olympia, 2hrs from Seattle). There may be other weirs to visit in Washington and OregonCrooked Creek...etc
- Docee fence may be a good structure to serve as template. It has similar flow as Tuya. Others Quincin, Puntledge
- Tuya will have to be constructed in a heavy fashion.
- There are drawings for Docee. Steve Backan runs the fence and is a great source of information
- Drawings done several months ago is shelved
- A Docee site visit was recommended (Roy, Ed, Pete, Sandy) Note that Ed's contract time ends the end of June.
- Suggest that a contractor (bid) attend the site visit.
- Roy suggested that the contractor requires a defined tender so we need to design the concept. Hence we provide the concept.
- Concept plans due the end of July (Ed's contract finishes the end of June, but Ron will look at extending it.)

- The site visit crew may be limited due to commitments of staff. The Tuya committee can then meet in Whse? To review site visits and draw a concept plan.
- Ed's company is registered in B.C. (Fish Pro LTD)
- Greg Brooke (DFO engineer) appears to be willing to offer his unit's support and services

Surveying

- More clarity around the access road (DFO will take on the access)
- Greg agreed to survey access road to site
- Roy suggests that the TFN be consulted before the road is surveyed.
- DFO is capable of estimating road costs.
- We should contact Greg and provide a schedule
- Roy suggested that we survey the original fishing site in anticipation of a fishladder around the original barrier (3-4 days DFO staff)
- Roy will discuss with Greg. Sandy and I will provide support costs.
- Environmental screening may be done by either Greg's or the Whse office.

Contractual arrangements should go through Greg's shop (consulting construction etc) not the Whitehorse office. Will require background from the Whse office.

Meeting adjourned at 1130 hrs.

Appendix B. Summary of tote road survey, Ampex Mining LTD.

AMPEX MINING Ltd
117 Platinum Road, Whitehorse, Y.T., Y1A 5M3, Canada
Phone: 867 667-6352 Cell: 867 333-0192
e-mail : ampex@northwestel.net

Date: June 22, 2009

Re: Access to new proposed fishing site at Tuya River

In the following text the word “road” will mean; non public access to be used for heavy equipment, highway trucks and crew for the fishing site. The access will not be to public street/highway standards.

On June 1-3, myself and another experienced access road builder, scouted, flagged and GPS's (Garmin Map 76, accuracy 5-15 meters depending on tree and slope cover) a potential access road to the future, Tuya River upper fishing site.

After thoroughly flying and discussing the area we chose the route marked on the attached map

We used an inclinometer with the intension of 15% maximum grade. (Similar grade as sections on the old Telegraph highway)

The direct distance to the site is 1.2 km with 304 meters elevation difference. Our flagged road is 2.9 km making the average grade 10.5%. There are a few flatter areas were we couldn't gain constant grade but over all, this will be a usable road for the fishing site construction and for future salmon harvesting. We also concluded that all road sections should have good building and road bed material.

“Jan (Swede) Martensson”
President, Ampex Mining Ltd

Appendix C. Details of Project Expenditures

Project Budget Form

Name of Project: Tuya River Harvest Study (year five-six) **2008**

**Spent to
March 1, 2010**

ELIGIBLE COSTS					BUDGET	OTHER FUNDING	CONTRIBUTION FUNDING
Labour Wages & Salaries							
Position	# of crew	# of work days	hrs per day	rate per hour	Total (PSC + In-kind + cash)	In-Kind & Cash	PSC Amount
project management and report(s)	1	20	7.5		7,500		7,500
DFO Senior Engineer	1	40	7.5		53		15,900
DFO Biologist	1	30	7.5		33	7,425	
DFO Administrator/researcher	1	30	7.5		27	6,075	
ADF&G Biologist	1	20	7.5		33	4,950	
Person Days (# of crew x work days)					sub total	18,450	23,400

8,813.50

Labour - Employer Costs (percent of wages subtotal amount)

rate	18%	sub total	7,533		3,321	4,212
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Subcontractors & Consultants	# of crew	# of work days	hrs per day	rate per hour		
general contractor (consultant/misc construction)	1	35	8		62	17,360
gen contr assist (driller/skilled labour)	1	10	8		43.75	3,500
fisheries technician	2	40	8		30	19,200
consultant (trap and access road design)	2	58	8		125	116,000
Engineer consultant (via ADFG)	1	27	8		125	25,600
Insurance if applicable						
					sub total	181,660

ADFG

7,475.62

Volunteer Labour	# of crew	# of work days	hrs per day		
Skilled					
Un-skilled					
Insurance if applicable					
					sub total

Total Labour Costs 231,043 21,771 209,272

Site / Project Costs	Detail (use additional page for details if needed)		
Helicopter charters	20 hrs at \$1k/hr	20,000	20000.00
Fixed wing charter		-	
Groceries	50 person days at \$60/day	3,000	3000.00
fuels	propane, gas, stove oil	1,228	1228.00
misc camp and personnel gear	field staff protective clothing (raingear, gloves etc)	1,000	1000.00
	phone bills	500	500.00

8,698.94

2,506.98

continued

travel and lodging for DFO/ADF&G and contractors	-		
includes mileage cost some air fare	-		
food, lodging for ctt members inseason construc and oper etc	5,000		5000.00
	-		
	-		
Total Site / Project Costs	30728.00		30728.00

1,886.71

ELIGIBLE COSTS	BUDGET	OTHER FUNDING	CONTRIBUTION FUNDING
Training (e.g Swiftwater, bear aware, electrofishing, etc).	Total (PSC + In-kind + cash)	In-Kind & Cash	PSC Amount
Name of course	# of crew	# of days	
Total Training Costs			

Overhead / Indirect Costs (not to exceed 20% of PSC Amount)			
Office space; including utilities, etc.	3,000	3,000	
Insurance			
Office supplies			
Telephone & long Distance	500	500	
Photocopies & printing	500	500	
Other overhead costs			
Total Overhead Costs	4,000	4,000	

Capital Costs / Assets			
Detail (use additional page for details if needed)			
Assets are things of value that have an initial cost of \$250 CAN or more and which can be readily misappropriated for personal use or gain or which are not, or will not be, fully consumed during the term of the project.			
power saw			
Total Capital Costs	-		
Project Total Costs	265,771	25,771	240,000
Project Total Costs	requested amount	\$240,000.00	
minus ADFG \$		\$25,600.00	
DFO	requested amount	\$214,400.00	

Budget Summary
(PSC + in-kind + cash)

Total Labour Costs	231,043		
Total Site / Project Costs	30,728	Project Total Costs	240,171
Total Training Costs			25,771
Total Overhead Costs	4,000		214,400
Total Capital Costs	-		
Project Total	265,771		

29381.75

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REGION: Pacific									
RESPONSIBILITY CENTRE: SF500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
PROJECT: 57141									
			JUL / JUILLET - ACT - Regular Pay - Other / Traitement de base - Autres			810	760	0104	(2,763.76)
			JUN / JUIN - ACT - Regular Pay - Other / Traitement de base - Autres			810	760	0104	2,763.76
			TOTAL LINE OBJECT: 0104 Regular Pay - Other						.00
			JUN / JUIN - ACT - Retro pay-Prev ys / Sal retro-Annees ant			810	760	0121	52.24
			DEC / DÉCEMBRE - ACT - Retro pay-Prev ys / Sal retro-Annees ant			810	760	0121	1.45
			DEC / DÉCEMBRE - ACT - Retro pay-Prev ys / Sal retro-Annees ant			810	760	0121	5.30
			DEC / DÉCEMBRE - ACT - Retro pay-Prev ys / Sal retro-Annees ant			810	760	0121	(1.45)
			JUN / JUIN - ACT - Retro pay-Prev ys / Sal retro-Annees ant			810	760	0121	12.24
			NOV / NOVEMBRE - ACT - Retro pay-Prev ys / Sal retro-Annees ant			810	760	0121	46.55
			TOTAL LINE OBJECT: 0121 Retro pay-Prev ys						116.33
			JUL / JUILLET - ACT - Arrears Pay / Arrérages de salaire			810	760	0128	(331.65)
			JUN / JUIN - ACT - Arrears Pay / Arrérages de salaire			810	760	0128	331.65
			JUN / JUIN - ACT - Arrears Pay / Arrérages de salaire			810	760	0128	172.68
			AUG / AOÛT - ACT - Arrears Pay / Arrérages de salaire			810	760	0128	863.39
			AUG / AOÛT - ACT - Arrears Pay / Arrérages de salaire			810	760	0128	172.68
			TOTAL LINE OBJECT: 0128 Arrears Pay						1,208.75
			DEC / DÉCEMBRE - ACT - Holiday & Vacation Pay - Non Recov. / Congés annuels et ferries-non recouv			810	760	0131	1.45

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REGION: Pacific									
RESPONSIBILITY CENTRE: SF500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
			JUL / JUILLET - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	(110.55)
			JUN / JUIN - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	2.58
			JUN / JUIN - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	13.27
			JUN / JUIN - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	110.55
			JUL / JUILLET - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	(13.27)
			JUN / JUIN - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	6.91
			JUN / JUIN - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	(7.34)
			JUN / JUIN - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	7.34
			AUG / AOÛT - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	6.91
			AUG / AOÛT - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	49.15
			AUG / AOÛT - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	34.54
			NOV / NOVEMBRE - ACT - Holiday & Vacation Pay- Non Recov. / Congés annuels et feriers-non recouv			810	760	0131	5.89

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REGION: Pacific									
RESPONSIBILITY CENTRE: 5F500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
TOTAL LINE OBJECT:			0131	Holiday & Vacation Pay- Non Recov.					107.43
AUG / AOÛT - ACT - Overtime / Temps supplémentaire					810	760	0141		1,228.69
TOTAL LINE OBJECT:			0141	Overtime					1,228.69
NOV / NOVEMBRE - ACT - Retroactive Overtime-Current Year / Temps supplémentaire rétroactif-Année courante					810	760	0156		66.19
TOTAL LINE OBJECT:			0156	Retroactive Overtime-Current Year					66.19
AUG / AOÛT - ACT - Isolated Posts Allowance / Indemnité de postes isolés					810	760	0176		10.19
AUG / AOÛT - ACT - Isolated Posts Allowance / Indemnité de postes isolés					810	760	0176		10.06
AUG / AOÛT - ACT - Isolated Posts Allowance / Indemnité de postes isolés					810	760	0176		50.31
AUG / AOÛT - ACT - Isolated Posts Allowance / Indemnité de postes isolés					810	760	0176		50.93
TOTAL LINE OBJECT:			0176	Isolated Posts Allowance					121.49
JUL / JUILLET - ACT - Other Allowances and Benefits / Autres Indemnités et avantages					810	760	0181		(445.76)
JUN / JUIN - ACT - Other Allowances and Benefits / Autres Indemnités et avantages					810	760	0181		445.76
JUN / JUIN - ACT - Other Allowances and Benefits / Autres Indemnités et avantages					810	760	0181		401.19
JUL / JUILLET - ACT - Other Allowances and Benefits / Autres Indemnités et avantages					810	760	0181		(401.19)
TOTAL LINE OBJECT:			0181	Other Allowances and Benefits					.00

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REGION: Pacific									
RESPONSIBILITY CENTRE: SF500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
ETHERTON, PETER	22-JUL-09	10055F1002	10BETH055 DEASE LAKE TUYA RIVER SAMPLING AND HABITAT ASSESSMENT JULY 22-28, 2009		28-JUL-2009	810	760	0202	346.85
MARTIN, MIKE	22-JUL-09C	10055F1002	10BMAR056 DEASE LAKE TUYA		28-JUL-2009	810	760	0202	239.50
			TOTAL LINE OBJECT: 0202 Travel in Canada						586.35
DESLANDES, JOSEE	23-APR-09C	1002562112	TO ACCESS THE LOWERE STIKINE SMOLT TAGGING		17-APR-2009	810	760	0205	1,300.36
			TOTAL LINE OBJECT: 0205 U.S.A. Travel						1,300.36
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	CHARTER FLIGHT JULY 23 AND 27, F1624-095316 2009 P.ETHERTON		27-JUL-2009	810	760	0212	4,227.60
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	CHARTER FLIGHT JULY 23 AND 27, F1624-095316 2009 P.ETHERTON		27-JUL-2009	810	760	0212	(4,227.60)
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	ADDITIONAL CHARGES (GST) F1624-095316		27-JUL-2009	810	760	0212	211.40
PACIFIC WESTERN HELICOPTERS LTD	26763	10045F1001	INV#26763 CHARTER FLIGHT JUNE 1 AND 2 PO F1624-095307 P.ETHERTON		02-JUN-2009	810	760	0212	722.94
PACIFIC WESTERN HELICOPTERS LTD	26763	10045F1001	STAD CHARTER FLIGHT JUNE 2 F1624-095307		02-JUN-2009	810	760	0212	2,025.00
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	ADDITIONAL CHARGES (GST) F1624-095316		27-JUL-2009	810	760	0212	211.40
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	ADDITIONAL CHARGES F1624-095316		27-JUL-2009	810	760	0212	615.60
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	ADDITIONAL CHARGES (GST) F1624-095316		27-JUL-2009	810	760	0212	(211.40)
PACIFIC WESTERN HELICOPTERS LTD	26901	10055F1015	CHARTER FLIGHT JULY 23 AND 27, F1624-095316 2009 P.ETHERTON		27-JUL-2009	810	760	0212	3,612.00
TSAYTA AVIATION LTD	6145	10055F1008	INV#6145 PO F1624-095315 CHARTER FLIGHT JULY 24, 2009 P.ETHERTON		24-JUL-2009	810	760	0212	360.00
TSAYTA AVIATION LTD	6145	10055F1008	CHARTER FLIGHT JULY 24, 2009 P.ETHERTON	F1624-095315	24-JUL-2009	810	760	0212	1,152.00

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REGION: Pacific									
RESPONSIBILITY CENTRE: SF500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
TOTAL LINE OBJECT:			0212 Aircraft Charters - Duty Travel Only						8,698.94
1949576	XXGAC 19-AUG-09	INDUSTRIAL			12-AUG-200	810	760	0911	1,760.85
	XXGAC Actual 6389739: A	ELECTRIC/ETHERTON							
	140151	PETER/POWER SUPPLY FOR							
		STIKINE CABIN INV							
		117715/Acquisition Card - cartes							
		djachat							
TOTAL LINE OBJECT:			0911 Heating/Air Cond/Refrig/Lighting/Cooling System Parts						1,760.85
1949577	XXGAC 19-AUG-09	YUKON HONDA/ETHERTON			12-AUG-200	810	760	0957	25.63
	XXGAC Actual 6389739: A	PETER/90 AMP LOCKING PLYERS							
	140151	FOR ROCKY INV 83131/Acquisition							
		Card - cartes djachat							
TOTAL LINE OBJECT:			0957 Ships and Boats Equipment and Parts (incl.ACV)						25.63
			Opening Balance 09-10/Solde			810	760	3139	(101,000.88)
			d'ouverture 09-10						
TOTAL LINE OBJECT:			3139 SPA-Miscellaneous Accounts - Opening Balance						(101,000.88)
STEWART BASIN EXPLORATION	200-FOC-01	10045F1011	INV#2009-FOC-01 ADD		01-JUL-2009	810	760	4017	78.75
			WAYPOINTS TO TUYA RIVER						
			ROAD MAP 1.5 HOURS						
TOTAL LINE OBJECT:			4017 Science,Habitat,Environmental-Engineering Services excl.consultants						78.75
AMPEX MINING	15-JUN-09	10035F1017	PO F1624-095303 TUYA RIVER		15-JUN-2009	810	760	4103	7,111.87
			ACCESS ROAD SURVEY AND FISH						
			WHEEL DESIGN CONSULTATION						
AMPEX MINING	19-JAN-2010	10105F1012	TUYA RIVER ACCESS ROAD	F1624-095303	28-DEC-2009	810	760	4103	285.00
			SURVEY AND FISH TRAP DESIGN						
			CONSULTATION						
AMPEX MINING	15-JUN-09	10035F1017	TUYA RIVER ACCESS ROAD	F1624-095303	15-JUN-2009	810	760	4103	7,118.87
			SURVEY AND FISH TRAP DESIGN						
			CONSULTATION						
AMPEX MINING	15-JUN-09	10035F1017	TUYA RIVER ACCESS ROAD	F1624-095303	15-JUN-2009	810	760	4103	(7,118.87)
			SURVEY AND FISH TRAP DESIGN						

This report provides a listing of all year-to-date assets and liabilities by Responsibility Centre, Project, Allotment and Line Object.

Filter used to generate Report: NBX.ALLT_CODE = 760 AND NBX.RC_CODE = SF500 AND NBX.PRJ_CODE = 57141

Report: ALYD100E

FY: 2009-2010

Fiscal Period: 12

**Assets and Liabilities
DETAILED TRANSACTIONS**
by Responsibility Centre, Project, Allotment and Line Object
Report as of March 5, 2010

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Vendor Name / Customer Name	Invoice Number/ Misc Receipt	Batch Name	Transaction Description	PO Number / Receipt Number	Invoice Date / Misc Receipt Date	Bus. Line	Allot Code	Obj Code	Invoice Amount
REGION: Pacific									
RESPONSIBILITY CENTRE: 5F500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
CONSULTATION									
			TOTAL LINE OBJECT:	4103	Oceanography, Aquaculture & Fisheries Research-Scientific Services (excl.com				7,396.87
	1906734	XXGAC 11-JUN-09	TIRECRAFT		03-JUN-2009	810	760	7162	24.00
		XXGAC Actual 6218741: A WHITEHORSE/ETHERTON							
		126760	PETER/PURGE AND FIL 10LB						
			PROPANE TANK INV						
			108026//Acquisition Card - cartes						
			djachat						
			TOTAL LINE OBJECT:	7162	Liquidified Petroleum Gas (excl. for Road Motor Vehicles), Propane, Natural Gas				24.00
OTTESENS TRUE VALUE	622330	10055F1004	INV # 622330 CUST # 41922		17-JUL-2009	810	760	7313	4,464.73
HARDWARE			LUMBER TERM # 570						
OTTESENS TRUE VALUE	622330	10055F1004	INV # 622330 CUST # 41922		17-JUL-2009	810	760	7313	(4,464.73)
HARDWARE			LUMBER TERM # 570						
			TOTAL LINE OBJECT:	7313	Wood Fabricated Materials				.00
JOHNSON'S BUILDING	31300	10075F1009	BUILDING MATERIALS FOR	F1624-095301/2	11-SEP-2009	810	760	7360	20,463.74
SUPPLIES LTD			STIKINE CABINS						
JOHNSON'S BUILDING	31300	10075F1009	INV#1303 PO F1624-095301/2		11-SEP-2009	810	760	7360	(20,463.74)
SUPPLIES LTD			VARIOUS BUILDING SUPPLIES						
			FOR STIKINE CAMP						
	1907939	XXGAC 11-JUN-09	DEASE LAKE SUPER A		05-JUN-2009	810	760	7360	29.09
		XXGAC Actual 6218741: AFOO/ETHERTON							
		126760	PETER/BATTERIES FOR CAMP						
			INV#09011//Acquisition Card - cartes						
			djachat						
			TOTAL LINE OBJECT:	7350	Other misc. Products & Goods not elsewhere specified				29.09
	1938855	XXGAC 26-AUG-09	ALPINE BAKERY/ETHERTON		22-JUL-2009	810	760	7505	26.75
		XXGAC Actual 6411978: A PETER/BREAD LOST							
		142371	RECEIPT//Acquisition Card - cartes						
			djachat						
	1937787	XXGAC 27-JUL-09	REAL CDN SUPERSTORE		22-JUL-2009	810	760	7505	284.56
		XXGAC Actual 6330179: A#11/ETHERTON PETER/GROCERIES							

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Report: ALYD100E

FY: 2009-2010

Fiscal Period: 12

Assets and Liabilities
DETAILED TRANSACTIONS
 by Responsibility Centre, Project, Allotment and Line Object
 Report as of March 5, 2010

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Vendor Name / Customer Name	Invoice Number/ Misc. Receipt	Batch Name	Transaction Description	PO Number / Receipt Number	Invoice Date / Misc. Receipt Date	Bus. Line	Allot Code	Lobj Code	Invoice Amount
REGION: Pacific									
RESPONSIBILITY CENTRE: SF500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									
		135108	FOR CAMP SALE 153049520400020059//Acquisition Card - cartes d'achat						
	1907940	XXGAC 12-JUN-09	DEASE LAKE SUPER A		05-JUN-2009	810	760	7505	121.60
		XXGAC Actual 6223978:	AFOO/ETHERTON						
		127107	PETER//GROCERIES FOR CAMP INV 00187325//Acquisition Card - cartes d'achat						
		TOTAL LINE OBJECT:	7505 Provisions-Groceries-Other						432.91
		TOTAL ALLOTMENT:	760 Collaborative arrangements - miscellaneous projects						(77,818.25)
TOTAL PROJECT: 57141 Pacific Salmon Commission - P. Eberton									(77,818.25)
TOTAL RESPONSIBILITY CENTRE: SF500 Area Chief, Stock Assessment/Fish Mgmt, Yukon Transboundary									(77,818.25)
TOTAL REGION: Pacific									(77,818.25)
Grand Total:									(77,818.25)

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