



YUKON RIVER DRAINAGE FISHERIES ASSOCIATION

> A United Voice for Downriver and Upriver Fishermen

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NORTH PACIFIC FISHERY MANAGEMENT COUNCIL TAKES ACTION ON CHINOOK SALMON BYCATCH

By Becca Robbins Gisclair, Policy Director

The North Pacific Fishery Management Council (the Council) took action during its April 2009 meeting to address Chinook salmon bycatch in the Bering Sea pollock fishery. The Council received extensive reports and public comments on the alternatives it was considering. Of the more than 200 people who gave public comment, many were from Western Alaska and from Community Development Quota (CDQ) groups.

EFFECTS OF THE COUNCIL'S ACTION

Ultimately, the Council chose a two-part approach (described below) that provides for a 47,591 bycatch level in most years, with the potential for the fleet to reach a 60,000 bycatch level in two out of every seven years without

consequence. The Council sought to balance the needs of Western Alaska salmon with the pollock fishery's ability to operate. The Council's decision does place a limit on Chinook salmon bycatch in the pollock fishery, which is an important development. However, the hard cap numbers chosen by the Council were well above the 29,000 to 32,500 figures requested by groups throughout Western Alaska and recommended by the Federal Subsistence Board and Board of Fisheries. The hard cap levels are also above those recommended by the U.S. Fish and Wildlife Service,

the U.S. Department of State, and the Yukon River Panel. Although the hard cap numbers chosen by the Council will eliminate the possibility of the record high bycatches during the years 2005, 2006, and 2007 being repeated, the numbers largely maintain bycatch levels experienced before 2005 and will do little to actively reduce salmon bycatch. The Council's action depends on industry incentive plans to reduce salmon bycatch below the specified hard cap levels. The plans, although innovative, operate outside agency and Council control, aside from some basic requirements for the plans and an annual Council review. The industry is not even legally required to submit the same plans that had been presented during the course of the Council's decision.



The Council deliberates on salmon bycatch with a packed house of Western Alaskans and pollock industry representatives. Photo credit Victoria Briggs.

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A MESSAGE FROM THE DIRECTOR

by Jill Klein, Executive Director

As I sit at my desk in Anchorage, I am pleased with the nice spring we are having. The weather is warm, the bugs are not out yet and the sky has been blue. As I look at pictures of flooding along the Yukon River,



I know a very different spring is taking place. The images of people's homes being destroyed by ice, people helping each other and their animals, people

reuniting after rescue, people sitting around the fire together—all of these images are real experiences for those who live in Eagle, along the Yukon River.

As I planned my weekend in Anchorage, with images of flooding and destruction in my mind, I thought about my daughter. I want her to have experiences in life that engage her, keep her active, feed her, and keep her safe and healthy. I know families along the Yukon River want the same thing. How do we achieve this?

Many people believe that by talking about and actively participating in conservation, we will save what we enjoy today for our children; that by taking conservative actions today, we will ensure there is a future for our children. Although this may be true, many factors affect the resources we have come to depend on and our ability to conserve our use of them today. Many local actions may help, but many global impacts are outside our control.

The Yukon River is experiencing this dilemma. Faced with a Chinook salmon fishery that may not be able to sustain the people who have come to depend on it, a call for action is warranted. The aspect of fisheries management that people are able to control is when the fish are in the river. This limited opportunity to influence the fishery is challenging because the salmon spend at least half of their lives in the marine environment under different management and ecosystems. Local people and managers feel they can have an impact on the in-river management, but it is hard to get buy-in when you know there is a portion of the salmon's lifecycle in the marine environment that is out of your control. Even more unsettling is feeling like those who are

responsible for the marine management are not doing a good enough job to get the salmon to return to the rivers, the people, and the habitats that depend on them.

The Yukon River is such a mighty river that it is able to provide sustenance for people and bring people together. People work together to harvest the salmon. From fishing to processing to eating, salmon bring family and community together. When there are not enough salmon and not enough resources, the river acts like a great divider, breaking people apart like the ice has done to the buildings in Eagle.

The Yukon River Drainage Fisheries Association (YRDFA) knows all too well the challenges and successes of being divided and coming together. On the Yukon River, we are now talking about conservation. We want people to volunteer to save the salmon, and we want people to do this before the real disaster strikes. We want people to take preventative measures, voluntary measures to help the salmon reach their spawning grounds.

How then will people survive today? How will their children eat healthy food today? How will their children participate in the fishing activities today if we are not fishing today so that fish can be saved for tomorrow? The children need these experiences today so that they will know their meaning tomorrow when the elders and parents are not around anymore to teach them.

I don't have all the answers, but I know the people and communities along the Yukon River have the strength to work in earnest on solutions to these questions. If we keep the end

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Many factors affect the resources we have come to depend on and our ability to conserve our use of them today.

goal in mind, we may be able to start piecing together how we work today for tomorrow. But we know this process will create hardships. Mitigating these hardships is also a necessary part of the discussion, one that is usually not included at the table. In the meantime, while we anxiously await the return of the salmon that we have been talking about for months, water levels continue to rise down the Yukon River. I hope that everyone stays safe and that people's valuables are as protected as possible. More hardship is not what we need during this promise of summer that spring has notified us of. **S**

Yukon River Fisheries Meetings Summer & Fall 2009

DATE	MEETING	LOCATION
May 26, 2009	NPFMC Data Collection	Seattle, WA
May 29 – 31, 2009	River Rally	Baltimore, MD
June 1 – 9, 2009	North Pacific Fishery Management Council	Anchorage
Aug. 6 – 8, 2009	Yukon River Inter-Tribal Watershed Council Summit	Whitehorse, YT
Oct. 1 – 2, 2009	YK Delta Regional Advisory Council	TBD
Oct. 1 – 9, 2009	North Pacific Fishery Management Council	Anchorage
Oct. 6 – 7, 2009	W. Interior Regional Advisory Council	Aniak
Oct. 13 – 14, 2009	E. Interior Regional Advisory Council	Central

RESOLUTION: 2009-01

Projected Poor Chinook Salmon Return to the Yukon River

WHEREAS the Yukon River Drainage Fisheries Association (YRDFA) represents subsistence, commercial, personal and sport users of wild salmon and other fish within the Alaska portion of the Yukon River drainage; and

WHEREAS the Alaska Department of Fish and Game and U.S. Fish and Wildlife Service have projected a poor return of Chinook salmon to the Yukon River and will manage the run to ensure escapement of Canadian origin Chinook salmon; and

WHEREAS the people of the Yukon River rely on salmon for their livelihood, cultural traditions and local economies; and

WHEREAS Chinook salmon have not been returning to the Yukon River in adequate numbers; and

WHEREAS Chinook salmon return to and migrate up the Yukon River according to their biological timing;

BE IT RESOLVED the YRDFA delegation requests a reduction of the subsistence windowed fishing schedule by 50% in order to reduce effort by fishermen.

COPIES of this resolution will be sent to the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service, and be made public at the April 7 and 8 meetings of Yukon River Tribal members and fishers from the entire length of the Yukon River.

APPROVED unanimously this 6th day of April 2009 by the Board members and delegates of YRDFA assembled at their Nineteenth Annual Meeting held in Hooper Bay and Fairbanks, Alaska.

Attest: Richard Burnham, YRDFA Co-Chair William Alstrom, YRDFA Co-Chair

2009 YRDFA RESOLUTIONS

By Becca Robbins Gisclair, Policy Director

After weather kept our full board from making it to the YRDFA Annual Meeting in Hooper Bay, the YRDFA Board of Directors met in Fairbanks, Alaska, on April 6, 2009, to conduct board business that could not be accomplished without a quorum. During a quick one-day meeting, the Board passed seven resolutions addressing issues of importance to Yukon River fishers and Yukon River salmon.

Resolution 2009-01 is included in full on this page. In response to the forecast for poor returns in 2009 and the ongoing need to conserve Yukon River Chinook salmon, the YRDFA Board requested a 50 percent reduction of the subsistence windows fishing schedule to reduce effort by fishers, thereby reducing harvest.

Resolution 2009-02 expresses YRDFA's concern about the potential impacts of the Donlin Creek mine on salmon and salmon spawning habitat. Clean water for spawning and rearing is vitally important for the wild salmon and other fish harvested for subsistence. Mining activity produces chemicals and pollution that cause severe damage to fish and fish habitat. Therefore, YRDFA expresses its concern that the mine, if permitted, should operate with no impacts to the environment and, particularly, no impacts to aquatic life and habitat productivity.

Resolution 2009-03 addresses hatcheries and roe stripping. Hatchery fish compete with Yukon River wild salmon for nutrition in the open ocean and are contributing to the declining size of Yukon River wild Chinook salmon. Roe stripping sets an undesirable precedent here in Alaska and depresses the price of salmon roe and flesh markets for Yukon River fishers. Therefore, YRDFA opposes allowing roe stripping in hatcheries and supports setting specific limits on hatchery production and decreasing funding and loans to private non-profit hatcheries.

Resolution 2009-04 opposes offshore oil and gas drilling in Alaska, particularly in Bristol Bay. Yukon River salmon and many millions of salmon from other regions pass through the area proposed for drilling in the North Aleutian Basin (Bristol Bay) in their time at sea before returning to their natal streams. The potential effects of drilling are numerous, and deadly pollution from drilling operations and oil spills from drilling operations and tankers can cause devastating effects on fish, wildlife, and the marine environment for years to come. Because the flow pattern in the Bristol Bay area travels from south to north, a spill in this region could affect the Yukon River and its associated ecosystem, causing direct impacts to vital subsistence and commercial fisheries in the Yukon River as well as in Bristol Bay. Therefore, YRDFA opposes oil and gas drilling offshore in Alaska and requests that current plans to hold lease sales in the North Aleutian Basin be stopped and that the North Aleutian Basin be withdrawn from any future leasing.

Resolution 2009-05 expresses YRDFA's concerns over the development and implementation of the proposed Pebble Mine. Clean water is of vital importance for the survival of Alaskan wild salmon and other fish essential to providing subsistence resources. Mining activities and practices, including cyanide heap leaching of gold ores, threaten the long-term viability of Western Alaska salmon and other fish stocks by allowing increased pollution and degradation of vital stream habitat. Therefore, YRDFA shares the concerns of many of those in the Bristol Bay region about the proposed Pebble Mine project.

Resolution 2009-06 expresses YRDFA's support for legislation requiring citizen oversight of the Trans-Alaska Pipeline System (TAPS). The Trans-Alaska pipeline crosses the Yukon River and its tributaries at several points. A break in the Trans-Alaska pipeline could result in the rapid disbursement of oil throughout the Yukon River. An oil spill in the Yukon River would have catastrophic impacts on Yukon River fish, fisheries, and markets, and would cause long-term damage to the ecosystem. There is currently no formal citizen oversight for the TAPS. Therefore YRDFA supports the creation and funding of a Trans-Alaska Pipeline Citizen Advisory Council to provide environmental oversight and monitoring for pipeline operations.

Resolution 2009-07 expresses gratitude to the people of Hooper Bay for their generosity and hospitality. The YRDFA Board Members, delegates, and staff of YRDFA thank the Hooper Bay School and staff, the City and Tribal Council, the cooks, the drivers, the dancers, the Elders, and the people of Hooper Bay, whose contributions made for a wonderful and productive 19th Annual Meeting.

Voices from the River

"If the king salmon run is as poor as projected, how will you meet your subsistence needs?"

In April 2009, YRDFA communications director Jason Hale asked this question of fishers from up and down the Yukon River. Here are their thoughts:

ISTRICT

DISTRICT

JAN WOODRUFF, EAGLE

"Last year we did not meet our subsistence needs. This year considering how dire the situation is we're voluntarily going to fish half as much as usual. If we have good quality fall chum, we're going to try and put some up, and we're going to seriously hope to get a moose or caribou."

TED HAMILTON, EMMONAK

"We're going to hurt. That's plain and simple. We get pretty frustrated sitting on the beach watching the fish go by and knowing people are going to sell subsistence fish that we're letting go. I could do that, too, but if everyone did that would be the end of king salmon as we know it."

> **ROBERT WALKER, ANVIK** "Fall back to Plan B—summer chum, fall chum, and freshwater fish like whitefish, pike, and sheefish. Also, moose in the fall."

RICT

DISTRICT 2

FRED HUNTINGTON, GALENA

"I fish during the winter, too. I just continue fishing whitefish, sheefish, dogfish, and silvers. I've got a good opportunity for fall chum because my brother has a fish wheel that gets lots of them. Also, I don't just keep fish for myself. I give it to elders in the community and at potlatches."

TIM MCMANUS, NENANA

"We get fall chum in Nenana. That's what we substitute for kings if we don't get enough for our smokehouse."

UPDATE ON THE WHITEFISH STRATEGIC PLANNING PROJECT (YUKON AND KUSKOKWIM RIVER DRAINAGES)

By Caroline Brown (ADF&G) and Randy Brown (USFWS)

Approximately one year ago, the U.S. Fish & Wildlife Service, Office of Subsistence Management, funded the development of a strategic action plan for whitefish species to provide direction for research on these important subsistence resources. With increasing commercial opportunities offered, but little research available about whitefish life history, the plan development was timely.

This strategic planning effort is divided into three phases: (1) preliminary research, includ-

last YRDFA newsletter. To briefly recap, the objectives were to discuss the interim synthesis report, identify biological and social science gaps in existing information, and explore appropriate methods for assessment, research, and management. Additionally, the group developed criteria that can be used to assign relative priority levels among issues such as fisheries, species, user groups, research objectives, and management options. During many discussions, delegates to the first meeting



Meeting participants intently watch a series of presentations on current whitefish science.

ing literature reviews and scoping meetings in the lower Yukon and Central Kuskokwim regions; (2) two meetings attended by a panel of experts made up of river residents, biologists, managers, and social scientists; and (3) development of the strategic plan. The first phase of the project was completed by October 2008 when preliminary materials on the biology and use of whitefish species were assembled for the expert panel.

The second phase of this project took place in November 2008 and April 2009, when the two group meetings were held. The results of the first meetings were briefly discussed in the shared their perspectives on fisheries, management, biology, fishing practices, environmental changes, other wildlife, and many other issues. Each delegate shared his or her two or three greatest concerns for whitefish and whitefish fisheries, which were then discussed by the group. Local representatives expressed their concerns about the impacts of commercial fisheries, beaver activity, and changes in water levels. They also provided regionally specific information on whitefish in their areas. Management biologists discussed harvest and abundance information they would require to effectively manage whitefish populations. Anthropologists explained the importance of understanding how subsistence fisheries take place and not just how many fish are taken. It was generally agreed that there was great potential to use genetics approaches to identify stocks of origin in mixed stock fisheries and the need for locating spawning locations as a first step of research.

The second meeting took place in April 2009 in Fairbanks. The meeting began with the presentation of a framework of hierarchical risk levels associated with fisheries, development activities, and management decisions based on threats to species, populations, fish distribution, and fisheries. A number of research scientists presented various types of projects to the group to provide some perspective on the types of information that is obtained, the challenges of funding projects, the time frame from concept to completion of reports, management issues, and more. Each delegate introduced issues, species, fisheries, and other ideas related to whitefish research that he or she considered important. These ideas were eventually assigned priorities in a discussion-based forum that used previously developed rating criteria. Transcripts of the meeting, which concluded on a very positive note, are being professionally prepared.

The ideas introduced and prioritized at the meeting will be the basis of the strategic plan for research of whitefish species in the Yukon and Kuskokwim river drainages. Randy Brown of the USFWS and Caroline Brown of the ADF&G will be working on development of the strategic plan (the third phase of the project) between May and November 2009 and hope to have a draft available for review by December 2009. To learn more about this strategic planning effort, receive any of the meeting materials, or have input into the process, please contact either Randy Brown at 907-456-0295 or randy_j_brown@fws.gov; or Caroline Brown, 907-459-7319 or caroline.brown@ alaska.gov. 💊

YUKON RIVER CHINOOK SALMON IMEG -WHAT DOES IT MEAN?

By Jason Hale, Communications Director

If you sit in on a meeting or call in to a teleconference about the Chinook salmon run on the Yukon River, sooner or later you'll hear people talking about the Interim Management Escapement Goal for Canadabound fish, or IMEG. Vague references may be made to border passage or escapement or spawning. Someone might mention fish passage numbers from the Alaska Department of Fish and Game (ADF&G) sonar in Eagle, Alaska, or genetics work lower on the river. However, rarely will you hear a clear explanation of what the IMEG means or why you should care.

WHAT IS AN IMEG?

Basically, IMEG is the number of Canadian-origin Chinook salmon that need to reach the spawning grounds in Canada to maintain sustainable yields of salmon. In other words, if we don't get this number of fish to the spawning grounds, the health and sustainability of the run may suffer, resulting in fewer fish to harvest in future years. The United States would also be in violation of our international treaty with Canada. In a typically year, half of Yukon salmon are produced in Canada, so it is very important to put these fish on the spawning grounds.

WHAT IS THE CURRENT IMEG?

The Yukon River Panel, which is responsible for setting and adjusting escapement objectives, set an IMEG at more than 45,000 Chinook salmon based on numbers from the Eagle sonar. This means that we need to make sure at least 45,000 Chinook salmon make it to the Canadian spawning grounds. As the "interim" part of IMEG implies, this designated number is not a permanent goal. In fact, it is a goal for 2009 only and will be reevaluated for 2010. The number is based on the best science available at this time, but as more data are collected, the figure could change.

SO, THE IMEG TELLS YOU THE TOTAL NUMBER OF FISH THAT NEED TO GET TO CANADA?

Nope. The IMEG just tells us how many fish need to get to the Canadian spawning grounds to help provide a healthy run

throughout the Yukon River drainage for future years. Harvest numbers still need to be considered, and this is where it gets really interesting. If the Canadian-origin portion of the Chinook salmon run is made up of more than 45,000 fish, those extra fish can be harvested. The extra fish are called the total

allowable catch. Alaskans are allowed 74 to 80 percent and Canadians are allowed 20 to 26 percent of the total allowable catch.

HOW ABOUT AN EXAMPLE?

Just for fun, let's say that 70,000 Canadian-origin Chinook salmon return to the river one year as part of the total run. (There would also be Alaskan origin fish in the run, but that's a topic for another day.) To meet the IMEG, we have to get at least 45,000 of those fish to the Canadian spawning grounds to help keep the run healthy and meet treaty obligations. So, we subtract the IMEG of 45,000 from the original 70,000, and we have 25,000 fish left.

These 25,000 fish are available to harvest. We know Alaskans are allowed 74 to 80 percent and Canadians are allowed 20 to 26 percent of these extra fish. To ease the math, let's look at the middle of those ranges and say Alaskans are allowed 77 percent and Canadians get 23 percent. My calculator tells me that 77 percent of the 25,000 harvestable Chinook salmon is 19,250 Chinook salmon. This figure is how many Canadianorigin salmon Alaskans can harvest in our

example. That leaves 5,750 fish for Canadian harvest.

So, in this example we need to get 45,000 fish across the Canadian border for spawning and another 5,750 fish across the border for harvest, for a total of 50,750 fish that we need to get through Alaska and into Canada. Remember that

these numbers are just examples, and when actual fish come into the river, the equations start to be calculated as the real numbers of fish become known.

IS THERE MORE?

If we don't get this

number of fish

to the spawning

grounds, the health

and sustainability of

the run may suffer.

There are many, many more details. If you would like to learn more, the best place to start is the Yukon River Salmon Agreement Handbook. You can find it on the YRDFA website (yukonsalmon.org) or call the YRDFA office at 877-999-8566, extension 105, to request a copy.

FISHERS MEET TO GIVE INPUT FOR MANAGING THE 2009 CHINOOK SALMON SEASON

By Jason Hale, Communications Director

In conclusion of a three-month public process to prepare for the anticipated poor 2009 Yukon River Chinook salmon run, more than 60 fishers from villages throughout the Alaska portion of the Yukon River drainage gathered with representatives from the Alaska Department of Fish and Game (ADF&G) and U.S. Fish and Wildlife Service (USFWS) in Fairbanks on April 7 to discuss options for managing the upcoming Chinook salmon run.

Everyone in the room recognized the importance of including people along the river in the preseason management plan for the 2009 season. The participants were chosen based on their ability to provide a voice for their village and regional area. Meeting participants included some of the most involved fishers on the river. There were representatives from the Federal Subsistence Board Regional Advisory Councils, Yukon River Panel, processors, inter-tribal consortiums, and YRDFA. Care was taken to ensure representation from every fishing district.

In the months before this meeting, YRDFA hosted regional teleconferences to give all subsistence users a chance to learn about the run projection and to share ideas about how to manage the run. The calls generated some great discussions, and a number of useful ideas came out of them.

These ideas were shared at a number of meetings in February and March, including the spring meeting of the Yukon River Panel, which funded this work. During this meeting, Panel members and advisors from throughout the Alaska portion of the Yukon River drainage discussed and debated all of the ideas from the teleconferences. Working with fisheries managers from ADF&G and USFWS, they sorted and refined each idea, meeting late into the night. They decided that some ideas were not possible this year because of time, money, or legal restrictions. In the end, they deemed five management options doable, along with a number of voluntary measures that fishers might consider.

Prior the the April 7 meeting in Fairbanks, the managers from ADF&G and USFWS developed recommendations on the five management options. Also, YRDFA staff pulled together a list of the voluntary measures that had been discussed during the teleconferences. These options, recommendations, and measures became the focus of the meeting in Fairbanks.

Here's what participants of the Fairbanks meeting discussed: (Note that most of these recommendations identify Y-1, but the intent is to implement them similarly in upriver fishing districts and subdistricts.)

Management Option 1: Delay start of subsistence windows by one week to allow early season subsistence fishing.

Initial Management Recommendation: Subsistence fishing would be allowed 24 hours per day in Y-1 until Saturday, June 7, at 8 a.m. to allow fishers the opportunity to target whitefish species prior to salmon abun-



Fishers and agency representatives divide into smaller groups for more personal, detailed discussions.

dance and then shift to a week closure.

Fishers' Reaction: The majority did not like use of a fixed date to start the subsistence windows. They pointed out that the start of the run can vary by several weeks, depending on environmental factors like ice-out, and they suggested using such factors to determine the start date of windows.

Management Option 2: No fishing on the 1st pulse.

Initial Management Recommendation: Beginning Saturday, June 7, at 8 a.m., the Y-1 subsistence fishery would be closed until Monday, June 15, at 8 p.m. Because the 1st pulse is unpredictable but is anticipated to occur between June 8 and June 15, this option would allow people to plan, and to do our best to let the first pulse with the highest Canadian contribution pass through U.S. waters without fishing on it.

Fishers' Reaction: A good deal of debate occurred. Some villages and fishers supported no fishing during a portion of the run. In general, fishers did not like the idea of laying off an entire pulse and preferred having the option to fish a little throughout the season. All participants were sensitive to the need to get fish to the spawning grounds, and they had long, involved discussions about the best strategy to meet escapement numbers with high-quality fish.

Management Option 3: Reduce normal schedule by half.

Initial Management Recommendation: Beginning Monday, June 15, at 8 p.m. the windowed subsistence fishing time in Y-1 would be reduced to two 18-hour periods per week, rather than two 36-hour periods. Even if a whole week of fishing time were pulled during the first pulse, the typical quarter to half point of the run usually falls in the period from June 15 to 20 and it is necessary to reduce time to further protect Canadian fish and minimize the impact of those individuals who may just fish harder when they can fish.

Fishers' Reaction: The majority supported

the idea of reduced fishing time. As with their reactions to Option 1, they did not feel that the start date should be fixed. Instead, they felt it should be based on ice-out or a similar natural event. Many fishers said that limiting fishing time would be the fairest way to limit the harvest and get more fish to the spawning grounds.

Management Option 4: Limit gillnets to 6-inch or less mesh size, require that fish wheels be manned, or require live boxes.

Initial Management Recommendation: If needed for further conservation measures, limit nets to 6 inch or smaller mesh, require that fish wheels be manned, or require live boxes on fish wheels. This measure will be dependent on not only Chinook salmon run strength and timing, the proportion of Chinook salmon males and females, and the proportion of the age/size of returning Chinook salmon, but also the abundance and timing of chum salmon. The restrictions of this option could occur as early as June 15 or not be implemented at all.

Fishers' Reaction: Very little support for limiting mesh and no support for limiting fish wheel operations were voiced. Fishers questioned the effectiveness of these strategies, especially in the case of live boxes for fish wheels.

Management Option 5: Review the Tanana River terminal fisheries.

Initial Management Recommendation: Personal use and sport fisheries would be managed to meet escapement objectives for the Chena and Salcha rivers. If subsistence restrictions are needed in the Tanana River, personal use and sport fishing would be reduced or closed.

Fishers' Reaction: The vast majority of fishers supported this option.

Voluntary Measures: Regardless of which management options are put into effect, if the run is as poor as projected, it will still be important for fishers to reduce their harvests. The following voluntary measures were discussed during the meeting:

- Individual fishers reduce harvest by a percentage, suggested percentage was 25%
- Communities reduce harvest by a percentage or quota amount

- Keep fish in the area (for example, consider limiting sharing, gifting, and customary trade off the river)
- Voluntarily do not fish on 1st pulse
- Shift subsistence harvest to chum salmon or other species

Each voluntary measure had several supporters, but meeting participants were quick to point out that fishers and communities along the river would need to determine which measures were right for them.

During the discussions of management options, fisheries managers were available to introduce options and answer questions, but mostly they listened to the views and opinions of the fishers. After the meeting, fisheries managers took all of the feedback, along with what they heard during the teleconferences and in other forums, into consideration as they developed management strategies for the 2009 Chinook salmon run. Managers shared these strategies during a final teleconference on April 16. Meeting participants and tribal council representatives participated in the call and provided comments, which managers took into account as they finalized their strategies. These finalized strategies can be found on pages 10 and 11 of this newsletter.

YRDFA would like to thank all participants of the teleconferences and in-person meeting for their time, advice, wisdom, and dedication. Also, YRDFA would like to express its appreciation to the Yukon River Panel members and advisors for their hard work on this issue and for funding this endeavor. Fishers depend on the Chinook salmon resource, and this project gave them a stronger voice in the management of that resource.

This article was prepared by YRDFA under award number CC-03-08 from the Yukon River Panel. The statements, findings, conclusions, and recommendations are those of the author and do not necessarily reflect the views of the Yukon River Panel.

EVERY FISH COUNTS IN 2009

King salmon are important to everyone along the river.

Everyone shares a responsibility to get enough kings to the spawning grounds.

Let's all do our part to ensure strong, healthy salmon runs on the Yukon River.



2009 Yukon River Salmon Outlook and Management Strategies Districts Affected: Yukon River Area

This article describes the anticipated management strategies for the 2009 season after discussing options with fishers during several preseason meetings. State and Federal fishery managers will coordinate management of the Yukon River subsistence salmon fishery.

RUN AND HARVEST OUTLOOK

Chinook Salmon	Chum Salmon	Coho Salmon
Below average to poor run is projected.	Near average runs are projected to provide for escapement and subsistence uses.	Average run is projected to provide for escape- ment and subsistence uses.
Subsistence conservation measures are required to share the anticipated available subsistence harvest and meet escapement goals.	Summer chum commercial surplus is anticipated to be 500,000 to 900,000 fish.	Stock status is stable with good production.
Directed commercial fishery is unlikely.	Fall chum commercial harvest is anticipated to be 50,000 to 300,000 fish.	Commercial harvest is anticipated to be 30,000 to 70,000 fish.

MANAGEMENT STRATEGIES

- Initial management will be based on preseason projections and shifted to in-season project assessment information as the runs develop.
- Because of the anticipated poor Chinook salmon return for 2009, it is unlikely that there will be any directed Chinook salmon commercial openings.
- A reduced subsistence salmon fishing schedule will begin approximately 7 days after ice-out at Alakanuk in Y-1 and will be implemented chronologically with the upriver migration. If ice-out is earlier than average, the schedule may be delayed longer than 7 days; if the ice-out is later than average, it may be implemented earlier than 7 days.
- To conserve the greatest number of Canada-bound Chinook salmon, there will be no fishing on the first pulse of Chinook salmon. Beginning in Y-1, one to two subsistence fishing periods will be pulled and similarly implemented to upriver fishing districts and subdistricts based on migratory timing. This will be announced by short notice news releases on VHF, radio, and Yukon River Drainage Fisheries Association (YRDFA) tele-conferences.
- The federal manager is planning to implement a Special Action near June 1 that would limit the harvest of subsistence Chinook salmon in waters adjacent to Federal Conservation units to federally qualified rural subsistence users only.
- In the sport fishery for Chinook salmon, the bag and possession limit in Yukon River tributaries (excluding the Tanana River drainage) will be reduced from three to one fish. No retention of Chinook salmon will be permitted in the mainstem Yukon River.
- The Tanana River personal use and sport fisheries will be managed to meet escapement objectives for Chena and Salcha rivers.
- A surplus of summer chum salmon is anticipated above escapement and subsistence needs. However, a directed chum commercial fishery will be dependent upon the strength of the Chinook salmon run.

The U.S./Canada Yukon River Panel agreed to a one-year Canadian Interim Management Escapement Goal (IMEG) of >45,000 Chinook salmon and >80,000 fall chum salmon based on the Eagle sonar program. The IMEG for the Fishing Branch River of 22,000 to 49,000 fall chum salmon based on the Fishing Branch River weir count will continue through 2010.

A reduced subsistence salmon fishing schedule will be in place early in the season until the salmon run size is projected to be of sufficient strength to warrant relaxing or discontinuing the schedule. The schedule is intended to reduce harvest impacts during years of low salmon runs on any particular run component and to spread subsistence harvest opportunity among users. **Note: this schedule is subject to change depending on run strength and ice-out date, as determined at Alakanuk**.

Area	Reduced Regulatory Subsistence Fishing Periods	Approximate Schedule to Begin	Days of the Week
Coastal District	7 days/week with 6" or smaller mesh size gill	nets All Season	M/T/W/TH/F/SA/SU – 24 hours
District Y-1	Two 18-hour periods/week	7 days after ice-out	Mon. 8 pm to Tue. 2 pm / Thu. 8 pm to Fri. 2 pm
District Y-2	Two 18-hour periods/week	2 days after Y-1	Wed. 8 pm to Thu. 2 pm / Sun. 8 pm to Mon. 2 pm
District Y-3	Two 18-hour periods/week	3 days after Y-2	Wed. 8 pm to Thu. 2 pm / Sun. 8 pm to Mon. 2 pm
Subdistrict Y-4-A	Two 24-hour periods/week	3 days after Y-3	Sun. 6 pm to Mon. 6 pm / Wed. 6 pm to Thu. 6 pm
Subdistricts Y-4-B, C	Two 24-hour periods/week	6 days after Y-4-A	Sun. 6 pm to Mon. 6 pm / Wed. 6 pm to Thu. 6 pm
Koyukuk and Innoko Rivers	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
Subdistricts Y-5-A, B, C	Two 24-hour periods/week	5 days after Y-4-B,C	Tue. 6 pm to Wed. 6 pm / Fri. 6 pm to Sat. 6 pm
Subdistrict Y-5-D (Below 22 Mile Sl	ough) 3.5 days/week	4 days after Y-5-A,B,C	Sun. 6 pm to Thurs 6 am
Subdistrict Y-5-D (Above 22 Mile Sl	ough) 3.5 days/week	7 days after Y-5-A,B,C	Sun. 6 pm to Thurs 6 am
District Y-6	Two 42-hour periods/week	All Season	Mon. 6 pm to Wed. Noon /Fri. 6 pm to Sun. Noon
Old Minto Area	5 days/week	All Season	Friday 6 pm to Wednesday 6 pm

All subsistence salmon fishing with gillnets and fish wheels must be stopped during subsistence salmon fishing closures. In **Districts Y-1, 2, and 3**, from **June 1 to July 15**, a person may not possess Chinook salmon taken for subsistence uses unless **both tips (lobes) of the tail fin** have been removed.

FOR ADDITIONAL INFORMATION:

ADF&G: Steve Hayes, Anchorage, 907-267-2383; Fred Bue, Fairbanks, 907-459-7274; or Emmonak, 907-949-1320 Subsistence fishing schedule: 1-866-479-7387 (toll free outside Fairbanks); in Fairbanks, call 459-7387 USFWS: Russ Holder, Fairbanks, 907-455-1849 or 1-800-267-3997; or Emmonak, 907-949-1798



"...COUNCIL TAKES ACTION..." continued from front page

SUMMARY: COUNCIL ACTION

The Council's final action provides two options: (1) fish under a 47,591 hard cap or (2) participate in an incentive program and fish under a 60,000 hard cap. Under the first option, the entire fishery operates under a 47,591 hard cap. This number represents the 10-year average bycatch from 1997 to 2006, excluding the low year (2000). The cap is divided between seasons (A and B) and among sectors (offshore catcher processors, motherships, inshore catcher vessels, and CDQ). When a sector reaches its portion of the cap, it must stop fishing for the remainder of the season.

Under the second option, a portion or all of the pollock fleet may develop an incentive plan agreement designed to minimize bycatch at all levels of salmon bycatch encounters. The plan must be reviewed and approved by the National Marine Fisheries Service (NMFS). The NMFS will not analyze the potential impacts of the plan; instead, it will review

the plan based on industry's statements about the anticipated effects. Several incentive plans were presented as part of the Council's salmon bycatch presentations at the April 2009 meeting. As noted above, the industry is not legally obligated to submit the same plans to the NMFS. If an incentive plan is approved, the vessels fishing under the plan will be subject to a proportion of the 60,000 hard cap. The vessels operating under the incentive plans are also subject to a performance standard. Under this performance standard, if any sector operating under an incentive plan exceeds its portion of the 47,591 level more than two times in any seven-year period, that sector's hard cap will be reduced to its share of the 47,591 hard cap (instead of the 60,000 level). Any vessel that opts out of an incentive plan, if one is submitted and approved, must fish under its proportion of a 28,496 hard cap. This lower cap was designed to encourage participation in the incentive plans.

The overall effect of these two options is

that vessels are either subject to a 47,591 hard cap from the outset under Option 1 or must keep bycatch below 47,591 in five out of every seven years to maintain the 60,000 hard cap under Option 2. Under Option 2, the Council will review incentive plans and their effectiveness on an annual basis.

Hard caps under all options are allocated 70 percent to the A Season and 30 percent to the B Season. Whatever is left over from the A Season portion can be "rolled over" or used in the B Season. The hard caps are also allocated among the different sectors of the pollock fishery. These allocations are based largely (75 percent) on the sector's bycatch history and partially (25 percent) on their pollock allocations.

The distributions by sector are based 75 percent on sector bycatch history (2002-2006) and 25 percent proportional to pollock allocations for each sector under the American Fisheries Act (AFA).



The Good & The Bad of the Council's Decision on Bycatch

The Council's decision didn't entirely please any of the stakeholders involved. From a Western Alaska perspective, here is a breakdown of some of the good and bad parts of the action.

The Good



Before this action, there was <u>no</u> limit on the number of salmon the pollock fishery could take as bycatch. This action establishes an absolute limit of 60,000 Chinook salmon.

Years like 2006, when over 87,000 Chinook salmon were caught, and 2007, when 122,000 were caught, can never happen again under the Council's action.

The performance standard, which really requires that bycatch remain below 47,591 in five out of every seven years, is set up so that if the fleet goes over 47,591 by even one fish that counts towards triggering the lower cap. This means that in reality the fleet will have to stay well below 47,591 **in most years** to avoid the lower cap.

To enforce a hard cap, as part of this action **significant** increases to observer coverage will be implemented. Inshore catcher vessels will now have to carry observers 100% of the time. Catcher processors and motherships are already required to carry 2 observers at all times.

The Bad



The Council chose a bycatch cap far above the recommendations of those responsible for managing the fisheries inriver - the Board of Fisheries, the Federal Subsistence Board, the U.S. Fish and Wildlife Service and the Yukon River Panel, as well as most Western Alaska groups. This cap level may not meet our treaty obligations under the Yukon River Salmon Agreement.

Under this action, incentive programs could provide additional reductions below the 47,591 level. However, given the structure of the action there is **no way to ensure that this will occur**. The Council will review the incentive programs on an annual basis, but they will not be able to reject or change them officially without starting a new amendment process, which takes time.

Under this action, the pollock fishery can catch 60,000 Chinook salmon as bycatch in two out of every seven years with no consequence.

To put this in perspective, since 1991 the fishery has only caught more than 60,000 Chinook salmon five times, and four of these have been since 2004.

The Council's decision must be reviewed and approved by the Secretary of Commerce. Pending approval by the Secretary, this management measure is scheduled to take effect in January 2011. The full motion is available on the Council's website at http://www.fakr.noaa. gov/npfmc/.

CHUM SALMON BYCATCH MEASURES

Now that the Council has taken action on Chinook salmon bycatch, it will begin the process of adopting chum salmon management measures. At its June meeting, the Council will refine the options it is considering to reduce chum salmon bycatch. The Council will not take final action until later this year or early in 2010. Look for articles about chum salmon bycatch in future newsletters. For more information, contact Becca Robbins Gisclair of YRDFA at 907-272-3141, extension106, or becca@yukonsalmon.org. 💊

This article was prepared by YRDFA under award number NA07NMF4720091 from the National Oceanic and Atmospheric Administration. The statements, findings, conclusions, and recommendations are those of the author and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration.

Timeline: Future Action

Note that these dates are estimates and subject to change.

Now to August 31, 2009 – NMFS Alaska Region preparation of proposed regulations, Fishery Management Plan (FMP) Amendment package, and Final Environmental Impact Statement

September 1 to December 2009 – NMFS Headquarters (Washington D.C.) review of proposed regulations

December 2009 to February 2010 – 60-day public comment period on the proposed rule to implement the April 2009 Council action and the Council's FMP Amendment

March 2010 – Deadline for FMP Amendment approval or denial by Secretary within 30 days of close of comment period

August 31, 2010 – Publication of final rule

January 1, 2011 – Effective date of final regulations

SPOTLIGHT ON SAINT MARY'S

In each issue of Yukon Fisheries News YRDFA highlights a different village. We hope these descriptions will give readers a glimpse into life and history in different areas of the Yukon River drainage.

On the north bank of the Andreafsky River, just up from where it meets the Yukon River, lies the City of St. Mary's, also known as Algaaciq. The city encompasses the Yup'ik villages of St. Mary's and Andreafsky, with a total population of about 549 people. The Andreafsky hills are near St. Mary's, but the geography along the river is low-lying land. The Andreafsky River provides the only deepwater dock in the Yukon Delta.

The village of Andreafsky got its name from the Andrea family, which settled on the river at the turn of the 19th century and opened a Russian Orthodox church. The village began as a supply depot and winter headquarters for the riverboat fleet of the Northern Commercial Company. The village of St. Mary's began in 1951 when residents of Akulurak relocated to its present-day location on the Andreafsky River. Akulurak, which means "in between place," was the site of a Jesuit mission set up By Lauren Sill, Program Coordinator

in 1903. The mission school flourished and eventually became a boarding school. However, it was located on an island in between two sloughs of the Yukon, and over time the area silted in. In the late 1940s, the mission and families from around Akulurak decided to move to higher ground and chose the current site. In 1967, the area near the mission incorporated into the City of St. Mary's, although Andreafsky remained independent until 1980. The Catholic Church closed the boarding school in 1987. Today, St. Mary's is a large town with two general stores, a school, a health clinic, and a year-round airstrip. It is connected by road to Pitkas Point and Mountain Village.

The economy of the community is seasonal, and subsistence activities play an important role in sustaining the people of St. Mary's. Residents fish for salmon, sheefish, blackfish, whitefish, grayling, trout, and pike. They hunt for moose, bear, duck, geese, swan, and ptarmigan. In the fall, they gather blueberries, blackberries, high- and low-bush cranberries, and salmonberries. Salmon plays an important role in St. Mary's, both for commercial and



subsistence uses. The region has the first gravel beds (spawning grounds) for salmon as they travel upriver in the waters of the Yukon River.

Fishing for salmon begins in the early summer. The Yukon River at St. Mary's is clear of ice three to four weeks before the mouth of the river melts, and the Yukon is ice-free from June through October. Most fishers in St. Mary's harvest Chinook salmon with drift nets. Fishing locations used by residents include Old Andreafsky, below Pitkas Point, near Boreal Fisheries, and between Pilot Station and Mountain Village. Boreal Fisheries processes salmon just outside town.

YRDFA has been working with active fishers and knowledgeable elders in St. Mary's in an attempt to document and analyze local and traditional ecological knowledge on the historical abundance, distribution, and health of salmon populations in the lower Yukon River drainage. YRDFA and ADF&G staff traveled to St. Mary's in the summer of 2007 and conducted interviews with 16 residents. The participants in the study were originally from all over the lower river area. Many of them live in St. Mary's today because they went to school there. Last month, YRDFA traveled to St. Mary's to present the preliminary results of the project to the community. A final report will be prepared by this summer.

SOURCES:

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RESEARCH PERSPECTIVES: EFFECTS OF MESH SIZE

By Bob DuBey, Ph.D., Science Director

Most research to date on changing salmon size has focused on demographic data collected from test fisheries, harvests and escapements. These studies were often hampered by the lack of pre-fishery data to provide a baseline, short time series of available data, biased samples obtained via selective gear or collection method, and high levels of natural variation. Thus, even when size changes can be detected, these studies often cannot link fishery factors, such as gear size, as being the cause for reductions in salmon size and lowered age structure among exploited populations. There have been investigations associating changes in population productivity, size and age composition, with over-harvest and selective exploitation of other long-lived fishes. However, the species in these studies have differ-

Long-term, selective exploitation of large Chinook salmon is likely to cause reductions in fish size and maturation age, and impair population productivity. ent life and exploitation histories than salmon, they often spawn in multiple seasons and were subjected to repeated exploitation, often prior to maturation. As traditional studies have proved insufficient to detect population level effects of large mesh gear use the use of modeling could provide insights on specific causes.

A modeling study titled "An Investigation of the Potential Effects of Selective Exploitation on the Demography and Productivity of Yukon River Chinook Salmon"

has been recently released. In this report, Jeff Bromaghin, a statistician with the U.S. Fish and Wildlife Service, with co-authors Ryan Nielson, a statistician with WEST Inc., and Jeff Hard, a fisheries biologist with the National Marine Fisheries Service, discuss their development of an individual based model that investigates long-term effects of large-mesh gill net fisheries on Chinook salmon under a variety of productivity and fishing scenarios. The model used information from Yukon River Chinook salmon to guide model construction when possible. The model uses population dynamics and the heritability of traits as components and simulates the effect of selective exploitation under a variety of productivity and fishing scenarios.

When the authors ran the model using 8 ½ inch mesh size under most cases, the mean size and age at maturation declined rapidly for approximately 50 years and stabilized at reduced levels after approximately 100 years. Then the model was run to investigate the use of reduced mesh size on the affected population. The model showed that moderate reductions in mesh size were not effective in reversing declines in mean size and age unless exploitation rates were also reduced. The authors conclude by stating that this model suggests "that long-term, selective exploitation of large Chinook salmon is likely to cause reductions in fish size and maturation age, and impair population productivity." This report can be accessed at http://alaska. fws.gov/fisheries/biometrics/reports.htm. **S**



YUKON RIVER PANEL 2009 RESTORATION & ENHANCEMENT PROJECTS

Project ¹	Project Title	Project Proponent	\$US/\$Cdn ² Req.
URE-04-09	Ruby Data Collection	Ruby Tribal Council	15,000/
URE-08-09	Tech. Assist. Dev. & Support — Fish Wheel Video	USFWS	5,500/
URE-09-09	Rampart-Rapids Full Season Video Monitoring	Stan Zuray	46,100/
URE-13-09	Ichthyophonus Sampling at Emmonak & Eagle	Lara Dehn	47,200/
URE-16(a)-09	Eagle Sonar — Joint Project	ADF&G/DFO	115,700/
URE-16(b)-09	Yukon River Border Chinook ASL Collection	ADF&G/DFO	20,100/
URE-19-09	In-season Chinook Stock ID Pilot	ADF&G	35,000/
URE-20N-09	Radio Tower Retrieval in Canada	ADF&G/DFO	36,800/
CRE-06-09	Yukon River North Mainstem Stewardship	DDRRC	/26,200
CRE-07-09	First Fish Youth Camp	Tr'ondek Hwech'in FN	/10,000
CRE-09-09	Tr'ondek Hwech'in Student Steward	Tr'ondek Hwech'in FN	/5,300
CRE-10-09	Size Selective Fishing Using Live Catch Fish Wheels	YRCF Assoc.	/29,700
CRE-11-09	In-season Management Fund	YRCF Assoc & THFN	/35,000
CRE-16-09	Klondike River Chinook Sonar	B. Mercer & Assoc.	/76,500
CRE-17-09 ³	Eagle Sonar — Joint Project CDN	DFO/ADF&G	/88,000
CRE-19-09	Mayo River Channel Recon. — Assess Juv. Chin. Hab-4	FN NND	/25,200
CRE-27-09	Porcupine River Chum Mark/Recapture Project	Vuntut Gwitchin Gov.	/43,600
CRE-29-09	Chum Spawning Ground Recoveries — Minto Area	Selkirk RRC	/12,000
CRE-37-09	Ta'an Kwach'an Co Blind Creek Chinook Enumeration	Jane Wilson & Assoc.	/47,700
CRE-41-09	Chinook Sonar Enumeration Big Salmon River	Jane Wilson & Assoc.	/86,200
CRE-51-09	Supplemental Juv. Chinook Plantings — Michie Cr.	Kwanlin Dun FN	/32,800
CRE-54-09	Ta'an Kwach'an Council Community Steward	Ta'an Kwach'an Cncl.	/45,700
CRE-63-09	Whitehorse Rapids Hatchery Coded Wire Tagging	YF&G Association	/47,400
CRE-65-09	McIntyre Creek Salmon Incubation Project	NRI Yukon College	/46,000
CRE-67-09	Yukon Schools Fry Releases & Habitat Studies	Streamkeepers Nor	/5,000
CRE-78-09	Collection of DNA Baseline Samples YR AK & YT	DFO/ADF&G	/60,000
CRE-79-09	Stock ID Microsatellite Variation — Chin. & Chum	DFO	/30,000
CRE-113N-09	Miner River Chinook Index	Vuntut Gwitchin Gov.	/18,400
CRE-114N-09	Porcupine River Sonar Feasibility Study	Vuntut Gwitchin Gov.	/18,900
CRE-117N-09 ⁴	Dawson City Enh. Handling & Freezing Facility	YRCF Assoc.	/60,000
CRE-118N-09	THFN Viable Fishery – Blast Freezer	Tr'ondek Hwech'in FN	/16,000
CRE-122N-09	Whitehorse Rapids Fishway Interpretive Panels	Janet Patterson, YEC	/4,800
CRE-123N-09	Whitehorse Fishway Salmon Cam	Janet Patterson, YEC	/5,000
CRE-124N-09	Value Added Chum Products – Dawson City	David Curtis	/19,600
	34 Restoration & Enhancement Projects	Total \$US 1,055,300	\$321,400/895,000

¹N – Identifies a new Yukon River Panel Restoration & Enhancement project.

²The amount expressed in \$US or \$Cdn according to the request/application, rounded to the nearest \$100. ³ Project number renamed [submitted as URE-16(c)-09]. ⁴ Decision pending

Yukon River Fisheries In-season Management Teleconferences

Jracking the run, one week at a time

1:00 pm | 2:00 pm Alaska | Yukon Time | Time

each Tuesday, starting on May 26, 2009

1-800-315-6338

Participant Code YUKON# (98566#)

Learn about management strategies for Chinook salmon on the first call of the season – May 26, 2009

Get involved!

Discuss fishing conditions & management strategies

Learn from fishers, processors, & managers

Make your voice heard!

Facilitated by YRDFA Sponsored by the Office of Subsistence Management and the Yukon River Panel