

TAHLTAN FISHERIES



Post season newsletter

March 2015

Biological Contract in 2014

The 2014 Stikine River Salmon Studies Biological Contract was awarded to the Tahltan Fisheries Program (TFP) – Iskut First Nation in the amount of \$164,423. Through this contract with Fisheries & Oceans Canada, numerous employment opportunities were created for Tahltan First Nations members. There were approximately 12 Field Technician positions throughout the season. The main projects conducted under this program during are described below.

Chinook/Coho Coded Wire Tagging

Crew members from both countries went upriver with boats from Wrangell on April 18. One TFP crew member was flown to Wrangell by Sunrise Aviation to meet up with the US crew members that morning. Camp was opened up and boats and gear were organized and prepared for the season start. The remaining Canadian crew members travelled down by boat with Myles Sampson on April 29. This project was staffed by Clayton Tashoots, Jared Dennis, and Kyle Inkster. Cook duties were performed by Lester Dennis, sincere gratitude to Lester for keeping the camp clean and providing good home cooked meals for the crew members, much appreciated. A total of 41,998 Chinook salmon smolts were tagged and 4,014 coho salmon smolts. Chinook quota of 32K smolts was met but we fell short of the 10K coho goal.



Fish salvage operation - July, 2014.

We would like to welcome Heather Hawkins to the team. She was hired as the Fisheries Manager in Telegraph for the Tahltan Band in the 2014 season. (Heather is also Vice-President of the Tahltan Central Council.)

In This Issue

- Biological Contract
- AFS projects
- Staff farewells
- Tahltan slide
- Meetings
- Egg take
- Tuya update
- PSC NF projects
- Salmon run sizes
- Harvests
- L. Tahltan Chinook
- Tuya fishery
- Treaty update
- Contacts

Biological Contract - continued



Kyle and Jared drift netting

Commercial Sampling

This project was conducted by Kerry Carlick, Keenan Vance, and John P Nole (from TFP) and Andy Carlick (from DFO). Samples were taken for analyses from the Lower Stikine commercial fishing operations throughout the Chinook, sockeye, and coho commercial openings. This project runs from May thru to late- August.

Lower Stikine Chinook Tagging

This project was staffed by Kyle Inkster, Kerry Carlick, Jared Dennis, Keenan Vance and Clayton Tashoots, working with the US crew at Kakwan Point down on the US side of the border. A total of 282 tags were applied to large Chinook salmon and 50 tags applied to Chinook jacks, versus the 10 year average of 646 large and 150 jacks. The project duration was April 28 - July 6. Tags were recovered throughout the various fisheries, and specific site visits were conducted by Kerry and Kyle in early August to recover tags from the spawning grounds.

Little Tahltan Chinook Enumeration and Sampling

This project started June 27, 2014 with Field Supervisor Sheldon Dennis and technical assistance provided by Field Technician, Clayton Tashoots. Crew and gear were flown in with Pacific Western Helicopters, from the Dease Lake base. A total of 169 large and 39 jack Chinook salmon were counted through the weir. This is well below the lower end of the escapement target range (which is 2,700 Chinook), and also well below the 10 year average of 5,057 large and 163 jacks. The crew was de-mobilized on the 10th of August.

The Little Tahltan Chinook stock has seen declining returns since 2007. Extremely low escapement this year can also be attributed to the Tahltan River landslide. The optimum escapement is 3,300, as per the Transboundary Technical Committee Management Plan.



Sheldon and Pete at Little Tahltan weir

Sidebar story:

Sockeye showing up at the lake

After being delayed by the landslide, the first sockeye arrived at Tahltan Lake (just one fish) on July 22, 2014. The next morning the crew awoke to over 10,000 fish piled up behind the weir. (An additional 6,000 arrived over the next 24 hour period.)

Gratefully, we had some additional crew onsite (who were conducting the enhancement study surveys). They were able to assist in manning the weir in shifts and enabled counting through the night.

Initially, the concentration of fish in the pool below the weir was such that dissolved oxygen (DO) levels in the creek were depleted to less than half of what the DO levels were in the lake.

Good job guys, our Nation and our salmon stocks are forever grateful for your grueling efforts to count and provide access to the sockeye arriving at the spawning grounds.



Sockeye finally showing up in mass (behind the Tahltan Lake weir)

Biological Contract - continued

Sockeye Smolt Enumeration

This project at Tahltan Lake mobilized on May 9 with Sheldon Dennis, Michael Nole (from TFP) flying in with PWH from Dease Lake. DFO personnel flew gear and staff in from the slide site at the first crossing of the Tahltan River.

The smolt weir was set across Johnny Tashoots Creek resulting in a count of 1,459,607 smolts leaving the lake, aligning with the 10 year average of 1,458,764. The crew pulled the weir and came out on June 6, 2014.

Tahltan Lake Adult Enumeration and Sampling

The crew went in July 12 to construct the adult weir in preparation of the arrival of the sockeye spawners. Field Supervisor Michael Nole and Field Technician Jared Dennis were running the weir. Keenan Vance also provided technical assistance to this weir project, filling in for both Johnny Sembsmoen (DFO) and Michael.

The weir was pulled by egg take crew on Sept 12 with a total of 40,045 sockeye spawners counted into the lake. Approximately 2,732 adults were subsequently collected as broodstock for the egg take (1,366 females and 1,366 males), which left a natural spawning escapement of 37,312 sockeye.

Aboriginal Fisheries Strategy - 2014

Health & Safety - Training

There were 12 TFP employees who received their Swift water Rescue (SRT1) Certification Training in Terrace April 2-4, 2014. Our crew also welcomed young Blake Asp to participate and receive certification in this course. Also, 6 Tahltan Technicians received their Level I First Aid and Transportation Endorsement Certifications in Terrace April 10&11, 2014.



Swift water rescue training

Aerial surveys

The 2014 sockeye aerial survey was conducted Sept. 10 with Cheri and Pete Etherton as observers and Jim Reed of PWH our pilot. In general, survey conditions were fair to good, flows were at low to moderate stages and assisted in viewing ability. A total of 647 sockeye spawners were observed in the prescribed index sites, (which includes Scud, Porcupine, Verrett, Chutine, Bronson slough, and Verrett slough).

The Stikine coho aerial survey was conducted on Nov. 6th with Cheri and Pete as observers, again PWH was chartered. Viewing conditions were fair to good, low water levels and relatively clear water conditions. Index sites flown included Scud, Porcupine, Katete, Verrett, Craig, Porcupine slough, and Verrett slough. A total of 1,195 coho spawners were counted (which is below the 10 year average of 2,232). All coho index sites were below average, with the exception of Porcupine slough.

Creel Census and Monitoring at Tahltan

This year at Tahltan we had Margaret Asp working as the guardian and doing creel census. She gave out information on where to receive permits along with what is expected when fishing in Tahltan Territory. Part of her job was to give out information to all visitors and new fishermen when entering the Tahltan Reserve. She also did the creel census by collecting information from anglers fishing near the Tahltan confluence.

Margaret has helped to reduce the number of illegal fish leaving our Territory and also made our visitors aware of the rules we (Tahltans) have around our food fishing practices. Margaret typically stopped into the office once a week to drop off the counts that she received from Tahltan and informed us if there were any issues that arise during the season. If you see someone fishing and they do not have a permit, or they are selling fish out of the Territory, please contact Tahltan Fisheries at (250) 235-3151.

Aboriginal Fisheries Strategy - continued

Stikine Stock Separation

Our samplers for the 2014 season were Lester Frank, Trysten Derrick and Scott Hawkins Jr. The crew kicked off the program June 9th, 2014. This started with Chinook sampling and continued until mid-August with sockeye salmon. There was a total of 271 sockeye and 80 Chinook sampled this season. The sampling took place between Glenora and the Tahltan/Stikine River confluences and was done by collecting samples from various food fisher nets. Our sampling crew are chosen from the community so they are familiar with everyone who comes home to food fish. At the end of the season we utilize the TFN's fisheries program's net and boom to sample from as there are less food fisherman this late in the season. The fish is then donated for a great dinner to a family in the community. The Tahltan First Nation would like to thank the Tahltan people for their continued cooperation with the sampling program.

Catch Monitoring and Reporting

Noreen Vance is our catch monitor from May to August. Noreen is available to give permits to Tahltan Members food fishing on the Stikine River. She also collects the numbers of fish caught each week. This past year Noreen issued permits to around 90 members, some who fish for short periods of time. She collected the numbers of fish caught every Monday from all the local Tahltan food fishers and then submitted it to DFO in Whitehorse. In 2014 we collected counts for 9,950 sockeye with the help of drop boxes and the Fisheries Guardian, Margaret Asp located at Tahltan. Noreen drove to local fish camps and issued food fish permits. The drop boxes at the fish camps were very beneficial to collecting more counts this past year. If you are in need of a permit this summer please contact the Fisheries Manager at the Band Office, Catch Monitor or Guardian at Tahltan.

Stikine sockeye stock separation

Most of the sockeye migrating past Telegraph Creek are Tahltan Lake bound. However, a small portion, approximately 10% are thought to spawn below the lake. Since 1993 a portion of the Tahltan run consists of enhanced sockeye salmon released into Tahltan and Tuya Lake as unfed fry. All "enhanced fry" originate from the Tahltan Lake egg take. These eggs are incubated and hatched at the Snettisham hatchery located in Alaska. Since 1995, sockeye bound for Tuya River contributed to the catch numbers at Telegraph Creek. These are the enhanced sockeye that have been released into Tuya Lake. In summary there are four groups of sockeye in the population at Telegraph Creek: Tahltan wild; Tahltan-Enhanced; Tuya Enhanced; and Mainstem.

The primary objective of the Upper Stikine River sampling program is to determine the relative contribution of these four groups. This is done by extracting two small bones, called otoliths, from an area close to the brain of the salmon and also by assessing the egg diameter of individual females. Our DFO technicians in Whitehorse later examine the bones for a thermal mark to determine if it is an enhanced or wild salmon and if it originated from the Tahltan or Tuya fry outplants. Tahltan members: Andy Carlick and Johnny Sembsmoen are among the DFO staff trained for this program. Other objectives for the sampling program includes collecting data to determine the age, size, and sex of both Chinook salmon and sockeye salmon. Staff also collect chinook spaghetti tags and determine the magnitude of tag loss from Chinook salmon netted in the lower Stikine River during May, June, and July.

Fond memories and sad farewells to two senior Field Supervisors

Andy Carlick has been involved in Fisheries activities since before there was even a Tahltan Fisheries Program on the Stikine. He started in the mid-80's, receiving field technician training through the Tahltan Tribal Council. Andy has worked every Stock Assessment program that we have operated, developing a high set of skills with his sampling techniques and his boat handling abilities. His valuable contribution to the Stikine fisheries management has spanned over three decades and in this time he has trained and passed along his knowledge of the salmon and the Stikine watershed to many new technicians, and for that our Nation is so very grateful.



Andy & Pete at Sawmill Lake

Andy's incredible abilities caught the attention of the Federal Department of Fisheries and Oceans in the mid 90's and he was hired on as a Senior Field Supervisor on the Lower Stikine with their organization. Andy has been experiencing health issues that prevent him from returning to the field this season. His presence will be greatly missed by all of his colleagues both from Canada and Alaska and although his position will be filled by another, he can never be replaced. We wish him all the best and will be praying for better healthy days ahead. So long dear friend, thank you for all the memories and for your countless sacrifices and contributions.

Sheldon Dennis joined the Tahltan Fisheries staff in the 1997 field season and worked his way up from Field Technician to senior positions as Field Supervisor in a very short time. He has been a pillar of the Iskut Band Fisheries staff, sharing his knowledge of the upper river Stock Assessment projects with his fellow employees at the Tahltan Lake sockeye smolt and adult weirs and the Little Tahltan Chinook weir. He was my right hand man throughout 19 egg takes...training new comers in the fine art of broodstock capture and egg collection. He always has a sunny disposition, great sense of humor and if anything was not working properly in camp, he was the man who could fix it.

Sheldon was selected to become the TFN Shotgun Certification Instructor and attended two training sessions working towards obtaining his Instructor certification to have the ability to re-certify our staff members. Sheldon will not be returning to the field this year as he will be pursuing his career as a First Nation artist and be home close to his family. We wish him well in his new endeavors and he will be terribly missed by his extended family here at Tahltan Fisheries.



Sheldon at Tahltan Lake - 2008

To both of you, for all your years of service to the management of the Stikine River salmon resources, we extend our deepest gratitude and the fond memories made will be held near and dear to our hearts. Meduh

Tahltan River Landslide



Landslide on the Tahltan River - May 21, 2014

The slide was first reported on May 21, 2014 by TFN member Dwayne Day. Cheri did an overflight with PWH that afternoon, with photos and video footage taken and forwarded to DFO. Shortly after DFO did site visits for monitoring and assessment purposes. A camera was installed above the slide to capture changes in water conditions.

DFO also brought an engineer to the site to establish stability, accessibility, and short and long term options for addressing the slide. A test net was set above the slide to watch for passage of fish and the slide was monitored for fish jump attempts, successes, or failures. An aerial survey above slide resulted in no fish being observed. Therefore, a short term option to capture fish below the slide and transport them above the site by helicopter was decided upon. Preparations then began for the fish salvage operation. DFO started gathering gear for various fish capture options. There were discussions with local TFN leadership and members to ascertain the best sites for construction of a holding pond, river access for fish capture and transport to the holding site.

A staff gauge was also installed at the Tahltan bridge to keep track of water levels throughout the migration. Equipment was sourced and mobilized to the site, and camp facilities and crew was established between DFO and TFN. A salmon holding area was made at the gravel bar in the side channel of the Tahltan River, and an access road to edge of the river was constructed to enable transport of captured fish.

About 300 of the salmon transported were marked with spaghetti tags. Radio tags were applied to 15 Chinook and 16 sockeye released both upstream and downstream of the slide to determine both unassisted passage and assisted transport success. Radio towers were positioned above and below the slide site.



Team effort

Landslide - continued

A variety of capture methods were used including: gillnet set nets donated by TFN food and commercial fishers; seine netting from the boat and off the bridge; and angling with rod and reel (for Chinook). First Nation anglers at bridge site donated their catches. Gill nets (thrown), the fish wheel and weir were not utilized. Heli-transport tanks (monsoon buckets) were loaned by the Whitehorse Rapids Fish Hatchery. Salmon were loaded into the transport tanks, which were pumped with oxygen to maintain fish health during the air lifts. Approximately 20 salmon were put in each bucket, transporting about 10 buckets per hour, resulting in roughly 300-700 salmon lifted per day. There was 200 helicopter trips required to transport the fish.

In terms of moving forward with trying to rectify the problem, the Tahltan Band Council has received additional funds through our AFS Agreement to pursue modifications at the slide site. Heather Hawkins has been instrumental in making these arrangements. Also, TNDC contributed some funding towards the project. Myles and Russell Sampson have been contracted to drill and inject expanding foam into the boulders and fracture the rocks. This work has already begun, and if successful, boulders will fracture into more manageable sizes to allow for moving of the rocks by cable or naturally by spring freshet water flows. Hopefully this will adequately improve fish access, and another fish salvage operation will not be necessary for the upcoming season.



Regan Asp - slide fisherman



Gillnet casting for Chinook

Fish salvage results:

The project operated from July 4-July 26. A total of 1,091 Chinook were lifted above the slide meeting the target of 1,000. There were 3,391 sockeye transported, which was well under the target of 8,000 but efforts were discontinued once it became apparent that the reduced water flows enabled fish to pass the slide site on their own. The number of sockeye arriving at the lake far exceeded the number of fish lifted. An estimated 70% of the Chinook returning to the Tahltan River were lost and 9% of the Tahltan Lake bound sockeye were lost, both due to the slide blocking access.

Expressions of gratitude to those who assisted with the slide salvage project.

We would like to sincerely thank the following groups of individuals who helped:

- TFN members that donated their Chinook rod and dip net catches in the early capture efforts.
- The Asp and Henry families for donated time from their food and commercial nets to capture sockeye in the early stages of the project.
- Myles Sampson for bringing his boat and his fishing expertise to the project.
- All the DFO staff members that stayed on and worked alongside the Tahltan Fisheries staff and local members.
- The Tahltan Band Council for providing use of their equipment.
- To TNDC, including Gary Merkle and Hankin Asp for their support via freeing up staff members to assist in the operation, providing equipment and operators, and for purchases of food and fishing gear.
- The local people who brought us coffee and beverages on rainy mornings when we were loading fish into buckets, and who dropped off baking and the occasional meal, we truly were blessed with the outpour of contributions.
- Sonia Dennis for keeping us well nourished through the 3 weeks of site work.
- To all the TFN Fisheries staff and members that participated in this huge effort, our deepest gratitude to every single one of you, what a big team effort, and what a great success.
- Jim Reed from PWH for bringing his flying expertise to the project.
- Final acknowledgment to Mr. Regan Asp, who spent the entire time alongside our crew, gearing lines, dip netting and running fish. Perhaps the most dedicated and avid fisherman I have ever met in all my years of fish management. He was the largest contributor of angled Chinook and I send him a big heartfelt thanks.

Fisheries Meetings:

The Tahltan Fisheries Manager(s) and Biologist continue to attend the various fisheries management meetings during the winter months including:

- Stikine River Salmon Management Committee (AFS funded)
- Transboundary Technical Committee and Enhancement Sub-Committee (AFS or PSC funded)
- Pacific Salmon Commission – Transboundary Rivers Panel (PSC funded)
- Pacific Salmon Commission – First Nation Caucus (PSC-FNC funding)
- Pacific Salmon Commission – First Nation Caucus Executive Committee
- Aboriginal Fisheries Strategy Agreement Negotiations (AFS funded)
- G2G Meetings with DFO and TFN when necessary (DFO/AFS funded)

Tahltan Lake Egg Take (1989-2014)

Under the new Treaty arrangements, the performance of the 2013 Stikine Enhancement Production Plan (SEPP) has been evaluated and accepted by the bilateral Transboundary River Panel and has been signed off by the Canadian and Alaskan Chairs. The 2.562M surviving fry resulting from the 2013 egg take were successfully transported by the Snettisham Hatchery staff May 27 - June 11, 2014. This included 2.1 million fry to Tahltan Lake and 462,000 to Tuya Lake.

Since 2010 we have continued increased fishing efforts at Tahltan Lake to ensure that adequate broodstock is captured to provide 6 million sockeye eggs to the Snettisham Hatchery in Alaska. Such efforts include the retention of all green females captured at the primary spawning site. Also, during peak spawning, the augmented fishing crew capture and deliver additional females to the holding pens to increase broodstock numbers.

The 2014 field crew was deployed on August 27 and set up took place the 28-29. After an unexpected delay in waiting for certain egg take supplies, our first fishing day was Sept 4 and the first egg take was conducted on Sept 5.

Under the new regulations from the Canada Food Inspection Agency we have had to change egg take field culture practices and the new protocol includes saline rinses of the eggs prior to and immediately after fertilization. This has been done to reduce the occurrence of IHN disease which has caused high mortality over the past few years. There was a notable improvement in the quality of the fertilized eggs and the percent dead eggs upon receipt at the hatchery.



Some of the egg take crew

Headline story:

No more Tuya Lake enhancement

The Canadian section of the Transboundary River Panel developed a timeline for the Tuya Project in which it is stated that the harvest structure must be in place and harvesting 80% of the terminal Tuya sockeye by 2013 or the Tuya Enhancement program would be terminated.

2014 marks the final year of fry out plants into Tuya Lake as mandated by the TFN members at our 2008 fisheries forum held in Dease Lake.

The 2014 egg take target was reduced from 6M down to 5M to accommodate the loss of Tuya Lake as an out plant option. (This was a unilateral decision by Canada.)

Panel discussions are ongoing as to interpretation of the Treaty language that enables Canada to withdraw its support of this project and the resulting harvest share reductions that Canada will take for its actions.

Tahltan Lake Egg Take - continued



Stripping eggs

Eggs from 1,366 females were collected and fertilized by 1,366 males respectively. Fecundity (# of eggs per female) is estimated at 2,730 which resulted in 3,734,640 million eggs delivered, shy of the 5 million target. In addition, 60 ovarian and BKD samples and 400 brood stock samples were taken and provided by field staff as per the contract requirements. The final take was completed on September 27th. The crew demobilized on September 29.

Crew members were Cheri Frocklage, Sheldon Dennis, Jared Dennis, Kyle Inkster, Drew Inkster, John P Nole, Clayton Tashoots, and Michael Nole. Richelle Frocklage returned as camp cook, she kept us all well fed and the camp living quarters clean. Thanks so much Richelle for the great meals, baking and awesome lunches, Medu. The 2014 additional fishing crew was comprised of Keenan Vance (from TFP) and one additional field member from Triton Environmental Consultants who fished the alternate spawning sites.

The egg take contract was held by Triton who provided additional field staff and on site biologist Michael Phelps. Thanks to Rick Woodman of Tsayta Aviation for egg and grocery delivery flights and for this project. Thanks also to Coastal Helicopters and Ward Air from Alaska for egg haul flights. We sure appreciate all the people on the other end that make sure the fuel, propane, supplies and groceries keep coming in, couldn't do it without you.

Many thanks to all my crew members for their hard work and continued interest, we have one of the most efficient egg take field crews to ever be assembled...you are the best of the best.

Over 250 male sockeye that were held for the final egg take were released by a grizzly bear resulting in the loss of an additional 683,000 eggs that would have been added to the overall total egg target.



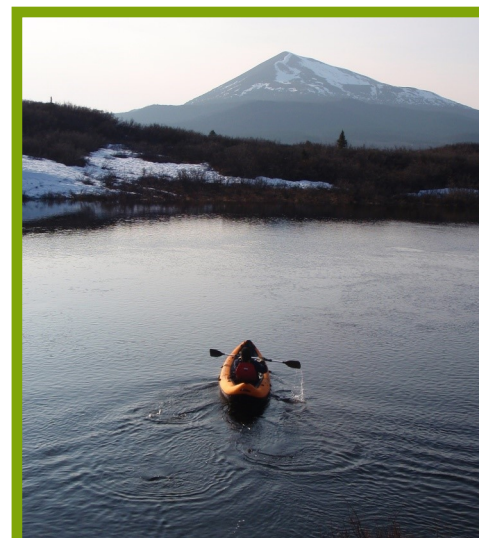
Sorting females for brood stock

Northern Fund projects - 2014/15

The following proposal based projects have been funded by the Northern Fund (NF) of the Pacific Salmon Commission (PSC).

Tuya smolt sampling

TF Biologist - Richard Erhardt and Technician - John Nole flew to the outlet of Tuya Lake by rotor wing on May 26, 2014 and remained there until May 28. A new temporary camp was established and fish capture was attempted by using a smolt / fyke net. Unfortunately, despite extensive effort, no sockeye smolts were captured. In recent years, by observation alone it is clear that river flows and depths have increased, making effective deployment of a fyke net very difficult. The second night, the fyke net was re-deployed. However, by early the next morning it had broken loose due to ice flows. The wing and net were recovered, however the trap itself was lost. This project did not receive funding for 2015, given the cancellation of the overall Tuya enhancement initiative.



John running net lines across

Tahltan Lake sockeye access improvement project

Numerous beaver dams are located within the first 4km below Tahltan Lake on Johnny Tashoots Creek. Over the years it has been observed that these dams can restrict or block fish passage, for both out-migrating sockeye smolts and in-migrating adults. The existing field staff at Tahltan Lake needs to constantly maintain weir operations, leaving inadequate time for dedicated access improvement activities. This new project focuses on ensuring migrational access past this problem area by removing physical beaver dam structures and controlling the local beaver population. Field staff for this project included: Biologist - Richard Erhardt; and Technicians - John Nole, Pat Ball, and Jocelyn Etzerza. There were 2 field sessions in 2014, the first in mid-May and the second in late July.



Pat and John notching down a beaver dam

The crew backpacked and set up remote camps along the way. A total of 9 dams were opened up (of which 3 were new). At several of the dams sockeye smolts were observed schooling above or moving through immediately after the dams had been breached. The project also facilitated clear passage for adult sockeye, once they finally made it above the slide.

Thanks to a great crew, the project was deemed very successful and is being funded again in 2015.

The design of a new spawning area at Tahltan Lake includes the following considerations:

The site must have flow and dissolved oxygen levels similar to, or better than, the main spawning grounds.

The design must provide enough enhancement area to justify the effort and expense of construction.

The enhancement area should allow for predator exclusion and the potential collection of brood stock to supplement the egg-take.

The construction plan must be feasible for a remote site.

The construction must not adversely affect the existing ecology of the lake. A staged approach to the construction is proposed (i.e. over several years).

The initial spawning area would be approximately 2,000 square meters. Then there could be phased construction of two other similar spawning areas.

The construction strategy should include an Environmental Management Plan.



The crew drilling ground water monitoring wells at Tahltan Lake

Northern Fund projects - continued

Stikine Enhancement Feasibility Study

Last year was the third year of this feasibility study. The previous work has narrowed an original list of 12 potential new sockeye enhancement projects down to 2 sites. This includes Tahltan Lake as the primary focus for project implementation, and the Porcupine River as a smaller secondary project for future consideration. Collecting, consolidating and analyzing data to inform the design for creating additional sockeye spawning habitat at Tahltan Lake is now the principal focus of this project.

The 2014 TFP field crew consisted of: John Nole, and Jocelyn Etzerza (Technicians); Richard Erhardt (Fisheries Biologist); Patrick Hudson (Hydrologist); and Cody Cameron (Hydrogeologist). During the field session in latter July, more detailed hydrogeological data was collected. This included additional well installations, slug tests, surface and ground water assessments and field water quality measures. Initial results are promising in terms of groundwater flows and dissolved oxygen levels at the site. As well, this data has now been plugged into a conceptual groundwater model that predicts flows and dissolved oxygen, which will inform designing the new spawning area. We will be receiving funding to continue the project in 2015, which will be the final year of collecting such data. In 2016, it is anticipated that a detailed design plan and budget will be developed, with actual construction potentially starting in 2017.

Stikine salmon escapements and run sizes - 2014



Gary Dennis and Jordan Hawkins

Total escapement for large Chinook was 15,267 (after an estimated 9,100 loss from the slide). This is just within the escapement goal range of 14,000 to 28,000 but below the 10-year average of 22,847.

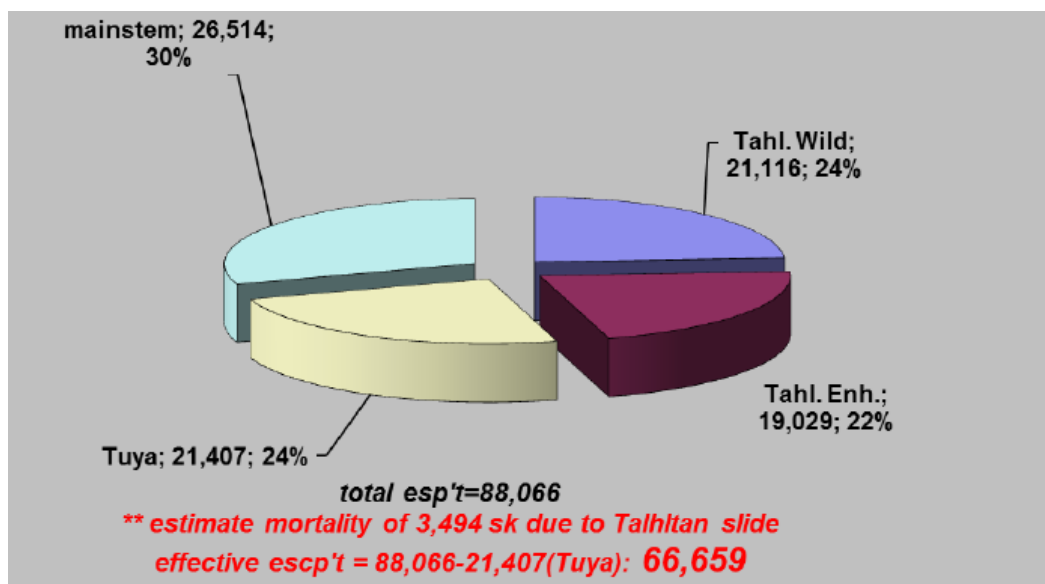
The Little Tahltan weir count was 169 Chinook which is well below the escapement goal range of 2,700 to 5,300 and the 10-year average of 3,750. The total large Chinook run was estimated to be 29,323 which is well below the ten year average of 41,055.

Total sockeye escapement was 88,066 (after an estimated 3,494 loss from the slide). The Tahltan Lake weir count was 43,639 which is well above the escapement goal range of 18,000 to 30,000 and the 10-year average of 30,989.

Non-Tahltan Lake sockeye (i.e. main-stem) escapement was estimated at 26,514 which is within the escapement goal range of 20,000-40,000 and close to the 10-year average. The total run for sockeye was approximately 162,858 which is below the 10-year average of 194,740.

Currently there is no means of accurately estimating Stikine coho escapement or run size. The 2014 coho catch per unit effort in the test fishery was above average, and Canadian commercial coho catches were also above average. The yearly coho aerial surveys conducted early November counted a total of 1,195 coho, which is below the 10-year average of 1,507.

Stikine River sockeye escapement (spawners) by stock grouping - 2014



Commercial and Food Fish Harvests - 2014

Estimates for known 2014 catches of Stikine salmon are summarized in the table below:

Fishery / species	Chinook (Large)	Sockeye	Coho
TFN Food Fishery	1,020	9,950	0
CAN Test Fishery	1,342	1,822	-
CAN Tuya Pilot Fishery	19	833	0
CAN Lower Commercial	896	30,502	5,409
CAN Upper Commercial	0	548	0
CAN Sport Fishery	50	-	-
CAN Totals	3,327	43,655	5,409
US Subsistence Fishery	56	1,527	143
US Sport Fishery	697	-	-
US Troll Fishery	736	-	-
US Gillnet Fisheries	204	22,340	30,184
US Totals	1,693	23,867	30,327

The 2014 TFN Food Fishery catch of 9,950 sockeye was well above the 10-year average of 5,483. US catches of sockeye were well below the average

Run outlooks for 2015:

Chinook - About 30,156 (below the 35,642 10-year average). This projection is above the pre-season trigger of 28,100 permitting CAN directed fisheries.

Sockeye - About 170,911 (close to the 179,828 10-year average).

Coho - About 101,010 (which is above the 92,000 10-year average).

Tuya Pilot Fishery - 2014

In 2014, Myles Sampson was contracted by the Iskut and Tahltan Bands for the second year. This fishery, aimed at trying to catch terminal Tuya sockeye, started July 27 and ended July 31. A total of 833 sockeye and 18 large Chinook were harvested and provided to the communities. (This sockeye catch was lower than the 6 year average of 2,415.)



Good friends and memories - slide salvage operations

Fish were distributed by Carlene Ducharme and Heather Hawkins to their respective communities.

Fewer fish were available for distribution due to the shorter fishing period, as workers were engaged in the Tahltan River slide fish salvage operations.

Little Tahltan River Chinook

The decline of the Little Tahltan Chinook stock has been of concern for some time. As portrayed in the figure below, since 2007 the weir count has not exceeded the lower bound of the escapement target range. Unfortunately, the overall Stikine Chinook abundance has been consistently lower since 2007. However, the Little Tahltan Chinook stock is showing a disproportionate (lower) abundance trend than that of other Stikine Chinook stocks.

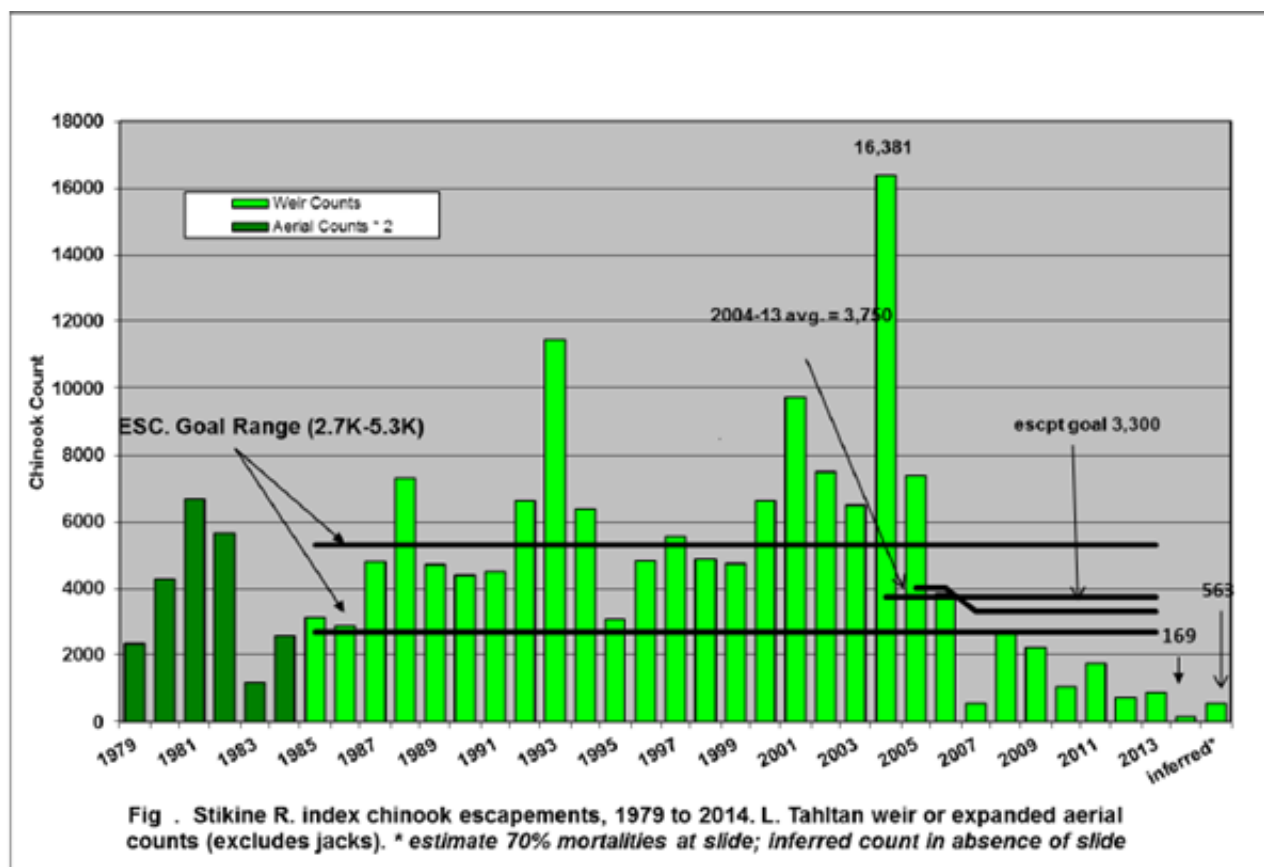
Although the specific reasons for the decline of Stikine Chinook are not distinctly known, changing ocean conditions are suspected to be a contributing factor. In this regard, since 2007 a similar trend has been seen throughout most other Chinook populations in the northern coastal geographic regions of BC and Alaska.

In recent years we have been pushing for the Little Tahltan Chinook escapement target to be formalized as a bi-laterally agreed upon escapement goal. (This is because currently Alaska only recognizes the system wide Stikine Chinook escapement goal as per the Treaty. DFO is supposed to be contracting the necessary data analysis, and is planning for it to be submitted to the Canadian review process this fall.

Investigating the decline of L. Tahltan Chinook:

We are hoping to start collecting some information regarding the status of L. Tahltan River habitat this summer. Such might include installation of a water station to collect temperature and flow data.

A proposal submission is planned for next year, to conduct more detailed work. This may include the collection of genetic samples from Tahltan River Chinook, to perhaps see if some are L. Tahltan origin.



Pacific Salmon Treaty - Negotiations

The Pacific Salmon Commission (PSC) is planning for upcoming negotiations that will lead to renewed Treaty chapters for 2019. To the degree possible, the regular meeting cycles will be utilized.

In January of 2015, our Transboundary (TBR) Panel developed a list of bilateral (US and CAN) issues for chapter renewal negotiations. There are substantive topics currently identified for future discussion. Such includes Stikine harvest shares for Chinook, sockeye and coho, along with the sockeye enhancement program.

The TBR Panel began some very preliminary negotiation discussions during the February 2015 meeting session. However, a prospective CAN TBR Panel session is being planned for November, 2015. The objective of such would be to review the initial US position paper and develop a CAN response.

The First Nations Caucus of the PSC also held a strategic planning meeting on March 6, 2015 to identify common First Nation issues relating to the upcoming negotiations.

To contact us:

Cheri Frocklage

Manager in Dease Lake

(250) 771-3012

tahltanfisheries@gmail.com

Heather Hawkins

Manager in Telegraph

(250) 235-3151

vicepresident@tahltan.org

Richard Erhardt

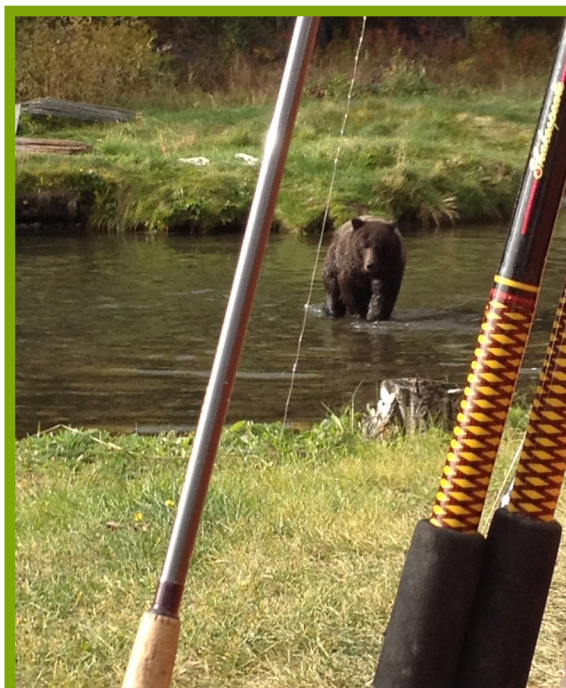
Biologist

(604) 463-3881

fisheriesnorth@hotmail.com

Tahltan Fisheries - Your source for salmon information.

Tahltan Fisheries funding for field work on the Upper Skeena River ended in 2013, so there was no surveys conducted in 2014. That being said, through the TCC / THREAT team we provided site specific fisheries information the was incorporated into the Klappan Strategic Initiative - Technical Report. The purpose of this report is to provide a summary of the values that are distinct to the headwaters area in order to facilitate discussions regarding long-term land use planning.



Johnny Tashoots Creek