

Northwest Indian Fisheries Commission

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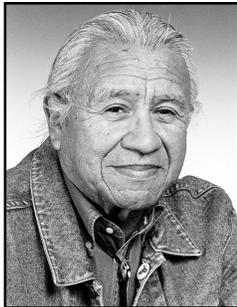
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Promises Remembered, Forgotten

By Billy Frank Jr.
NWIFC Chairman

A recently announced national independent public opinion survey has revealed that the American people overwhelmingly support the legal and political jurisdiction of Indians on tribal lands. The survey, conducted in mid-February, also showed that strengthening tribal self-governance is a national political priority.



This type of national survey has never been done. Tribal leaders from across the country, including Jamestown S'Klallam Chair Ron Allen and National Congress of American Indians President Tex Hall joined federal government leaders such as Sen. Daniel Inouye (D-HI) and Sen. Ben Nighthorse Campbell (R-CO) in announcing the results of the survey in the nation's capitol on March 21.

The survey demonstrated that high percentages of American voters claim to understand that honoring tribal governance on tribal land is a matter of keeping American promises. Among the respondents who understood that tribes are governments, 71 percent supported increased tribal self-governance. Ninety-four percent agreed that tribes should be able to cite and arrest both Indians and non-Indians on their tribal lands. Eighty-six percent agreed that tribes have the right to tax both Indian and non-Indian property owners

within reservation boundaries.

And how did tribal natural resource management fare? Seventy-seven percent supported the right of tribes to set zoning, environmental, and land use regulations for Indian and non-Indian property owners on reservations.

Apparently the people of America understand that it is important to keep promises, such as those made in the treaties between the tribes and the United States. These treaties are the contracts that the U.S. used to secure land to create states. These contracts reserved rights for the tribes, both on and off-reservation, such as fishing and hunting. These treaty rights are defined in the U.S. Constitution as "the supreme law of the land." A contract is a contract, right? That's one of the fundamental principles that have made this country great.

The problem is that people tend to forget these principles when they perceive that they will impact their particular wallets, or their particular property rights. For example, it seemed easy for the agriculture community and municipal water suppliers to push these principles aside during the recently adjourned Washington State Legislature. Water, or rather the lack thereof, was a key issue. Agricultural interests were strongly insistent that they get water to quench the thirst of their livestock and to irrigate their crops, even as they were equally insistent that there be no provisions in state legislation

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On The Cover: Hoh tribal member Steven Penn hauls in his net on the Hoh River in late February in hopes of finding some steelhead. Tribal members depend on the steelhead runs for sustenance during the long winter months. See story on page 8. *Photo: D. Preston*

Northwest Indian Fisheries Commission News

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Hatchery Reform Effort Moves Forward

The goal of recovering wild salmon stocks was given a boost recently when the Hatchery Reform Project released its first set of recommendations on how to reform hatchery operations in three regions.

The Hatchery Science Review Group – a diverse panel of independent scientists established to develop the scientific framework to guide hatchery reform programs – wrote the recommendations. They took a close look at tribal, state and federal hatchery operations over the past two years, using the best available science to recommend ways to restore wild salmon runs and produce fish for harvest. The recommendations, announced at a news conference in February, varied from area wide to specific recommendations for individual hatcheries.

The Hatchery Reform Project is a systematic, science-driven effort to address how hatcheries will be used to achieve their goals while helping to recover and conserve naturally spawning salmon populations and support sustainable fisheries.

“We are confident that by working together we can achieve our goal of returning wild salmon stocks to abundance,” said Billy Frank Jr., NWIFC chairman. “Reforming hatchery practices is another step on the road to wild salmon recovery.”

But, no matter how well a hatchery is run, it will never replace the real thing. “It’s only one part of a big puzzle. Hatcheries do not take the place of habitat. They never have, never will. We need salmon coming back to our rivers and streams,” said Frank.

Hatcheries will no longer be judged on the basis of how many fish they produce, said Washington Department of Fish and Wildlife Director Jeff Koenings. Instead, they will be judged on the basis of how many adults return to a river system.

In locations where wild salmon stocks are depressed, their recovery can get a “jump start” from a hatchery that spawns the wild adults to boost a new generation of fish, Koenings said.



Nisqually tribal hatchery personnel Nano Perez and Mike Huff seine young salmon from a rearing pond at the tribe's Clear Creek Hatchery. *Photo: T. Meyer*

“The Hatchery Reform Project is the first time anyone has taken a big-picture, systematic look at the Puget Sound and coastal hatcheries,” said Rep. Norm Dicks, who shepherded funding for the project through Congress.

“By moving ahead with these reforms, the state and tribes will not only go beyond the Endangered Species Act's requirements to minimize hatchery impacts, they intend to help us bring back the wild salmon,” said Sen. Patty Murray.

Congress first funded Hatchery Reform in 2000 due to concerns – following ESA listings of several local salmon stocks – that hatcheries were having a detrimental effect on salmon runs.

After looking at the hatcheries on the Strait of Juan de Fuca, South Sound and the Stillaguamish/Snohomish watersheds, the review group will visit three more regions starting this year. “Only a comprehensive plan can balance all the related, complex interests, such as tribal treaty rights, sports fishing and conservation,” said Dicks

In addition to Hatchery Genetic Management Plans being developed for each tribal facility, projects are also being funded through the Hatchery Reform Project to improve how hatcheries perform. Nineteen tribal hatchery reform projects were funded this year.

Good Management A Big Contributor To Large Returns



In 2001, tribal and state fishery managers achieved the highest escapement of chinook in almost 40 years on the Snohomish River System. *Photo: D. Preston*

In what tribal and state management experts say is an important step forward in salmon recovery, record numbers of chinook, pink, and coho salmon returned to their spawning grounds in 2001 in the Snohomish basin.

For chinook salmon in the Snohomish system, including the Snohomish, Skykomish and Snoqualmie rivers, the co-managers were able to achieve the highest escapement since at least 1965. Pink and coho salmon escapements were also at record levels in the Snohomish, with pink totals reaching almost four times the previous high. "Escapement" is the number of fish allowed to spawn in order to sustain a run at a desired level.

Snohomish chinook escapement for 2001 was estimated to be 8,581 spawning fish. The average number through the 1960s and 1970s was approximately 5,000 fish per year. Between 1980 and 1998 this number was not reached even once. Since then, the escapement has exceeded 6,000 in 1998, 2000, and 2001. The recent upturn indicates that conservative harvest management plans are allowing large numbers of chinook to spawn to propagate the species.

"This shows that we're doing all we can from the harvest management side. Through great sacrifices by fishing communities, the tribal and state co-managers are allowing most of the returning salmon to reach their spawning grounds," said Terry Williams, Commissioner of Fisheries and Natural Resources with the Tulalip Tribes. "Now we are challenging the habitat to produce fish from these spawning salmon - and challenging ourselves to keep cru-

cially important habitat restoration and protection efforts coming."

Though the increasing escapements are positive news, they should not be

taken as an indication that salmon recovery has been achieved. The strong 2001 returns are a result of many factors, including favorable ocean conditions, an absence of significant river flooding, and continuing extreme restrictions on both tribal and non-tribal fishing. "In the future when these stocks are recovered", Williams said, "we will expect to see spawning numbers this large, or larger, even during times when survival conditions are not as good." If habitat recovery efforts do not increase, said Williams, the 2001 runs will be just a small blip on a larger radar screen of diminishing salmon populations.

Neither do this year's numbers indicate a long-term trend. Environmental factors, such as marine and river conditions, fluctuate from year to year. Fish returning to spawn in 2001 faced neither an El Niño phenomenon in the ocean nor significant drought or flooding in the river. Managers expect fluctuations in abundance to continue, but they hope to see an upward overall trend.

"This doesn't mean we've done all we can do or that the problem is solved. Healthy salmon runs require quality habitat, and we're far from where we need to be on that front,"

said Kit Rawson, biologist with the Tulalip Tribes. "We need to be sure all the factors limiting production are addressed so that abundance can continue to increase. Fishing restrictions by themselves will not bring this about. Improved habitat is a prerequisite for salmon recovery."

Beginning several years ago, the state and tribal co-managers reduced the allowable catch of chinook salmon below the levels that would normally be permitted. "The allowable harvest levels were deliberately set low enough that the runs would grow quickly under favorable survival conditions," Rawson said. "Chinook management is now designed to facilitate recovery and not to harvest as many fish as possible. The Snohomish spawning escapement numbers seen in 2001 demonstrate that this plan is working as expected."

"We're still very short of our long-term goal of wild salmon recovery," said Williams, "but this shows that changes in harvest management can produce results when other conditions are right. Now it's time for habitat preservation and restoration actions to complement our harvest management efforts. If we work together, salmon recovery can happen." - J. Shaw

Even Dead Salmon Aid Recovery Efforts

Jackie Vanderpol grabbed a chum salmon carcass from the pile and picked her way through the brush to the edge of Tanwax Creek. She heaved the carcass into the stream, briefly watched it float away, then clambered up the bank to rejoin her schoolmates.

Vanderpol was one of dozens of students from Yelm and Eatonville schools who helped distribute salmon carcasses throughout the Nisqually River Basin as part of a program organized by the Nisqually Stream Stewards, a group that involves Nisqually watershed community members in restoring salmon habitat.

When salmon return to a watershed to spawn and die, they return valuable nutrients to the many organisms in the ecosystem. Young salmon, insects and wildlife feed on the carcasses. Nutrients from the decomposing salmon help fuel plant life. It is estimated that more than 137 species of fish and wildlife depend on salmon for their survival.

As numbers of salmon returning to many watersheds have declined, so have the ecosystems the salmon help support. Distributing surplus salmon carcasses throughout a watershed helps replenish



Jackie Vanderpol, a 6th grade student from Mill Pond Intermediate School in Yelm, tosses a chum salmon carcass into Tanwax Creek. *Photo: T. Meyer*

the fuel that makes the ecosystem work.

The surplus salmon distributed through the Stream Steward program come from the Nisqually Tribe's salmon hatchery program. Last year, more than 600 salmon carcasses were distributed through the program.

This was the second year that the Stream Stewards teamed up with the Nisqually River Education Project, an organization that helps local teachers teach their students about the Nisqually

River watershed and involves students in helping monitor and restore the health of the watershed.

Increases in salmon production as a result of carcass distribution are being closely monitored by the Quinault Indian Nation (QIN), and it appears that efforts are paying off.

"The results aren't conclusive, but we know these carcasses also do good things in the stream regardless, so it is likely we will continue the program and we're looking at possibly expanding it," said John Cornell, QIN fisheries biologist.

The QIN distributed surplus salmon carcasses for three years in Hurst and Christmas creeks. No carcasses were distributed in nearby Miller and Shale creeks to compare results. All the streams are within the Queets River system located north of Aberdeen on the Olympic Peninsula. There were significantly more salmon smolts and fry in the springs of 2000 and 2001 in Hurst Creek than in the past 20 years.

"In the 20 years of data before we started putting carcasses in there, we had a pretty straight line in terms of numbers of fry each season. The increase in numbers in the last two years seems to be pretty strong evidence we're having an impact," Cornell said.

– T. Meyer & D. Preston



A coho salmon, encased in frost, decomposes along the bank of a stream, returning its nutrients to the ecosystem. *Photo: D. Preston*

SSC Restores Future Skagit Main Stem

Near Rockport, a few stream channels gently network through an oxbow. The waters meander through thinned stands of mostly deciduous trees. Like many areas near Washington's rivers, habitat degradation caused by multiple factors has diminished its value to fish and wildlife.

But this is no ordinary riverside property: In another generation, perhaps more, this ten-acre parcel likely will be home to the main stem of the Skagit River, and a crucial portion of habitat for the creatures in this watershed.

"This is a unique – and in many ways, an ideal - restoration site," says Steve Hinton, director of restoration with the Skagit System Cooperative (SSC). "In the foreseeable future, we're going to see the river move into this area. With habitat projects that look toward the long-term, we have a real opportunity to build quality environments for salmon and other wildlife."

SSC, the natural resources consortium of the Swinomish, Upper Skagit and Sauk-Suiattle tribes, is taking advantage of that opportunity. A comprehensive restoration effort is under way here along the banks of the Skagit, where tribal staff are planting thousands of trees and native shrubs in order to enhance the region's riparian habitat.

Though tribal staff will cultivate more than 3,500 new plants on this site, that's far from all they have done here. They also repaired failing fences and created new barriers designed to stop roaming cattle from disrupting the area's ecology.

Besides removing cattle, SSC staff also removed invasive species like blackberries, which pose a risk to native vegetation. Additionally, SSC has made arrangements to remove a temporary road that stands in the way of one channel's connection with the river.

The most obvious habitat improve-

ments, though, come from the new plants. During February and March, SSC employees re-forested this parcel of land with native vegetation - especially conifers like Douglas fir. The property, now owned by Seattle City Light, was purchased from a local landowner. The plants were purchased from Banksavers, the Stillaguamish tribal nursery. Native youth working with the Salmon Corps program provided labor for the project as well.

Tribal staff are always working to improve their habitat enhancement efforts. As Hinton says, "We look at every site as an experiment which will tell us how to do better on future sites." In this case, that means a variety of reforms designed to help trees and shrubs survive at a higher rate. Instead of planting the new stems with no root cover, bushes and trees are planted with complete root wads and inside containers. This helps the plants survive inclement weather.

Seedlings are also secured to the ground with bamboo stakes and protected from the elements by a surrounding layer of fabric.

"The survival rate has been extremely high," said Belinda Steele, a natural resources technician with SSC. "We've had next to no plant loss."

To ensure this high survival rate continues - and that the restoration continues to go as planned - SSC will monitor the project site for at least five years.

"We're committed to developing the



Steve Hinton, director of restoration at Skagit System Cooperative, removes a tarp protecting trees and shrubs from frost. These plants will be placed in the ground as part of restoration effort on the Skagit River. *Photo: J. Shaw*

best restoration methods by constantly monitoring the work we do," said Hinton. "Some of these improvements take a bit more of an up-front investment, but it pays off over the long haul."

Besides working to solve some of the habitat's current problems, SSC moved to prevent future damage from traditional problems like cattle grazing. Cattle are known to cause erosion of stream banks and to destroy valuable habitat through their eating habits.

Cattle, which historically have had free access to these channels, graze down valuable woody material such as willow and cottonwood. This clears the way for invasives like scotch broom - which the cows don't eat - to take hold, disrupting the habitat.

Removing obvious barriers to salmon migration - such as the temporary road - will help fish today, while giving the habitat a long-term boost will assist tomorrow's young fish as they grow toward adulthood.

"The river is going to visit this site," Hinton said confidently. "Hopefully, we'll have these trees up to 80-100 feet by then." - *J. Shaw*

Tribe Searches For Solution To Pollution In Dungeness Bay

Since the initial shellfish harvest closure in Dungeness Bay two years ago, the Jamestown S’Klallam Tribe has been conducting extensive research into the source of the pollution that is still tainting sections of the bay. The tribe has been harvesting shellfish on Dungeness Bay since time immemorial, so ensuring a clean bay is important for them.

“Once you find the sources of the pollution, you can more easily prescribe a solution,” said Lyn Muench, natural resources planner for the tribe. “The initial problem we ran into is that we didn’t know where most of the water in the bay comes from. Since the pollution is water borne, we decided that finding out how water circulates through the bay is a priority.”

Focusing mainly on the area closed to shellfish harvest, tribal water quality personnel regularly take to the bay, collecting water samples and releasing “window shade drogues” – cone shaped devices that collect data as they are carried on the current. The drogues drift unimpeded and indicate the movement of water throughout the inner and outer bay under different weather and tidal conditions.

As tribal employees collect circulation data, they also take the opportunity to gather water quality samples, finding the highest levels of contamination near the mouth of the Dungeness River. “This backs up our assumption that most of the fecal coliform contamination is coming from the river and the upper watershed,” said Muench. “But, this doesn’t mean we can stop working and put blame squarely on upland sources.”

Since the first closure in 1999, the Washington State Department of Health has also collected pollution data in the bay at several different stations. A variety of pollutants are suspected, including farms, failing septic systems and unmanaged storm water. Population has tripled in the Dungeness Valley in the last 25 years, greatly increasing paved surfaces throughout the watershed, and increasing runoff.

Dungeness Bay was first closed by the state Department of Health for shellfishing due to fecal coliform pollution two years ago, cutting the tribe’s shellfish commercial operation production by one-third and closing a public shellfish harvest area at the Dungeness Boat Ramp. An additional closure last year has expanded further into the Bay and closed other private and public harvest areas. In concert with Clallam County, the City of Sequim, the Clallam Conservation District, and state agencies, the tribe is taking part in a coordi-



Jack Rensel releases a window shade drogue to gather information on water circulation in Dungeness Bay.

Photo: E. O’Connell

nated effort to clean up the water in and around Dungeness Bay. “Our study dovetails with the efforts of our neighbors,” said Muench. “Because we’re dealing with pollution affecting such a large area, we need cooperation between different communities to find a real solution”

“Dungeness Bay is the most important place for us in terms of shellfish harvest,” said Sandy Johnson, tribal vice-chair. “Making sure we can safely gather food here is an extremely high priority for us. We want to make sure everyone, tribal and non-tribal alike, can come here and safely eat shellfish.”
– E. O’Connell

Dungeness Bay Fast Facts

- Originally called Tses-kut, the settlers called the bay New Dungeness from the name given by Capt. George Vancouver after a promontory on Strait of Dover in the English Channel.
- The Dungeness River, which flows into the bay, is 32 miles long. It is the second steepest river in the U.S., dropping 7,300 feet over its length.
- The river and bay support four species of salmon, in addition to ocean going steelhead trout.
- The 631 acres of The Dungeness National Wildlife Refuge include Dungeness Spit, Graveyard Spit, and portions of Dungeness Bay and Harbor. Dungeness Spit is 5 1/2 miles long; portions of the spit measure only 50 feet wide at high tide.

Steelhead Sustain



Steven Penn, Hoh tribal fisherman, is enjoying a day of fishing despite a couple of things that might have caused other fishermen to call it a day. The 50-something Penn doesn't have a truck at the moment – it's in the shop. His boat motor isn't working either, so he uses a pole to propel his motor-less boat out to check his net.

To top it off, the steelhead numbers are few this week, but Penn smiles anyway. "I've lived here all my life except for about seven years when I worked as a welder. I have been fishing my whole life," Penn said. "I used to fish for money; now I fish because I like being outside," he said.

The small Hoh Tribe, located near the mouth of the Hoh River on the Olympic Peninsula, has always depended on fishing. Steelhead are important because they return over a longer time (four months) and at a time when there are no other species of fish to catch.

The bright steelhead bring only a slightly better price than their coho cousins, but the fish are also important for cultural ceremonies and provide food for a tribe that faces an unemployment rate of more than 50 percent during the winter.

"I work for the tribe when there is work available, but it's usually in the summer," said Penn. He has helped clear logging debris, typically small leftover cedar spalts, from miles of clogged streams in past summers to provide more spawning and rearing habitat. "We need to keep doing that program so fish have a place to go. If you have more fish returning, but no place for them to spawn, you can't improve the populations," he said.

As he picks a few steelhead from his net, he finds one with the bite of a seal, which constantly threaten his catch. The seals roam far upriver in search of fish and the nets offer an easy meal if not tended closely.

While Penn works, fellow tribal member Howard Hudson comes to the landing to meet his son, who is bringing in his catch.

"The price isn't so good, but I was able to trade some fish for Dungeness crab from another fishermen," said Hudson. "That's a good trade and we're both happy."

Hoh tribal member Steven Penn hauls in a steelhead on the Hoh River. At right, a day's catch and net floats form a mosaic in the bottom of a tribal fishing boat.
Photos: D. Preston



Hoh Tribe

Hudson's son, Joe, motors down the river, his dog yapping with excitement in the bow. He pulls in with fewer than 10 fish. "The price is bad for fish right now, but we can't control that. I like being on the river. I'm comfortable there," he said.

Rearing of hatchery steelhead for release into the Hoh River occurs at the Quinault National Fish Hatchery at nearby Cook Creek. Approximately 100,000 fish are released each year into the Hoh. Half are transferred in February to begin final rearing at the tribe's reservation hatchery, from which they are ultimately released. The other half are transported in early May for immediate release several miles above the reservation. The hatchery steelhead begin returning in December. The larger portion of the wild run usually begins returning in February.

The Hoh Tribe, as a co-manager of the resource, assesses spawning escapement of the wild steelhead runs based upon comprehensive spawning ground surveys. Escapement is the number of fish allowed to pass upstream and spawn so that a run can be sustained at a desired level.

To accurately assess wild and hatchery harvest impacts the tribe keeps close track of the makeup of its fishermen's harvest by sampling a high proportion of the catch, separating the numbers of hatchery and wild fish caught.

"We work with the Washington Department of Fish and Wildlife to determine the appropriate management of salmon and steelhead stocks based on our most recently finalized and historic information," said Jim Jorgensen, Hoh tribal fisheries biologist. The tribe has also instituted a strong program to monitor and provide input on habitat issues that affect fish, Jorgensen said. The program monitors ongoing habitat conditions and assesses the potential impacts of proposed land-use activities on fish habitat within the Hoh Basin.

"The tribe has a very limited ocean fishery here, further increasing the relative importance and reliance of tribal members on the in-river fisheries, particularly the steelhead as it provides the longest fishery," Jorgensen said.

– D. Preston

Old Maps Aid Salmon Habitat Restoration

When Captain George Davidson of the US Coast Survey mapped Hood Canal beginning in 1855, he probably didn't realize that his work would one day give modern scientists a map to salmon habitat restoration. Davidson was leading an expedition to plot the coasts of the northwest for the federal government, in preparation for settlement by American pioneers. But, now his maps are being used to peer back in time.

The Port Gamble S'Klallam and Skokomish Tribes, in cooperation with the Hood Canal Salmon Enhancement Group and the Point No Point Treaty Council, are using old maps to see what the canal looked like over 150 years ago. "As beautiful as it is today, a lot of changes have been made to the Hood Canal since Captain Davidson was here," said Steve Todd, habitat biologist with the Point No Point Treaty Council. "The original surveyors saw the Hood Canal in a pristine, fully functional state. We can use what they saw to help restore habitats that have been degraded since settlement, or lost entirely."

Some areas have seen significant changes since the 1850s. For example:

- A salt flat near Belfair on the north shore of Hood Canal has disappeared and now is the site of a parking lot.
- In north Kitsap County, a sandy spit has been extended with fill, making the construction of a housing development possible, while also covering the estuary of a small creek.
- On the Duckabush River, the Rt. 101 causeway cut off a major alternative channel of the estuary.

A second phase of the project sponsored by the Point No Point Treaty Council will extend the maps from the north end of Hood Canal and into the Strait of Juan de Fuca. In addition to the 1800s maps used in the Hood Canal project, maps from the 1920s and 1950s will be used in the Strait to show progression over time.

"These maps will give us a baseline for what we have on the Hood Canal right now," said Ted Labbe, habitat biologist for the Port Gamble S'Klallam Tribe. "We will be able to interpret contemporary features of Hood Canal through the eyes of someone 150 years ago." This work will help inform salmon habitat restoration planning and better characterize the rate and pattern of coastal wetland loss. "We need to do our homework – we need to know what our shorelines looked like before we begin to restore them for salmon. And the full history of our shorelines needs to be told so that people can begin to appreciate how precious they are," said Labbe. – E. O'Connell

Tribe Works To Boost Chum Run On Elwha

Since 1995, the Lower Elwha Klallam Tribe has been conducting a chum salmon outplanting program in hopes of increasing the number of naturally spawning chum in the Elwha River. “We hope that this work will mark the start of a healthy run of wild chum on the Elwha,” said Mike McHenry, Lower Elwha Klallam fisheries biologist.

Tribal crews transport incubator boxes to various side channels of the lower Elwha River in hopes that the eggs enclosed will become the next generation of Elwha River chum salmon. Crews dig holes in the river gravel and the boxes, each holding 1,000 eggs, are then slowly buried. Each box simulates a natural salmon redd, or nest. The boxes allow the chum to swim out from the incubators into the surrounding gravel once they have hatched. When the young salmon have absorbed their yolk sacs they swim up out of the gravel and begin their lives as free-swimming salmon. “These boxes are close as possible to being a salmon redd, without actually being created by a salmon,” said Larry Ward, Lower Elwha Klallam Tribal enhancement biologist.

Four to five months after the boxes are installed, they will be dug up to see how many eggs hatched and how many fry have successfully moved out of the incubators into the surrounding gravel. Around 90 percent of the eggs planted since 1995 have successfully hatched.

The young salmon will spend as little as a few days in the Elwha system before migrating out to salt water. After an average of three years in the ocean, the salmon return as adults to the Elwha River to spawn.

Before the outplanting project began, chum populations on the Elwha had bottomed out around 500. Last year, when the chum released in 1997 returned to the Elwha, the tribe saw a significant increase. Over 100 chum were spotted in the Boston Charlie side channel outplanting site alone. “We’ve definitely seen a bump in the number of chum returning to the Elwha,” said McHenry. “It looks like there was a significant increase this year alone.” But, he cautioned, the state of the chum run in the Elwha has yet to turn the corner.

Habitat restoration projects, such as the tribe’s recent log-jam installation on the Elwha, work hand-in-hand with the chum outplanting. “It wouldn’t do much good to put all these young fish in the system if we didn’t try to improve



Mel Elofson, left, Lower Elwha Klallam tribal fisheries technician, and Larry Ward, tribal enhancement biologist, plant chum eggs in Boston Charlie Creek. *Photo: E. O’Connell*

their habitat,” said McHenry. “Salmon use this improved habitat as a place to rear and feed.”

Historically the Elwha River supported vibrant populations of all five salmon species. But habitat degradation, mostly due to the construction of two salmon-blocking dams five miles up the river, cut off much of the river’s habitat to salmon. “The trouble chum have been facing on the Elwha River reflect the trouble all wild salmon stocks have been having on this river,” said McHenry. “Loss of habitat and the general effects of damming on the system, have all been a hammer on the chum salmon here.” – *E. O’Connell*

Elwha River Chum Fast Facts

- Chum Salmon scientific name: *Oncorhynchus keta*.
- Common names: Dog salmon, calico salmon, chub, fall salmon, and keta salmon.
- Almost immediately after hatching, chum migrate to salt water. In contrast, other salmon species migrate to sea after months or even years in fresh water.
- Chum range from the Sacramento River northward to Arctic Alaska.

Lack Of Salmon Hurting Tribes, Economies

Recovery, Economic Development Needed

Representatives from a number of tribes in western Washington, as well as First Nations from British Columbia, joined with Lummi tribal members in calling for salmon recovery and economic development in Indian Country at a “Gathering for Salmon” hosted by the Lummi Nation in February

“Shellfish is helping to sustain us,” said Swinomish fisheries manager Lorraine Loomis. “But the culture is hurting. The whole community is hurting from the lack of salmon.”

Rachel Hagaman of the Lower Elwha Klallam Tribe noted that few fin fisheries exist for her tribe anymore, with most tribal members focusing on shellfish. Geoduck, shrimp and crab fisheries “were gangbusters the first few years — but then those started to decline, too.”

Long term, salmon recovery is one of the highest priorities for all Northwest tribes.

“We are the salmon people,” said Phil Hamilton of the Muckleshoot Tribe. “For generations, salmon has sustained our way of life. Now we must sustain the salmon.”

Economic recovery, though, is another pressing problem. The mere absence of fish isn’t the only problem tribal fishers face. Market conditions, including the influx of

farmed salmon from countries like Chile, are making it unprofitable for tribal members to go fishing.

“Twenty years ago, you could sell coho (salmon) for \$1.50 to \$2 a pound,” said Mel Moon, director of natural resources for the Quileute Tribe. “Last season, it was 15 cents.”

Culturally, economically, and spiritually, native families rely on the salmon.

“One hundred percent of Lummi families rely on the salmon harvest,” said Raynette Finkbonner, the chief of staff for the Lummi Nation.

That’s true of tribal governments as well. The Lummi Nation government has seen a 50 percent decrease in its revenue due to the depressed fishing economy, and is seeking a federal disaster declaration.

On the second day of the gathering, economic development was the focus. Representatives from Key Bank and U.S. Bank were on hand to discuss alternative business opportunities for tribal fishers.

“We’re doing what we can to survive,” said Finkbonner. “We can’t rely just on the fishing industry anymore. We have to do other things so there will at least be a traditional fishing industry left.” — *J. Shaw*

Being Frank

Continued From Page 2

for instream flows. And the lobbyists working on behalf of municipal water suppliers were strongly insistent that there be water for their growing communities, even at the expense of natural resources. Where was the support for contracts with the tribes then? Lack of progress in the legislature to adequately protect instream flows will unfortunately result in massive litigation. When this occurs, the agricultural industry and water suppliers will only have themselves to blame. Previous courts have been clear on the outcome of this type of litigation — fish come first because they are part of the treaty-reserved rights of the tribes.

It’s only fair to acknowledge that most of the objectives espoused by agricultural interests and municipalities for

water legislation weren’t retained—this time. But it’s not a new issue. Water has been fought over ever since Americans came west to plant crops and raise livestock. The damming of rivers for irrigation and drinking water supplies, the channelization of streams, the removal of the trees and the poisoning of the waters with pesticides, herbicides and industrial wastes all took their toll on the water. And the toll taken on salmon habitat has had far-reaching impacts on tribal economies, sustenance, and culture.

These are the things the tribes want to protect. As millions upon millions of people have moved here, they have pushed the exploitation of water and related resources to the outer limit. Every river has, in fact, already been over-appropriated by the state.

It is gratifying that people across the country know it is important for the country to keep its word to the tribes, and that it is important for the Indian nations to continue to govern themselves, as they have done for many thousands of years. But it is important for the people who responded to this public opinion poll to understand that the principles of sovereignty are most meaningful if they realize that the inherent principles of integrity and justice apply to them as well.

Be aware that the tribes here, in the Northwest, will always devote themselves to the protection and restoration of salmon and the habitat needed to sustain them. That is the meaning of our sovereignty, and the purpose of our self-governance.

Blackcod Harvest Cuts Hurt Coastal Tribes

Harvest of blackcod, one of the economic pillars of the coastal tribal communities, has been cut by 37 percent this season. The oily bottom-dwelling blackcod is prized in Japan, and more recently, in fine restaurants throughout the United States. In recent years, tribal fishermen were getting up to \$4 a pound for blackcod, compared to 40 cents a pound received for coho salmon this past season.

Last year, the tribal blackcod allocation was more than 669 metric tons. This year, the total tribal catch is 424 metric tons. The reduction was in response to a low population of spawning-age fish. While populations seem to be on the upswing, this year's class of spawning fish is small, necessitating the cuts in harvest. Harvest quotas are determined by the Pacific Fisheries Management Council.

The reduction was not unexpected, but for some fishermen, there are few ways to make up the loss in fishing opportunity.

"The fishermen are trying to get out and get blackcod early and work as hard as possible on crab," said Joe Schumacker, marine shellfish biologist for the Quinault Indian Nation. "They understand that there is going to be a lot less blackcod to help make boat payments."

Bad weather and low market price for crab means fishermen are looking at a hole in their income that is likely to go largely unfilled, Schumacker said.

Quileute fishermen will also feel the economic hit from the blackcod cuts and while crab harvest will help, the Quileute crab catch has been in decline since 1997-98. From a high of 600,000 pounds, the catch has been closer to 200,000 pounds and this season is shaping up similarly.



A Quileute tribal fisherman brings in his blackcod catch. This season's tribal harvest was reduced by more than 30 percent. *Photo: D. Preston*

"We're still on the low end of that catch. There isn't enough information about either the crab or blackcod populations. Both fisheries are overcapitalized and we're concerned about managing these resources for sustainability," said Mel Moon, Natural Resources director for the Quileute Tribe.

The tribe is also trying to add value to their salmon catch by developing a charter boat operation. A development of charter-based boats would offer a wide range of visitor opportunity from whale watching to salmon fishing. "With stocks declining, we are forced into these niche markets to get more out of less," said Moon.

For Makah tribal fishermen, there are not enough crab in their fishing area to make up for the cuts in blackcod harvest. "For us, the only good news is a bump in the limits for halibut. But it will be hard to replace that income from blackcod,"

said Russ Svec, fisheries program manager for the Makah Tribe.

The tribal halibut catch was increased 13 percent from 424,000 lbs. to 483,500 lbs. this year as the result of increased abundance of halibut found in surveys and a computation error that set harvest rates lower than necessary last season. A total of 13 western Washington tribes participate in the halibut fishery.

The tribe is working to gather more information about the blackcod in their area. "Very little is known about blackcod and we want to know where they originate – whether that's in our own waters or if they are migrating from other places," said Svec. – *D. Preston*

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