



*Hazel Nelson*

*Co-Chairs*

*Steve Gotch*

*USA*

*Canada*

*Yukon River Panel 100 – 419 Range Road Whitehorse, Yukon Y1A 3V1*

---

## Summary Minutes

### Yukon River Panel Meeting

December 4-6, 2012

Hilton Hotel, Anchorage, Alaska

#### Those Present:

##### Panel Members

###### Co- Chairs

Hazel Nelson (US)  
Steve Gotch (Cnd)

###### Members

Fred Bue (US)  
Ragnar Alstrom (US)  
Andy Bassich (US)  
Pauline Frost-Hanberg (Cnd)  
Frank Thomas (Cnd)  
Stanley Ned (US)  
Erik Weingarh (US)  
Nathan Millar (Cnd)

###### US Alternate Co-Chair

John Linderman (ADFG)

##### JTC Members & Agency Staff

###### JTC Co-Chairs

Jan Conitz (ADF&G)  
Steve Smith (DFO)

###### DFO

Elizabeth MacDonald  
Bonnie Huebschwerlen  
Susan Antpoebler  
Mary Ellen Jarvis  
Sean Collins

###### NOAA

Pete Hagen

###### ADF&G

Heather Leba  
Dr. Stephanie Schmidt  
Caroline Brown  
Eric Newland

US Alternate Panel Members

Virgil Umphenour  
Richard Burnham  
John Lamont

Alida Trainor  
Tom Taube  
Jeff Estensen  
Dan Bergstrom

US Panel Advisors

Myron Naneng  
Angela Demientieff  
Victor Lord  
James Roberts  
Joseph Strongheart, Sr.  
Gabe Nicholi  
Andrew Firmin

USFWS

Aaron Martin

Others Present

Thomas McLain (Executive Secretary, YRP)

Visitors:

Jason Hale (YRDFA); Craig Fleener (Deputy Commissioner, ADF&G); Steve Klosiewski (USF&WS); Casie Stockdale (AVCP); Emmie Fairclough (Ta'an Kwach'an Council, Whitehorse); Chief Kristina Kane (Ta'an Kwach'an Council, Whitehorse); Edythe Maloney (Ta'an Kwach'an Council, Whitehorse); Madeline Jackson (Teslin Tlingit Council, Teslin); Duane Gastat' Aucoin (Teslin Tlingit Council, Teslin); Ryan Peterson (Tr'ondëk Hwëch'in, Dawson City); Richard Dewhurst (Teslin Tlingit Council, Teslin); Kathryn Porter (Teslin Tlingit Council, Teslin); Darryl Sheepway (Teslin Tlingit Council, Teslin); Ben Mulligan (ADF&G); Jill Klein (YRDFA); Dennis Zimmerman (Yukon Salmon Subcommittee, Whitehorse); Harry Wilder (Mountain Village Elder); Jeff Guyon (Geneticist, NOAA).

**Wednesday, December 5, 2012**

**8:15 am**

**U.S./Canada Yukon River Panel Meeting. (open session)**

*Opening Prayer: John Lamont*

**1. Introduction and Welcoming Remarks - Co-chairs.**

*Hazel: Welcome to all of you.*

*Steve Gotch: I am the area director for the Yukon area. It is a real pleasure to be here. I want to thank our Alaska friends for their hospitality. Everyone recognizes that 2012 was one of the lowest returns we have seen on the river. This was reflected on the unprecedented restrictions placed upon the subsistence users on the lower river. This is resulting with a generation of children growing up and not knowing the Chinook salmon in their culture. What's the answer to this? I believe the answer is in this room. I urge*

*you to show your thoughts and experiences. From the Canadian side we have a number of representatives who have come from a great distance this winter.*

*Hazel: I echo your words. I know that many of the people here share them. I am Hazel Nelson. I am originally from Bristol Bay and am currently director of Subsistence for ADF&G.*

## **2. Introductions.**

### **3. Review & Approval of agenda – Co-chairs.**

*Hazel: There are a couple of changes. Lunch will be from 12-1. The US will hold a closed session from 1-2. We are going to address the R&E tomorrow. We are going to extend the public testimony until 6 this evening. The panel will meet afterwards until 7.*

*Andy: Addition: Panel Member meeting concerns after #5.*

*Hazel: Agenda approved as amended.*

### **4. Review and approval of the March, 2012 summary meeting notes – Co-chairs.**

*Nathan: Will this document become a part of the public record and be posted on the web site.*

*Andy: Once approved I think it should be posted on our web site.*

*Nathan: I support that and feel it should be a part of the public record.*

*Hazel: The minutes are approved and be posted on the web site.*

### **5. Panel Member meeting concerns.**

*Steve Gotch: A Panel procedures and working group objectives would be set up to develop and provide recommendations to the Panel in the March meeting on how the R&E administration will move forward, likewise function and role of the executive secretary should be defined. If you could step forward with your willingness to participate.*

*Andy: A motion: The first morning of the first panel meeting, one hour should be set aside for the co-chairs and panel members to meet with each other to address concerns individually. Steve: **We will incorporate that into our March meeting agenda.***

### **6. JTC meeting summary – Jan Conitz, ADF&G.**

- Held in November 14-15 in Vancouver, BC.
  - 11 US members and 7 Canadian members. 3 guests (co-chairs, guest presenter and 2 PSC (director and administrator).
  - This was our first meeting in an outside location. The spring meeting is planned in Seattle. We will evaluate our costs after the spring meeting. The other changes are on-going.
- We had a number of presentations.
  - 2012 postseason fishery review (US and Canadian staff).
  - NOAA fisheries presentation on research.
  - Post season project reports: Biological sampling in the US subsistence fisheries (AVCP and TCC).
  - Canadian Yukon habitat research review (Sean Collins, DFO).

- Juvenile Chinook production and habitat considerations (Mike Bradford).
- In river-migration of juvenile Chinook salmon (Smith, DFO)
- Subcommittee Reports:
  - CIAPPS – Canadian index areas (determining priority areas for escapement monitoring).
  - Age composition sampling at the border (correction for gear-type bias; data needed for run-reconstruction, S-R analysis).
  - JTC protocols – “Terms of Reference”. How we do our business.
- R&E Review.
  - 50 conceptual proposals.
  - Developed a new scoring system - use of critical elements.
  - Final scores: 50% US average and 50% Canada average score.
  - JTC recommended 34 projects to advance to the DP stage.
- Escapement Goals:
  - Chinook salmon – need to finish run reconstruction, S-R analysis.
  - Chum salmon – adjustments needed, to update age and stock composition.
  - No changes recommended for 2013.
- Other business:
  - JTC Report.
    - Organizational changes made to improve flow and efficiency.
    - Tables reviewed, cleaned, reformatted.
    - Need Panel input

Questions:

- Were the projects proposals restrained by any artificial monetary line?
  - The JTC reviewers drew a line at \$1.4 million.
  - All of the proposals received a numerical score, with the total score determining the ranking.
- Concern with the controls placed on input into the modeling utilized to determine escapement goals.
  - The test fishing that takes place at Eagle sonar, is it rigorous enough?
    - ◆ It is not necessarily designed for gathering age or size of fish as it is conducted. How is that going to affect this analysis?
    - ◆ Will there be a review of the test fishery, so it can be used for this analysis? What do we need from this test fishery?
    - ◆ I am asking the JTC to determine what is needed to modify the test fishery to determine the quality of escapement across the border. We need to ensure that our data is as accurate as possible.
    - ◆ I don't think the test fishery is mirroring what is in the run.
    - ◆ I have similar concerns about quality of escapement. What I would like to see is that the Panel is kept up to speed with the JTC findings, so that we are not just presented a recommendation at the end of the day.
  - JTC heard from 4 of our modelers last fall. We will ask one of them to address the Panel.

- The realization was that more was needed to develop the process to begin to recommend an escapement goal for Chinook. What we agreed upon, was that at the next meeting we need to address the process.
- In the S-R analysis that you are doing, are you using the test fishery at Eagle as the comparative data as collected? When that program was set up, it was set up for species apportionment, not run reconstruction.
  - ◆ There were suggestions on what can be done to improve the confidence intervals on the data collected.
  - ◆ We are just looking at addressing the sampling bias.
  - ◆ What is the effect of the man-caused mortality?
    - A lot of those questions are being considered by a large group of scientists.
    - The AYK-SSI symposium will have some of those presenting. It is being watched and studied.
- Regarding the JTC report, it is a valuable report.
  - Thinking about the historical data, it is very important to keep in.
  - I would recommend a 1 or 2 page summary of how we are doing with goals of the Panel.
- Is the JTC composition changing?
  - We are trying to keep enough people to address the different disciplines.
  - We are reducing the numbers attending as a cost saving measure.
  - We will have a fluctuating membership, based upon the needs.
  - From the Canadian perspective, our participation is governed by our technical folks need to be engaged in terms of their contribution to the meeting.
  - The other thing that needs to be recognized is that we view ourselves as a technical committee, with the right expertise at the table.
- How do you incorporate traditional knowledge into your data?
  - That is a valuable component. When we look at the R&E proposals, we look for local input for their knowledge.
  - We look at local observations.
  - Local knowledge is scientific data and needs to be incorporated. On the JTC there aren't local representatives providing information.
  - We have a number of meetings with First Nations and through what we hear we relay that information to the JTC. In many aspects the stories correlate with what our science is saying.

**6.1 2012 Chinook and summer chum summary.** *Stephanie Schmidt, ADF&G.*

- Preseason outlook for Chinook was for a poor to below average run: 109,000-146,000. Escapement was the highest priority, and we were aiming for escapement to the border.
- US Preseason Management Strategy
  - Initial management would be based on preseason projections and shift to inseason run assessment as runs develop
  - Implemented subsistence fishing schedule was implemented earlier this year.
  - An additional subsistence period would be pulled.

- Tanana River fisheries would be managed to meet Chinook salmon escapement.
- Summer chum salmon commercial anticipated, but harvest would be dependent upon the Chinook run.
- In-season assessment.
  - Test fishing.
  - ASL composition.
  - Pilot Station sonar
  - Genetics – mixed stock analysis performed on samples.
  - Obtain subsistence fishermen reports.
- Subsistence fishery summary:
  - Inseason assessment through June 12. Ice out was May?
  - First Chinook was caught June 11 (average was June 4)
    - Tracking late.
    - First salmon were tracking 1985, entering June 14-17.
  - Cumulative count through June 18 was 4,481.
- Inseason management strategy. Weak and late run.
  - Hadn't seen first pulse by June 19.
  - Gillnet gear was restricted to 6" or smaller.
  - First pulse started June 24, with cumulative of 27,210 on June 24 at Pilot Station.
  - 2<sup>nd</sup> subsistence period closed in District 1.
  - June 25, cumulative count was 31,318. MSA was 45% was of Canadian origin. Protected that pulse all the way to the border.
  - June 27, 48,146 count,
    - Reduced subsistence fishing periods and gear restrictions. This was to protect part of the third pulse and still allow for summer chum subsistence harvest.
  - We started to see Chinook at Eagle sonar, with 975 on July 17. At this point the cumulative at Pilot was 104,378 with an MSA of 45% which equated to 46,800 Canadian-origin. The subsistence closures were most pronounced in area 5D with one short (36 hour) period and then closed.
  - The Alaskan stocks were weak also.
- Summer chum commercial fishery:
  - We were expecting an average to above average run of 1.5 to 2 million fish.
  - The commercial fishing opportunity to be dependent upon the Chinook run.
  - By June 28, we had over 1 million chum by Pilot Station.
    - On average by June 28, the majority of Chinook are past Pilot.
  - The commercial openings were concurrent with the subsistence openings.
    - Restricted to 6" or smaller.
    - No sale of incidental Chinook.
    - We were evaluating by the hour where and when we could fish for summer chum.
      - ◆ On June 29, we opened a 4 hour fishery in south mouth.

- ◆ Before going ahead with the next opening we evaluated the LYTF and incidental catch numbers.
  - ◆ We did this also in District 2.
  - In District 4A Kaltag Fishery the fishery was a fish wheel fishery.
  - The total catch of Chinook caught but not sold was 2,548.
    - ◆ Genetic composition: 30% Canadian origin or ~750.
    - ◆ Dominated by age 5 and age 6.
- For Chinook escapement goals:
  - Canadian IMEG was 31,474 past Eagle, below the goal of 42,500- 55,000.
  - For the Alaska stocks, only the East Fork Andreafsky River Weir, Nulato River Aerial, and Salcha River Tower had counts that met their escapement goals.

Questions:

- You mentioned a number of test fisheries. I assume there is retention. Is there any accounting of the Chinook retained?
  - Between 1200-1600 Chinook in the Lower Yukon Test Fishery (LYTF). The Mountain Village Test Fishery (MVTF), 400-500 Chinook.
  - These are distributed to the villages.
- Do we have an idea of the subsistence harvest this year?
  - We are still working on compiling those surveys.
- Is there any monitoring of the intensity of the fishing during the open periods?
  - We do get the number of fishermen participating in each fishery.
  - We do go out and survey the fishermen and also do periodic aerial surveys.
- Did you observe any change in the intensity of the subsistence fisheries?
  - It differed all up and down the river, with no definitive trend.
  - There are very few fish camps on the river. The effort is concentrated near the villages due to the price in fuel.
- In regards to your mixed stock analysis, how does the LYTF compare with the Pilot station test fishery?
  - Within the first pulse they matched pretty close to the same.
- I am always interested in the effects of our management actions. What is going to be effective and what the impact of the actions would be? A summary of these would be appreciated.
  - That analysis will be done and evaluating our actions would be very helpful.
  - We do this informally in season.

**6.2 2012 Chinook and fall chum summary.** *Mary Ellen Jarvis, DFO*

- Outlook was for 54,000 – 73,000 Chinook.
  - Escapement goal was for 42,500-55,000 Chinook.
  - Border escapement target was 45,400-49,500.
  - TAC was 12,500-30,500 fish.
- Pre-season planning:
  - Development and discussion of decision rules through annual processes.
  - Commercial, domestic, and recreational fisheries would likely be closed.

- Restrictions in the First Nation fisheries were likely if the lower end of the outlook was realized. First Nations were advised to take a precautionary approach early in the season.
- Our decision matrix determines the guideline harvest and management actions.
  - In the green zone, is where we would consider opening the other fisheries.
- In-season management strategy, in response to the Lower Yukon Test Fishery and Pilot Station indicators of a poor return and subsequent US management actions:
  - The Canadian TAC estimate was for 2300-2900 fish
  - Sport fishery was closed to Chinook retention on July 12.
  - Precautionary approach communicated through weekly conference calls with First Nations.
  - Some of the most restrictive measures were implemented by the First Nations.
  - First Nations were proactive in meeting conservation objectives.
  - Tatchun Creek area was closed to all angling on July 24<sup>th</sup> and remained closed until Sept. 14.
- Harvest summary – Chinook (preliminary).
  - 1615 fish were harvested by FN.
  - 160 on the Porcupine.
  - 6 were caught and released by sport on the Teslin River.
  - The Teslin Tlingit Council distributed 1,553 salmon from the Taku River. The Ta'an Council also distributed 1,000 pounds of salmon to their people.
  - The First Nation harvest of Chinook has dropped considerably over the last 5 years.
  - Other management actions included implementing a 7.5 inch mesh size in the commercial and domestic fisheries for Chinook.
- Upper Yukon Chinook Stock Assessment - *Elizabeth MacDonald, DFO*
  - The 2012 Eagle sonar count was the lowest since counting began there.
  - The Eagle estimate was 34,747.
  - Spawning Escapement: 31,747, under the 42,500 goal.
  - The Blind Creek weir counts were the lowest – 157 Chinook (48% female)
  - Big Salmon – 2,525 past the sonar.
  - Teslin Sonar – 3,396 salmon.
  - Whitehorse Rapids Fishway – 1,030 salmon.
  - Porcupine River – 46 Chinook and 74 redds from the Miner River aerial surveys.
  - 1466 ASL samples collected.
  - 221 Yukon Chinook baseline samples collected this year.

Questions and discussion:

- What gear is the FN using?
  - It varies by community.
  - Outside of Dawson it varies from 5 ½ to 6 ½” mesh.
- Are temperatures being monitored?



- It is on-going. In addition, we have funded TTC to monitor their systems.
- Expansion of the temperature monitoring program is on-going.
- On the Canadian side, Al von Finster is working to keep it going.
- One of your questions was on the protection of the habitat.
  - We have very strong regulation in effect to protect spawning habitat, with a very rigorous review process.
  - There has been no development in the last 10 years.
  - On the assessment priorities, they are based on our needs as determined by the Panel. We are not able to monitor all of the tributaries.
- Regarding the quality of escapement, I am wondering what we have learned and if that information could be brought to the next meeting?
  - At the JTC that is one of the activities that we are attempting to quantify. It is difficult to assess in a couple of years the impacts of particular actions.
- Quality of escapement is the foundation of the Canadian component. The ASL subcommittee needs to be tasked with an ASL based monitoring of stocks on the Canadian side. We need to see our historical background. I would also like to see tracked the 7 and 8 year old fish and the size of the largest fish caught in the projects this year.
- There are a number of factors influencing the return of salmon. The incidental catch in Alaska was greater than the total catch in Canada.

Public Testimony

**12:00 pm - Lunch:**

**Meeting resumed: 2:20 pm**

### **6.3 Fall 2012 Yukon Area summary – Jeff Estensen, ADF&G**

- Fall Chum:
  - Preseason forecast: A point estimate of 1,114,000 with a range of 986,000 to 1,242,000 fish.
    - Preseason projection was for more than 800,000 fish.
    - Early season management based primarily on preseason projection.
  - All districts started season on pre-2001 subsistence schedules.
    - Commercial harvest took place throughout the season.
    - Fall chum was a normal run as far as timing.
    - 4 pulses throughout the run.
    - Assessment:
      - ◆ Lower Yukon Drift Gillnet Test Fishery and Pilot Station Sonar.
      - ◆ We were fishing a schedule of two periods a week.
        - Tried to gauge how big the pulses were.
  - Subsistence harvest estimated to be around 80,000 fish.
  - Commercial harvest was 289,700 fish. The lower river had the 2<sup>nd</sup> highest harvest on record.
- Coho run:
  - Passage for the most part was below average for most days.

- Have the ability to conduct a commercial harvest in September.
  - Did not undertake in 2012.
- Had an average run size of around 200,000 fish.
- **Escapement:**
  - Made all of the escapement goals, including the Fishing Branch.
  - Coho, made escapement goal on the Delta Clearwater of 5,230 fish.
- **Reconstructed total run size:**
  - 2012 Preliminary run size estimates are 1,040,000 Fall Chum Salmon.
  - We are seeing increased production.

Questions and discussion:

- Is there any correlation between the fall chum run size and the Chinook run?
  - I am not aware.
- What was noticeable this year was the average weight of the fish. Some of the largest fall chum I have seen.
  - The harvest data does not indicate this.
- What was the most noticeable was the lack of blushed fish. The fish remained bright. Was this also up river?
  - We heard this from those upstream.
- Could you explain the subsistence schedule for the fall chum?
  - In the lower river, open 7 days a week, except for closure during the commercial openers. Basically followed the tail end of the Chinook run all the way to the border.
- Question on the increased production. Does this relate to adults/spawner?
  - Yes.
- Is this a result of increased marine production or decreased ocean harvest? Fall chum are discrete spawners.
  - When you have a lot of fish, you have a lot of competition for the spawning sites. Is it something on the spawning grounds? Who knows?
- Do you see any potential correlation with the marine bycatch?
  - I don't know.

**6.4 Canadian 2012 Fall Chum Summary - Mary Ellen Jarvis, DFO**

- Yukon Canadian origin outlook:
  - Average: 247,000-300,000.
  - Escapement goal: 70,000-104,000
  - TAC: 143,000-196,000.
  - Border Passage estimate: 145,000-167,000
- Porcupine below average to average:
  - 49,300-60,000
  - Escapement goal: 22,000-49,000
  - Canadian TAC: 8,736-12,160
  - Average VGFN harvest: 3,500 fish.
- Preseason fall chum management plan:
  - First Nation

- Unrestricted- Porcupine sonar and Eagle sonar to provide guidelines for management.
  - Commercial/Domestic.
    - Confirm Green Zone projection with Eagle sonar in-season.
    - Anticipated Commercial/Domestic openings early in the season.
- Inseason summary:
  - US indicators were strong from the onset. Eagle sonar confirmed the abundance.
  - Unrestricted First Nation Fishery.
  - Commercial opening Aug. 31 for 4 days.
  - Opened again Sept. 7 to Oct. 15.
  - Extended beyond Oct. 15.
  - First Nations harvested 498 with 700 estimated.
  - 3,072 harvested on the Porcupine.
  - Commercial harvest of 3,171.
  - Total harvest of 6,741.
- **Chum Salmon Assessment** – *Elizabeth Macdonald, DFO*
  - Eagle estimate: 153,248. Mainstem spawning escapement 138,970, goals exceeded.
  - 25,000 escapement on the Porcupine
  - 22,399 on the Fishing Branch. We did meet spawning escapement.
  - Comparison between the Porcupine sonar and the Fishing Branch shows they overlap well, and tracked together.

Questions:

- Are you seeing changes in the conditions on the spawning grounds?
  - There are definitely changes occurring, but the observations are not conclusive.
- Where are we at for the genetic baseline in Canada?
  - We need more for fall chum.
- Given that we put quite a few more fall chum on the spawning ground this year, what can we be doing to prosecute the fisheries when we do have a surplus?
  - There is an opportunity there; however they have lost their infrastructure.

**6.5 Marine Fisheries and Research Review** – *Dr. Pete Hagen, NOAA*

- Salmon bycatch assessment and management.
  - In 2012, the total was 11,350 Chinook.
    - Traditionally 60% of the bycatch caught in the winter season – the 2011 bycatch however was different.
    - In the B-season bycatch per pollock caught increases at the end of the season.
  - Amendment 91 and 2011 Incentive Plan – capped at 60,000.
  - Through Nov. 19, the bycatch total was 11,350.
  - Stock composition. The 2011 data being worked up. The stock mixtures show about 10% mid Yukon and about 20% for the upper Yukon. The lower

- Yukon stocks are mixed in with western Alaska stocks and at present are unable to be teased out.
- For chum, the bycatch is 24,251. Tend to be captured earlier in the fall season.
  - The stock composition: Yukon chum represent fewer than 10% of the catch.
  - Regulatory Actions:
    - Initial review on Bering Sea-Aleutian Islands (BSAI) chum salmon bycatch.
    - Not anticipated for a decision until next year.
    - The initial review of the Gulf of Alaska (GOA) bycatch of Chinook by all trawl fisheries.
      - ◆ Initial review.
      - ◆ Looking at maybe putting a cap in place.
  - Marine Research highlights.
    - Research focus and funding: AYK-SSI, NPRB, PCSRF/SSF, and state of AK.
      - One of the key goals of the pelagic trawl research in the NBS has been to improve our understanding of salmon mortality through a combination of assessment and process driven studies.
    - Arctic Fisheries and Oceanographic Survey.
      - In Chukchi and upper Bering Sea.
      - Purpose to collect baseline fisheries and oceanographic data to enable resource managers to better predict effects of climate and human impacts on ocean productivity and on the ecology of marine and anadromous fish species within the Bering Sea and Chukchi Sea.
      - Weather was much colder and also surveyed earlier in the year, than the BASIS survey in 2007.
      - Juvenile Chinook – none encountered in the Chukchi, but did encounter in the upper Bering. 2012 was the lowest abundance and smallest size. Could still see faint parr marks on a number of the samples (late out migration possible).
  - Status of the Bering Sea.
    - Arctic Ice – summer of 2012 shows record breaking ice melt and thinning and further loss of multiyear ice. We are still low, but coming up to previous years. Most of the ice retreat was on the Atlantic side.
    - El Nino status – warm over the equator. La Nina is the cold condition. The switch to El Nino conditions stalled, with the near term conditions uncertain.
    - Don't know what is going to happen next.
    - Arctic Oscillation – as a result of the summer ice melt, more heat absorption in the water is increasing the amplitude.
    - Outlook for December: colder in Alaska, with below normal precipitation.
    - For December through February, cold likely to persist, along with dryer conditions. Likely to face a cold year next year.

Questions:

- Are you able to determine the age of the juveniles?

- *Juveniles are the ones that have not gone into their first winter.*
- Are there patterns between El Nino and La Nina?
  - *Why it switches back and forth, who knows?*
- On the trawl surveys, are you doing genetics on the juveniles?
  - *We are. We have a difficult time separating out the stocks to the resolution to show Canadian.*
  - *The majority of the fish in the northern Bering are Yukon oriented. Work that the ADF&G lab is doing shows they can separate out the Norton Sound from lower Yukon stocks.*
- The juvenile index, has any work been done to help with our management decisions? Does it tell us anything about ocean or freshwater survival?
  - *The potential is there, but need to be cautious with the interpretation of the data.*
- I am wondering where the focus on these new monies going to be?
  - *The lack of knowledge on the marine environment is the largest gap.*

#### **6.6 Yukon 2012 environmental conditions – Sean Collins, DFO.**

- Description of 2011/2012 winter weather and 2012 summer conditions and resulting streamflows.
- Observations of significant events noted.
- Communication with public and colleagues.
- Winter conditions
  - Well above normal.
  - Porcupine drainage received below normal for the majority of season.
  - Elsewhere well above normal.
  - An unusually warm and fluctuating winter. All months above normal except for November, this was below normal. 7<sup>th</sup> warmest on record.
- March/April
  - March returned to normal and the Porcupine area received unusually cold conditions.
- Spring freshet condition.
  - Spring conditions were normal, due to cooler than normal temperatures which slowed snowmelt.
  - Late spring localized rainfall on snow and caused prolonged strong freshets in the Pelly and Ross River.
  - Spring freshet conditions resulted in extreme flows in some locations.
- Rearing Season Conditions:
  - Significant rainfall for a week in early June raised streams in Southern Yukon.
  - Frequent cloud and rain conditions for southern Yukon through June and July.
  - 7<sup>th</sup> warmest summer on record.
  - Dispersal of 0+ should have been good, although elongated high flows may have delayed upstream migration to rearing areas.
  - Very high water into August.
- Basin wide stream flow.
  - Flows were maintained by melting snowpack.

- Rearing season temperatures
  - Summer temperature for the Yukon Territory was higher than normal.
- Adult Chinook migration.
  - Yukon River flows were higher than normal during the majority of the migration timing, delaying migration and spawning.
  - Spawning activity was not impacted overall.
  - Normal fall temperature and precipitation conditions in southern Yukon and unusually cold in Dawson area to date.
  - Normal snowpack developed to date for insulation of streams, however below average temperatures.
- Winter conditions may have been more dynamic than normal resulting in negative effects to 2011 incubation and 2010 overwintering juveniles.

Questions

- Any studies looking at high flows/low temperature impacts to the survival?
  - *That has not been completed.*

Public Testimony:

**5:15 pm. End of the public meeting.**

**5:20 pm.**

**RESTORATION AND ENHANCEMENT FUND COMMITTEE resumed (Closed Session)**

**Thursday, December 6, 2012**

**8:30 am.**

**U.S./Canada Yukon River Panel Meeting. (open session)**

- 7. Developing the AYK-SSI Chinook Salmon Research Action Plan – Joseph Spaeder, AYK SSI Research Coordinator.**
  - This plan is nearly done and will be released next Monday.
  - Core elements of the approach.
    - Collaborative approach to research involving key state, federal, and native partners working together.
    - Uses an integrated marine and freshwater approach to address research across the full salmon life cycle.
    - Research funding guided by strategic salmon research plan based on the best available science.
    - Scientific standards for research proposals with?
  - Focusing on declined Chinook salmon stocks.
    - Over the past decade and including

- AYK-SSI Chinook salmon expert Panel process.
  - What are the variables
  - Project objectives
    - Review and synthesize existing knowledge of Chinook salmon.
  - Members of the Salmon Expert Panel.
    - Co-chair Daniel Schindler, Univ. of WA
    - Co-chair Charles Krueger, Great Lakes Fisheries Commission
    - Eric Volk, ADF&G – Comm. Fish
    - Jan Conitz, ADF&G – Comm. Fish
    - Pete Bisson, USDA Forest Service
    - Katherine Howard, ADF&G – Comm. Fish
    - Bob Clark, ADF&G – Sport Fish
    - Kate Myers, Univ. of WA
    - Mike Johns, Mich. State Univ.
    - Jim Murphy, NMFS – AK Fisheries Science Center, Auke Bay Lab.
    - James Winton, USGS – Western Fisheries Research Center
    - Mark Scheuerell, NMFS – NW Fisheries Science Center
    - Mike Bradford, DFO and School of Resource and Environmental Management, Simon Fraser University.
- Define the problem/Identify the Pattern we seek to explain.
  - Identify hypothesis
  - Summary of evidence for/against the hypothesis
  - Plausibility of the biological mechanism.
  - Recommended program of research on AYK
  - Research – propose a program of research specific to the AYK region Chinook salmon.
  - Establish priorities.
- Hypothesis.
  - Density dependent effects and overcompensation.
  - Freshwater mortality.
  - Ocean mortality.
  - Anthropogenic changes to marine ecological processes.
  - Marine bycatch.
  - Escapement quality.
  - Pathogens.
- Convene Chinook salmon outreach workshop.
  - Feedback from users, folks in region.
  - December 10-11, 2012. Sheraton Anchorage Hotel.

Questions:

- In regard to the funding of the research. What entity will decide who will be funded? Also why wasn't the pathogen hypothesis also carried over into the juvenile life stage?
  - *The AYKSSI program will be the most immediate funders of the work. An RSVP is out for \$2.5 million.*

- *We ask other entities to include funding projects addressing some of these hypotheses.*
- Is someone going to address the hatchery production impacts to the marine environment?
  - *That issue will get presented.*
- On the pathogens, herring in the Bering Sea don't exhibit *Ichthyophonus*. *Ichthyophonus* is found south of the Bering.
  - *There can be trophic interactions for vectors of Ichthyophonus. Where the infection occurs is very difficult to sort out.*
- Are the presentations going to be in print and how can they be obtained.
  - *We are not set up for web casts of the presentations.*
  - *We will attempt to make power points available on our web site.*
- In the past has AYKSSI conducted any research towards these hypotheses?
  - *We haven't ever laid prior research on these hypotheses. We have funded work on a number of them. Our research plan is fairly broad. We have limited funding and always looking for partners with shared opportunities.*
- How long has AYKSSI been able to positively identify different stocks within the AYK region?
  - *The coastal western Alaska grouping has been very difficult to sort out.*

#### **8. Lower Yukon Subsistence Chinook Harvest ASL& Stock Composition Sampling.**

*Casie Stockdale, AVCP.*

- Objective: Representatively sample Y1 and Y2 subsistence Chinook harvest to estimate ASL and genetic stock compositions in each district.
- Background: Age, Sec, Length and Genetic sampling on the Yukon River.
- How is the information used?
  - Characterize the composition of harvest.
  - Historical trend analysis
  - Post-season run reconstruction.
  - Pre-season forecast.
- Importance of characterizing the subsistence harvest.
  - The subsistence harvest equals about 15,000 fish in Y1 and Y2.
  - The subsistence sample is different from the commercial harvest, with lower female ratios and different age classes harvested.
  - The Canadian stock ratios are also different.
- Objectives:
  - Representatively sample Y1 and Y2 subsistence Chinook harvest to estimate ASL and genetic stock compositions in each district.
- 2012 sample goal of at least 900 samples collected across 50 different fishing households.
- Approach:
  - Hire community coordinators.
  - Recruit subsistence fisherman to sample their Chinook for age, sex, length and tissue samples for genetic stock identification.
  - Participants paid \$5/fish.



- Samples analyzed by ADF&G for age and genetic stock id.
- Results.
  - Preliminary results inseason.
  - Preliminary end of season results presented in ADF&G Yukon River Summer Season Summary.
  - Final age and Genetic Results available by January.
  - Final results reported in spring, 2013.
  - Final results are essential to the Yukon Run Reconstruction and preseason outlook.
- How it meets the R&E objectives.
- Value to the Communities.
  - Directly involves public participation.
  - Goal to involve ANSEP students.
  - Provides background information.
  - Increased public and agency awareness and understanding.
  - Local hires.
  - Empowers the stakeholders.

Discussion:

- I appreciate your presentation and seeing the outcome of the project.
- Could you tell about some of the feedback from the participants?
  - *Tanana Chiefs had been doing this in the middle river. It was really about building trust. Doug had numerous meetings to tell how the information would be used.*
  - *Last year, we had people call to have their kids trained. It was something people wanted to be a part of.*
- On the samples from the subsistence harvest, was the size and type of the gill net recorded?
  - *The mesh size, net type, and location fished were recorded. We will summarize this in our final report. We had an unexpected level of lower Yukon fish in the first pulse.*
- I applaud this effort. I would be interested if you include the kids involved. Do the participants get direct feedback on the genetics results?
  - *We present the results in AVCP fliers and in meetings. We also provide these in the YR DFA newsletters.*
- The data that each family collects would really enhance the program
  - *We can mail that information to each family involved.*
- At the start of this project, I remember one of the comments from Larry DuBois - the quality of the samples provided was very high.
  - *Having an experienced PI to help get this going was a major contribution.*
- I am wondering what protocols were in place for the individual fishers to get a representative sample.
  - *We don't select fishermen who we think would represent all of the harvest. We work with fisherman opportunistically trying to work with enough fishermen to incorporate the variability in time, area, and gear and also*

*enough fishermen to provide enough samples for genetic stock identification. One of the things we use is the harvest calendar to determine when our fishermen are fishing. We only need 200 samples per village. We are increasing our sample size and also considering a wider range of gear types.*

## **9. Communications Committee Report – Jason Hale, YRDFA**

- Overview:
  - Re-run projects.
  - R&E Outreach experiment.
  - Salmon summit.
  - Legal updates.
  - Pressing proposals.
  - 2013 pre-season meeting.
  - 2013 internal meeting.
- Educational Exchange. – *Dennis Zimmermann, Ex. Director, Yukon Salmon Sub-Committee.*
  - The purpose.
  - Special thanks to Bill Alstrom and Fred Huntington.
  - Yukon Participants.
  - Visited.
    - Fairbanks.
    - St. Mary's
    - Mountain village.
    - Pilot Station Sonar.
    - Galena.
    - Koyukuk.
    - Nulato
    - Kaltag.
  - Observations
    - Every community was different.
    - Everyone blames everyone else.
    - Summer chum are important.
    - A lot of Yukoners don't understand about the commercial fishery for summer chum.
    - A whole bunch of science on the river.
    - Fishing is what people do. A huge cultural piece.
    - Commercial fishing boats are not necessarily large.
    - Many were talking conservation.
    - There weren't a lot of conversations.
    - We were amazed at the food options available.
    - Many were meeting needs. We saw a lot of fish hanging.
    - Timing issues of runs.
    - Meeting needs is subjective. Customary trade is difficult to quantify and talk about.
    - Selective fishing does occur.

- Fish wheels are large on the lower Yukon
- Drift fishing is productive. There are very few spots in the upper Yukon where it works.
- The pulse closures are very effective. WE didn't realize what that meant. We saw the pulse develop and how people got organized.
- Shut the damn thing down. When we explained the problem, there were people who really did care.

The way things were. Photos from the late 1930's on the Yukon.

- In-season management teleconferences.
  - Peak participation the 3<sup>rd</sup> week.
  - 9% increase in overall participation.
  - It is clear that people see they can turn to this program to get answers.
- R&E outreach experiment.
  - Funded 4 projects.
    - Mtn. Village Test fishery.
    - TCC subsistence sampling.
    - Teslin Sonar.
    - Blind Creek weir.
  - Recommend adding to RFP for next year, at \$2,500 max. with a total amount available.
- Salmon summit communication recommendations.
  - Eliminate close-door meeting sessions.
  - Provide a structure for FN to give meaningful input to the Panel.
  - Address a perceived R&E bias.
  - Fund International meeting.
- Legal Updates
- Recap of 2012 preseason meeting.
  - In April (Anchorage)
  - Discussion points
    - Voluntary reductions.
    - Federally qualified users.
    - Sale of incidental catch.
    - Pulse protection and other management plan actions.
  - 4 Workshops.
    - Salmon science.
    - Fall chum
    - Harvests & subsistence law.
    - Commercial processor panel.
  - Participation.

*Andy: The communications committee is your committee. I would encourage you to become involved.*

Public Testimony:

**11:40 am - Lunch:**

**2:30 pm Open Panel Meeting resumed.**

**10. Decisions on the Restoration and Enhancement Conceptual Proposals.**

- *Panel members have come to consensus. **Those projects will be forwarded to the DP, with the DP back to the Panel by Jan. 15.** At that time the Panel will decide on a meeting at the earliest possible date by teleconference to make a decision on the funding of those projects. **The funding amount is for \$54,000 for the salmon summit and \$71,000 for the pre-season meeting.***
- *The list of the CP's being forwarded has a total amount moving forward of \$1,209,550.*
- *Andy: I make a motion that we move the selected projects we have discussed to the Detailed Proposal stage and for them to be considered for funding at the March meeting. Consensus. The final funding amount is not for the full \$1.2 million. There will be further paring down of the amount funded.*
- *John: The proponents of those projects will be notified by the PSC, along with the requirements of the DP stage.*

**11. R&E priority committee update.**

- *Andy. At the last meeting we were working on the priorities for the call. We were unable to meet this fall. The JTC did a good job of including much of what we had discussed into the call this fall. Nathan: One of the other items the committee was tasked with was on how to provide opportunity for public comment. Andy: John you eluded to possible savings. John: We are hoping for some savings (from JTC travel budget) that could be applied to facilitation costs. Andy: **I would request that time be allotted in our March agenda for the committee to meet.** John: I would like to see if we could make this happen before the March meeting. Committee members are 2 panel members from each country and the JTC co-chairs.*

**12. Yukon River Panel financial audit process.**

- *Hazel: What we would like from the Panel would be your approval for the co-chairs to sign the document.*
- *Andy: I would like to make a motion that the co-chairs have the authority to sign the Panel audit. Consensus.*

**13. Panel budget and administration. Steve Gotch.**

- *The net assets of the Panel were: The Panel received 1.3 million dollars Canadian. \$1.1 million was transferred to the PSC to administrate the R&E fund. The total expenditures were: \$1,301,769. At the end of the fiscal year, March 31, 2012, the net assets of the Panel were: \$360,289*

**14. Miscellaneous Business – Hazel.**

- Committee meetings: Steve: *One of the discussions we had was to develop a strategy on how the Panel would administer the R&E fund. That working group would be composed of both Panel members and agency staff. The group would review the effectiveness of the PSC administration. The agreement between the Panel and PSC is set to expire in March, 2014. The working group will also recommend the direction for the Executive Secretary duties. It would also identify and quantify the various other administrative functions, i.e. the web site and specifically the procedures around the financial administration processes of the Yukon River Panel.*
  - Committee to be made up of:
    - USFWS – Aaron Martin.
    - DFO – Steve Smith, Elizabeth MacDonald, and Steve Gotch
    - Andy Bassich, Ragnar Alstrom, and Nathan Miller.
    - ADF&G – John Linderman, Hazel Nelson, and Jan Conitz.
  - Provide consideration to the full Panel in March.

Andy: *We need to work on the mechanics on how the R&E works. On whether we utilize the above committee or make the time for the Budget Committee. I will be glad to provide a flow chart on how the JTC would like to have this work.*

John: *Given the cross-over of this working group and the Budget ‘Committee, it would be good to schedule both together.*

- Testifying at other meetings: Is there a protocol to follow?
  - John: *Are there any upcoming meetings that Panel needs to be represented at?*
  - Virgil: *I was asked to testify at the bycatch meeting. I spoke about the effect of the bycatch and that the amount caught was greater than the amount caught in Canada. There were certain areas where they would catch more Chinook salmon and there are more areas where they would catch more chum salmon. That meeting was the 5<sup>th</sup> of April. (Virgil was thanked by Hazel and Steve for providing this testimony on behalf of the Panel).*
- Does the Panel want to have a discussion about testifying?
  - *Is anyone attending the AYKSSI meeting? Andy*
- The Board of Fish meeting in January. The Panel will be well represented.

## 15. Correspondence:

Steve: *As an order of procedure. I and my co-chair will draft a letter expressing our comments and concerns to the PSC.*

- The PSC is responsible for putting the R&E packets together.
  - The members did not receive the packets prior to the meeting.
  - *Panel members ask that they receive them two weeks prior to the meeting.*
  - *One of the things lacking was the status report of the projects, which should be included.*

- *I have concern over the lack of attendance by their representative at our meetings.*

Hazel: *Would the Panel want to see the letter?* Andy: *If you could e-mail us so we have a copy that would suffice.*

Nathan: *A letter to the USF&WS on the interest that we accrue on our account, seeking a final resolution on whether we have to return the interest, or would we have it available at our discretion.*

Andy: *It would be appropriate to send a letter to the Federal Subsistence Board regarding customary trade and our concern. Do we want to address this?* John: *Is the letter you are referencing the one in 2008?* Fred: *It was Jan., 2010.*

#### **16. Next meeting:**

- Whitehorse, March 25-29, 2013.
  - 4 days of meetings with the option of a 5<sup>th</sup> day. Would the Panel be adverse to a full 5 days?
  - Nathan: ***We should consider a request for Emmy Fairclough to present at the next meeting. The Panel needs to consider the recommendations from the salmon summit as an item on the next agenda.***

#### **17. Any other business.**

Fred Bue: *We have done a lot of business here and is there confidential information that should stay within our group?*

Hazel: *When it comes to transparency and full disclosure, regarding not only the financial reports but the minutes of our meetings, when the working group gets to that item, they consider the impacts in their recommendations. Let the working group address this.*

John: *It would be prudent to follow up with the Department of State on this issue.*

#### **18. Work assignments:**

- Nathan: *Recommendations of the Panel to the JTC.*
  - The Panel be kept up to date on the process to provide the escapement goals.
  - The JTC report provide a report card on the run reconstruction each year and include information on escapement, border passage, and catch share.
  - On the flip side, the JTC would like some specific comments on the JTC report and how to include historical data.
  - The Panel would like to see a report on the quality of escapement, to include any trends. Andy: *I would also like to see how the conversion to the fish wheel to the sonar test fisheries feed into the quality of escapement as it feeds into mixed stock analysis.*
  - The Panel would like a report on the effectiveness of management measures on both sides of the border for the past 5 years.
  - The JTC requested direction from the Panel on the information needed from the R&E process and that there is some clarity of roles.

- Fred: The other thing is the relationship of the JTC and the Panel. We need to understand what both require. The Panel needs to provide direction.  
Aaron: *I would like to ask for some clarity on the time frame for these requests.*
- Hazel: *For those on the next agenda: Andy requested a meeting of the Panel members: **The first morning of the first panel meeting, one hour should be set aside for the co-chairs and panel members to meet with each other to address concerns individually.***
  - Nathan: *The Panel needs to consider including more traditional knowledge into the agenda.*

**19. Closing remarks:**

**20. Closing Prayer:** *Madelyn Jackson.*

**Adjourned: 4:45 pm.**