

# NWIFC News

*Northwest Indian Fisheries Commission*

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# Status Of Things To Come



As we embark on the year 2004, it seems worthwhile to evaluate the status of the treaties that spell out the legal relationship that exists between tribal and non-tribal governments here. It's been 150 years since the first Washington Territorial Governor, Isaac Stevens, set foot here. From some counts, it has been seven generations since he established treaties, acting on behalf of the United States.

The treaties were, in fact, a federal prerequisite to the creation of Washington. No treaties, no state. No treaties, no landowners. No houses, no industries, no highways, no anything. And, whether you're aware of it or not, that legal relationship still exists.

You know the basics of the history. Indians occupied the land, and had done so for thousands of years. Non-Indians wanted it. So, they struck the treaties, moved us out of the way and set up shop. The thing is, the treaties had conditions. By definition, treaties are government-to-government contracts between sovereign nations, constitutionally defined as the "supreme law of the land."

The seven generations I mentioned is very meaningful to us. That's the amount of time we're supposed to take into account when we make decisions. How will the things we do today affect our descendants seven generations from now?

So just what is the status of Indian people today, and how did the decision to enter into treaties affect us? In some ways, that is a hard question to answer.

As is the case across the country, Indian people here have a shorter life expectancy than other citizens (about six years on the average). Our teens are 10 times more likely to commit suicide and 10 times less likely to complete their education. Our unemployment rates are typically five to 10 times higher than they are for other citizens.

If you figure it's okay for Indians to suffer because they don't contribute to that same contemporary society, you are wrong. The fact is that the tribes make a major contribution to this state. Just in terms of the economy, we contribute well over a billion dollars to the economy every year, and we see little of it in return.

So, what is the status of our treaties?

Casual observers might say they're not worth the paper they were written on – that neither the U.S. nor the state have kept their word to the tribes. I can't say they're wrong. But I can say that I hold the spirit of my forefathers sacred, and that they showed great wisdom in reserving natural resource and other sovereign rights for their descendants. I can say that I will continue to fight for these same rights for as long as I live, because I want the decisions I make and the actions I take today to benefit all of our descendants in the seven generations to come.

## Northwest Indian Fisheries Commission News

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**On The Cover:** Dewey Cleveland, Quileute tribal fisherman, stacks crab pots on a boat in LaPush Marina. Coastal crab harvests were good for the second year in a row. See story on Page 12. *Photo: D. Preston*

# Low Oxygen Levels Plague Hood Canal

Thousands of fish, shrimp and crab died this past year in Hood Canal. The culprit is extremely low dissolved oxygen levels, which sends some deepwater marine life, such as rockfish, to shallower water and leaves other species dead on the seafloor.

To address this problem, the Skokomish Tribe purchased equipment to take water samples and oxygen readings in the canal, and is planning on pursuing additional grants within a collaborative process that will allow the tribe to continue exploring the problem. Continued research is vital for the Skokomish because shellfish and finfish in Hood Canal are economically and culturally important to the tribe. Hood Canal is the treaty-defined usual and accustomed area of the Skokomish, and their predecessors the Twana.

“We know we have a problem and we know it affects fish and shellfish, but we’re just not sure to what extent,” said Eric Sparkman, shellfish biologist for the Skokomish Tribe. “Obviously the low dissolved oxygen levels are causing some fish and shellfish to die, but we are not sure how it’s affecting the overall populations. Are other species moving out of the area during these events, and if so where are they going? We need to answer those and other questions.”

Low oxygen levels are nothing new in the 60-mile long fjord, which is already plagued by poor water circulation.

The problem, however, has worsened over the past couple of years. It’s suspected that an increase in the amount of nutrients – such as fertilizers and runoff from failing septic systems – emptying into the canal is partly to blame. An increase in nutrients, along with warm weather conditions, can help trigger algae blooms. Eventually, algae dies and sinks to the seafloor, eating up oxygen as it decomposes. That chokes deepwater fish, forcing some toward the surface, where oxygen levels are often higher.

During a low-oxygen event in October, water samples from the southern portion of Hood Canal showed oxygen levels as low as 1.6 parts per million (ppm) in 20 feet of water and 1.0 ppm in 50 feet of water. An oxygen level near five ppm is stressful for fish, and below two ppm is considered deadly for marine life. Where the oxygen levels dropped below two ppm, the canal essentially became a dead zone for marine life. Rockfish, sea cucumbers, octopi and shrimp were all found dead. Some shrimp that did survive were plagued with disease.

Historical studies have shown low dissolved oxygen in the canal as far back as the 1950s. Such processes are not unique and may be attributed to longer and warmer days, low in-stream water flows, and variable water column circulation or stratification.

So far, clams and oysters have not shown signs of being affected by the low oxygen problems in Hood Canal, but those shellfish could be harmed by the runoff of nutrients. An increase in pollutants flowing into the canal would not only prompt algae blooms but also contaminate shellfish beds used by recreational and tribal harvesters.

“The same problems that are suspected of causing the low dissolved oxygen problem in Hood Canal could stretch to the beach,” Sparkman said. “More pollutants flowing into Hood Canal raise the possibility that important shellfish beds will become contaminated, keeping tribal and non-tribal harvesters from harvesting clams and oysters. That would hurt the tribe and the state.”

The tribe is working with local, state and federal agencies to address the problem, and will continue to take water samples and oxygen readings in Hood Canal. Additionally, the tribe intends to work cooperatively on a watershed initiative submission to the Environmental Protection Agency for supporting appropriate investigations and potential remedies.

“We must continue to study this low oxygen problem, so we can pinpoint the causes and address the issue,” Sparkman said.

– D. Friedel



Oxygen problems are taking a toll on marine life in Hood Canal. The Skokomish Tribe is working with the State of Washington and others to learn more about the problem and how best to address it. *Photo: D. Friedel*

# Sei Whale Carcass Provides Opportunity For

Tribal and federal marine biologists gained valuable information about the endangered sei whale as a result of a necropsy (animal autopsy) that was performed on a carcass towed to Neah Bay in September.

The 45-foot, six-inch whale washed ashore west of Port Angeles in mid-September and was towed to Neah Bay by Makah tribal representatives.

Sei whales are rarely seen in U.S. near shore waters. The biologists wanted to learn more information about sei whales and determine the cause of death.

“It was a rare opportunity to gather important scientific information about this whale,” said Nathan Pamplin, marine mammal biologist for the Makah Tribe. “The whale was going to get pretty stinky where it was and people were clapping when we towed it off the beach near Port Angeles. They were pretty happy to see it go.”

Sei whales can measure between 25-50 feet in length and weigh 40 tons. It is the third largest species of baleen whales behind the blue and finback whales. They breed and feed in the open ocean where they mostly filter water for plankton through their baleen as they swim. Sei whales also feed on small shrimp and fish.

“This is the first time we’ve seen a sei whale wash up in Washington,” said Pat Gearin, marine biologist for National Oceanic and Atmospheric Administration (NOAA) Fisheries. “The Makah Tribe was instrumental in giving us this opportunity to do this necropsy.” While the whales are listed as endangered under the Endangered Species Act and rarely seen in Washington waters, they are seen more commonly in Alaska. “But it’s rare to actually get your hands on one,” said Gearin.

Pamplin, Gearin and several dozen Makah tribal members, including students, assisted in the smelly job of cut-

ting up the whale, collecting tissue samples and taking measurements for the Northwest Marine Mammal Stranding Network database. The necropsy was performed on a beach across from the marina in Neah Bay.

The biologists found that the whale had a thin blubber layer compared to other whales such as gray whales. This would normally indicate poor physical condition, but the normal thickness is not known for sei whales because few have been examined in recent years. The information will help researchers understand what normal blubber depth is for sei whales.

The whale was struck out at sea by a cargo ship and carried to Olympic Peninsula waters. “It wasn’t possible to determine if the whale was dead before being struck by the ship, but because sei whales skim feed at the surface, it’s very possible it was killed by the impact of the ship,” said Gearin.

“The scientific information about this whale is important and I’m glad we could help out,” said Pamplin.

– D. Preston



Nathan Pamplin, marine mammal biologist for (autopsy) on a sei whale. The tribe and National O biologists towed the whale to Neah Bay for stud waters. Photo: D. Preston

## Federal Court Again Delays Mak

A three judge panel of a federal appeals court has denied a request by the Makah Tribe, other tribes and the federal government to reconsider its earlier decision that prevents the Makah from exercising its treaty whaling right.

“The panel amended its original opinion to such a degree that the court wants to receive additional petitions in the case before deciding whether to grant the tribes’ request for rehearing,” said John Arum, attorney for the Makah Tribe. The tribe is likely to file for a rehearing during the 45-day opportunity to do so.

In December 2002, the 9<sup>th</sup> U.S Circuit Court of Appeals ruled that the tribe’s treaty right to hunt whales was

subject to the Marine Mammal Protection Act. The judges also ruled a full environmental impact statement was required, not just the two completed environmental assessments. The three-judge ruling was made on an appeal filed by anti-whaling groups whose original suit was dismissed by a lower court. The tribe appealed for the court’s full panel of 11 judges to hear the case, which was denied, at least temporarily, in the most recent action.

The gray whale was removed from the Endangered Species Act list in 1994 and numbers over 17,000. The tribe has taken only one whale over the past five years.



the Makah Tribe, performs a necropsy (animal oceanic and Atmospheric Administration Fisheries ly. Sei whales are rarely seen in U.S. nearshore

## Makah Whale Hunt

“It’s very frustrating,” said Nathan Tyler, Makah tribal chairman. “Now we’re talking at least two years before this is resolved. It’s already been nearly a year from when we filed for the first rehearing,” he said.

The federal government has not said whether it will join the second request. Phil Katzen, the attorney who filed a friend of the court brief in support of the of the Makah for 23 other tribes, expects all or most of those tribes will again want to support the Makah petition for rehearing. – *D. Preston*

## Skokomish Tribe Beefs Up Enforcement Team

Looking to increase the ability and presence of the tribe’s fisheries and wildlife enforcement division, the Skokomish Tribe plans to hire new officers and purchase new equipment in the coming months.

The tribe was awarded a \$550,000 Community Oriented Policing Services (COPS) tribal resources grant from the U.S. Department of Justice. The funds will go toward adding two new officers, two new fisheries enforcement boats and new search and rescue equipment.

“We are trying to enhance our enforcement program here at the tribe, and that includes public safety as well as fisheries and wildlife enforcement,” said Dave Herrera, fisheries manager for the Skokomish Tribe.

The addition of two new officers will give the tribe a total of five fisheries and wildlife enforcement officers, two of which will rotate between fisheries and public safety. All the officers will be cross-trained and be able to take on difficult tasks, such as search and rescue missions and diving. – *D. Friedel*

## Spawning Report: 2002 Was Year Of The Chum

More than 36,000 chum were observed by Puyallup tribal staff throughout the Puyallup system last year, according to the tribe’s annual salmon report released recently.

“Last year’s return had more to do with favorable ocean conditions than an increase in available spawning habitat,” said Russ Ladley, resource protection manager for the Puyallup Tribe. The chum run in 2002 was up from 25,000 a year before. Chum salmon are

especially drawn to spawn in low gradient creeks and rivers, which are effected by development.

“Most of what we would consider classic chum habitat just doesn’t exist anymore,” said Ladley. Areas that once had strong chum runs, such as the lower White River, continue to have depressed populations. “Last year, we saw fewer than 300 chum salmon in the White River, compared to over 3,000 chum observed in nearby Clarks Creek,” he said. – *E. O’Connell*

## Squaxin Island Tribe Praises Approval Of Estuary Study

The Squaxin Island Tribe applauded the recent approval by state government of a Deschutes River estuary restoration feasibility study. “This has been a long time coming,” said Jim Peters, natural resources director for the Squaxin Island Tribe. “We have been trying to restore productivity to this system ever since the State of Washington dammed the Deschutes River.”

The feasibility study will look at how sediments are carried down into the former estuary that is now Capitol Lake in Olympia.

Contrary to the intentions of the original designers of the capitol campus, Capitol Lake was created in 1951 when an earthen dam was built between the banks of the lower Deschutes River. Fresh water backed up by the dam flooded what had been a rich tidal estuary. Today the lake is a warm, shallow reservoir that is constantly filling with sediment and faces a host of environmental problems. In addition to an invasion of non-native weeds, problems include water quality and low levels of dissolved oxygen.

– *E. O’Connell*

# Elk Roundup

## *Tribes, State Relocate Elk To Boost Nooksack Herd*

A cooperative effort between the Point Elliott Treaty tribes and the Washington Department of Fish and Wildlife (WDFW) to bolster a weak population of elk in the North Cascades resulted in the successful transfer of 41 animals from the Mount St. Helens area Oct. 4-5. The elk were moved to help augment the flagging Nooksack elk herd, also known as the North Cascades elk herd.

The elk relocation project, involving staff from the tribes, WDFW, and volunteers, took place in St. Helens Wildlife Area east of Castle Rock. Two chartered helicopters herded elk from the Toutle River valley floor and slowly moved the animals toward a capture structure that had been built specifically for the relocation effort. The structure consisted of two inter-connected corrals and a livestock-loading ramp. The helicopters herded elk toward the corrals between two tall burlap-covered “wing walls” that stretched out more than 1,000 feet away from a corral structure.

Once captured, elk were moved individually through a livestock chute where veterinarians checked the health of each animal and injected the elk with vitamins and antibiotics. Only female elk and their juvenile offspring were targeted for relocation. Four bull elk that were captured in the corral trap were removed from the structure and set free in the Toutle River valley.

The adult cow elk were also fitted with radio-transmitting collars, which will allow biologists to track their movements and habitat uses. The Point Elliott treaty tribes, working in cooperation with the state co-managers and Rocky Mountain Elk Foundation volunteers, will use the collars to electronically monitor the movements of the transplanted elk for the next two years. The Point Elliott tribes include Lummi, Muckleshoot, Nooksack, Sauk-Suiattle, Stillaguamish, Suquamish, Swinomish, Tulalip and Upper Skagit.

Animals were moved directly into livestock trailers that had been modified for the transfer. The female elk and their juvenile offspring were released near the south fork of the Nooksack River. Joint tribal and non-tribal habitat improvement efforts in the area have increased the food supply for the transplanted elk

Biologists believe a number of factors contributed to the decline in the North Cascades elk herd’s population, including habitat changes and over-hunting. WDFW and the tribes have forbidden hunting in the herd’s core area since 1993, and hunting seasons for the area will not be estab-



Shawn Yanity, Stillaguamish Tribe, cradles the head of a blindfolded cow elk being processed for transplantation to the Nooksack River drainage. *Photo: T. Meyer*

lished until elk populations have reached a recovery goal.

“We are pleased with the initial results of this joint two-year effort,” said Todd Wilbur of the Swinomish Tribe, who chairs the Inter-tribal Wildlife Committee of the Northwest Indian Fisheries Commission. “The tribes are committed to enhancing and protecting elk populations throughout western Washington. This project will dramatically improve the health of the North Cascades elk herd.” – *J. Shaw*

## *Quileute Elk Study Finds P*

Cow elk nursing calves through winter in the Dickey watershed on the Olympic Peninsula exist at a body fat level that hovers around 3 percent in spring. That’s 1 percent above the rate where starvation can occur and it means that most cows can only successfully reproduce every other year, rather than every year.

Those are some of the findings of a joint three-year study by the Quileute Tribe, Washington Department of Fish and Wildlife (WDFW), Rayonier Timber Company, United States Geological Survey, New Mexico State Cooperative Institute, and the National Council For Air and Stream Improvement (NCASI).

“We have some of the lowest levels in the state for both body fat and numbers of calves added to the herd each year,” said Frank Geyer, Timber, Fish and Wildlife biologist for the Quileute Tribe. “In fact, some of the nursing cows we monitored were below 3 percent body fat in the spring.”

The tribe, WDFW and others worked together to put 20 radio collars on the herd in the Dickey River drainage in November of 2000. The Dickey herd is one of the most important herds to the Quileute Tribe. “Our objective was to better understand the population dynamics – herd composition, how many new calves are added each year, the survival rate, numbers and sources of mortalities, and body condition,” said

# Hunting Tradition Is A Way Of Life

How important is hunting to the Swinomish way of life? Chester Cayou Jr., a respected Swinomish tribal hunter, has a quick answer.



Chester Cayou Jr.

Cayou chuckles. “It is our life,” he answers. And it has been since before anyone can remember.

Once a year, Cayou gathers a group of a dozen or so young hunters from the 800-member tribe to go on a ceremonial journey to bring back game for tribal elders and provide wildlife resources for use in traditional and sacred practices.

The meat gathered will be distributed to tribal elders and local spiritual leaders for use in religious ceremonies. No parts of the animal – not the hooves, the antlers, nor the hide – will be sold or wasted.

“In the wintertime, we use the game for longhouse ceremonies – we powwow every night,” said Cayou, stressing that elk meat is a traditional and essential staple food. “A lot of our elders, that’s all they’ll eat – the traditional Indian food that we give them.”

Wildlife resources have always been central to the cultures of the treaty Indian tribes in western Washington. As traditional foods, deer, elk and other wildlife remain important elements of feasts for funerals, naming ceremonies and potlaches. Hides, hooves, antlers, feathers and other wildlife parts are still used for traditional ceremonial items and regalia. Like salmon and shellfish, the tribes reserved the right to harvest wildlife in treaties with the U.S. government.

Wildlife still provides important nutrition to Indian families on reservations where unemployment can run as high as 80 percent.

Unfortunately, the quality and quantity of the habitat upon which the wildlife resources in western Washington depend are declining rapidly.

Swinomish hunters now have to plan week-long trips to find game, because harvestable wildlife has disappeared from their traditional hunting grounds. But these trips will continue, because a community and a culture depend on it.

This doesn’t mean that the tribes are harvesting lots of elk: far from it.

“We don’t impact the resource like some people think – we just take what we need,” said Glen Edwards, a Swinomish hunter and tribal council member who also sits on the tribe’s fish and game commission. “Last year, we took one elk. That’s hardly anything.”

Western Washington treaty tribal hunters account for only about 1 percent of the total combined deer and elk harvest in the state. According to statistics for 2001-2002, tribal members harvested only 640 deer and 307 elk. More deer and elk are killed by vehicles on state roads than are taken by tribal hunters.

Tribal hunters, Edwards says, sometimes unfairly get bad press.

“If a tribal member does something wrong, it gets put in the spotlight, and all the Indian hunters are lumped together with one bad apple,” said Edwards.

As a sovereign government, each treaty tribe develops its own hunting regulations and ordinances governing tribal members. Many tribes work with state government to develop regulations and share harvest data.

Tribal hunters must obtain tags for each big game animal they wish to hunt. Unlike the state system of voluntary reporting, tribal members are required to report all harvest. If a tribal member is found in violation of tribal regulations, he is cited into tribal court. Penalties can include fines and loss of hunting privileges.

“Hunting was and is a way of life to us,” said Edwards. “It’s important to us to preserve that tradition.” – J. Shaw

## Olympic Peninsula Herds In Poor Condition

Geyer. “This information enables us to manage the resource better.”

The tribe tracked herd movement, as well as the types of forage the elk preferred and tree ages in which the animals were found.

The conclusions of the study fit with other NCASI studies conducted on the Olympic Peninsula herds and the rest of the state.

“We couldn’t have finished this three years without the help of Rayonier,” said Geyer. “Our budget was capped at \$30,000 each year. Rayonier kicked in as much as \$14,000 in some years and provided access to their land. NCASI and the others were also instrumental in the collection of the data. The tribe intends to pursue additional research as funding allows. What we’ve found out so far should draw interest from the research community and hopefully allow us to continue the work.”

“The findings from this elk research will benefit tribal and non-tribal hunters in the years to come,” said Mel Moon, Quileute natural resources director.



Frank Geyer, a Quileute Tribe biologist, helps collect information as part of a joint elk study by the tribe and several other agencies. Photo: D. Preston

– D. Preston

# Hydro Project Could Threaten Nooksack Salmon

The North Fork of the Nooksack River contains habitat for all salmon and trout native to the Pacific Northwest, including endangered chinook and bull trout. Unfortunately, a recently re-started hydroelectric facility could cause serious consequences for the fish, which are listed as “threatened” under the federal Endangered Species Act. In an attempt to prevent this, the Nooksack Tribe is taking steps to help ensure that the operators of this dam abide by federal and state laws requiring protection for fish.

In operation without a license since May, this new incarnation of the Nooksack Falls Hydroelectric Project diverts water from the upper reach of the North Fork, which is very important habitat for chinook, bull trout and other species. Nooksack Natural Resources (NNR) believes the project deserves close scrutiny.

**'...the impact to fish could be devastating.'**

– *Bob Kelly*  
*Director*  
*Nooksack Natural Resources*

“We are extremely concerned about the way this hydro-power facility is being managed, with few precautions being taken to protect fish populations,” said Bob Kelly, director of NNR. “That’s why we’re monitoring the situation so closely.”

Through monitoring and through participation in the licensing process, NNR is working hard to make certain this dam is not allowed to harm vital natural resources.

Until 1997, when a major fire damaged the facility, Puget Sound Power and Light Company (the company now known as Puget Sound Energy) operated the dam. After the fire, it was effectively abandoned and it fell into disrepair for the next several years.

It remained that way until early this year, when a corporation called Puget Sound Hydro acquired the facility. They began producing power – and dewatering the North Fork of the Nooksack River – in May.

“If this dam gets even close to withdrawing as much as they claim they will, the impact to fish could be devastating,” said Kelly.

Besides using precious and increasingly rare water, though, the facility is old and outdated. One main concern includes the project’s inability to adequately respond to changes in flow that could strand and kill juvenile fish downstream.

“The facility needs to be upgraded to adequately protect fish,” said Kelly, “but the dam’s operators are refusing to install simple, common sense fish protection measures.” Not only are the dam’s operators ignoring state law, they are claiming to be exempt from federal law. The current owner is asserting that site is not subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC), the governing body responsible for regulating all hydropower projects.

Puget Sound Hydro claims that, since the dam has been in continuous use since 1906 (the federal government did not begin regulating dams until 1920), it should be exempt from FERC regulations under a grandfather clause. The facility was abandoned in 1997, however, and only re-started this year, a six-year gap in operation.

“No one should be allowed to maximize their profits while minimizing fish protection,” said Kelly. “That seems to be what this project is trying to do.”

Because of concern for threatened chinook, bull trout and other fish species, the Nooksack Tribe has filed a “motion to intervene” with FERC. Intervener status allows the tribe to participate in FERC hearings as a voice for responsible policies; to file briefs advocating for fish in the Nooksack River; and to file for a new hearing if FERC’s ultimate licensing decision is unacceptable.

“We are certainly not opposed to all energy projects: we just want to see these projects done right. But if this dam cannot be operated in a way that protects threatened fish, then it should not be allowed to operate at all,” Kelly said.

– *J. Shaw*



On the North Fork of the Nooksack River, scenic Nooksack Falls feeds a controversial power plant downstream. *Photo: J. Shaw*



## On Quinault Reservation

# Landmark Forest Plan Completed

A new Quinault Indian Reservation forest management plan meets the economic, social and cultural needs of the Quinault people in an ecologically sustainable manner.

“This has been years in the making, but its completion gives us direction in terms of forest management and resource protection that we didn’t have before,” said Bruce Jones, director of natural resources for the Quinault Indian Nation (QIN). The 10-year plan covers 173,000 acres of the 207,000-acre reservation. It includes lands owned by the QIN and more than 2,300 individual Indian allotments, some owned by as many as 250 individuals. The complexity of land ownership is one of the most difficult issues in managing the land base.

“It formalizes a lot of what the QIN had been doing anyway,” said Nancy Allison, the planning forester for QIN. “Consultation with U.S. Fish and Wildlife Service over possible impacts the



As dawn colors the sky, a Quinault Indian Nation forest technician plants new trees. *Photo: Larry Workman, Quinault Indian Nation*

An example of how adaptive management might work is the plan’s requirement for 100-foot wide, no cut buffers along streams and rivers. Buffers along

“We have a lot of folks whose only income is the revenue from the timber on their 40 or 80 acre allotment. This plan provides the flexibility to protect the fish, but also harvest the timber,” said Allison. The forest is also managed for cultural and traditional uses such as large cedars for canoes and medicinal plants.

“This is a plan for managing the timber resource; however, throughout the development process, we included the multi-disciplinary expertise of the staff to create a management strategy that will allow us to harvest timber with the least possible impact on water quality, wildlife and fish habitat, and cultural resources,” said Allison. “This multi-disciplinary approach was not an easy one. It forced us to weigh the tradeoffs and create a plan that has addressed all of the multiple objectives of the plan.”

“When we operate in the woods now, people can have confidence that we have a holistic approach and not a sale-by-sale approach,” said tribal Natural Resources Director Bruce Jones. “This is a landmark accomplishment.”

– D. Preston

**'...people can have confidence that we have a holistic approach...'**

– Bruce Jones  
Natural Resources Director  
Quinault Indian Nation

plan would have on endangered species was a huge part of this process.” Having consulted programmatically on the plan, there is no longer a need for consulting on each individual timber sale. The plan has formally considered fish and wildlife listed on the endangered species list, and incorporates their needs into the management plan.

The QIN forest plan relies heavily on adaptive management, a process that constantly evaluates the plan to reflect changing conditions in the field and responds to those changes.

rivers are important for providing adequate shade to keep stream temperatures low for fish and to filter damaging sediment from roads before it gets to the stream. “We really don’t know how much of a buffer is necessary,” said Allison. “Under the adaptive management process, we will monitor the buffer. Maybe in some instances, we can harvest a little closer and still maintain adequate coverage for stream and fish protection. In other cases, we might need to provide greater protection. Without a monitoring and adaptive management process, we would have no mechanism for finding this out.”

# Skokomish Tribe Buys Land To Protect Habitat

Property along the Skokomish River that is susceptible to flooding and unsuitable for development might not seem all that valuable, but for salmon it's prized. In an attempt to preserve that important salmon spawning and rearing habitat, the Skokomish Tribe has purchased about 175 acres of floodplain and wetlands along the lower Skokomish River.

"Not everyone is in the market for a swampy floodplain, but in this case we were," said Dave Herrera, fisheries director for the Skokomish Tribe. "By purchasing this precious landscape, the tribe can better protect and manage the watershed's salmon resource that is important to us all."

The tribe is putting together a long-range stewardship plan for the property, aimed at helping struggling salmon stocks rebound and become sustainable runs. With better access to the land, the tribe can better understand how salmon are using the watershed. Several species of salmon, and respective stocks, including Puget Sound

chinook and Hood Canal summer chum, which are listed as "threatened" under the federal Endangered Species Act, are present in the Skokomish River watershed.

As part of that stewardship plan, the tribe plans to allow both the Skokomish River and various tributary creeks to meander more naturally throughout the floodplain as they once did. Over the past 100 years, a series of dikes throughout the lower watershed have restricted the river's movement. Those dikes, the filling of off-channel habitat necessary for spawning and rearing salmon, upstream logging practices, a hydroelectric diversion, and agricultural conversions have collectively changed the region's landscape and altered the river into a fast moving channel during high rains and subsequent discharge events. The rapidly flowing floodwaters scour the river channel and destroy salmon redds or nests. At other times during the year, the lack of water in the river due to the City of Tacoma's Cushman hydroelec-

tric project also has further degraded salmon spawning and rearing habitat.

"We now have a better opportunity to help protect and manage the resource, and maybe build this up into a premier fishery here on the Skokomish," Herrera said. "We want everybody, tribal members and non-tribal members alike, to enjoy this area and the resources available for years and generations to come."

Purchased with Pacific Coastal Salmon Recovery funds, the property was owned by the Bourgault family. The Bourgaults homesteaded and farmed the land for about 100 years. As part of the purchase agreement, the tribe will allow the eldest member of the family to continue to work the area's hay fields.

"The Bourgault family is an important and historic part of this watershed," said Keith Dublanica, natural resources director for the Skokomish Tribe. "They have had a working history in this watershed and they should be remembered as being good stewards of this land."

## *New Park Along Poulsbo's Dogfish Creek Will Show*

Walking along the banks of Dogfish Creek underneath the new Lindvig Bridge, Paul Dorn points out a number of salmon making their way upstream to spawn. "This is what we envisioned," said Dorn, salmon recovery program manager for the Suquamish Tribe.

That's not all Dorn and others had in mind, however. The newly constructed bridge in Poulsbo has not only provided salmon better access to spawning and rearing habitat in Dogfish Creek, but it also has paved the way for a new environmentally focused park.

Almost 13 acres of undeveloped land along Dogfish Creek has been set aside for the new park, which will have an education center focusing on fish and wildlife in the Poulsbo area and could also include exhibits on Indian cultural history. The Suquamish Tribe helped secure grants from the Salmon Recovery Funding (SRF) Board. The City of Poulsbo secured National Fish and Wildlife Foundation and Aquatic Lands Enhancement Account grants to help match the SRF Board funds used to purchase the land.



A sign marks where an empty lot will become part of a new park featuring a restored salmon stream. Photo: D. Friedel



Dave Herrera, fisheries director with the Skokomish Tribe, checks out property the tribe recently purchased along the Skokomish River. Photo: *D. Friedel*

The Skokomish Tribe is still in the market for land along the Skokomish River and throughout the watershed. The plan is to return as much of the watershed back to its natural state to help fish and wildlife thrive in the area.

“This watershed is important to the Skokomish Tribe,” Dublanica said. “Recovering the wetlands and waterways is the first step toward restoring the natural resources the tribe has always depended on.” – *D. Friedel*

## Passages

### Janet McCloud Yet-Si-Blue

Janet McCloud, Yet-Si-Blue, “The Woman Who Talks,” a prominent tribal fishing rights activist and advocate of traditional practices, passed away in November.



Janet McCloud

Born March 30, 1934 on the Tulalip Reservation, McCloud helped organize fishing protests along the Nisqually River. Known popularly as the “fish wars,” the protests, which often ended in arrests by state game wardens, eventually led to a federal court ruling reasserting the tribes’ rights to manage their own fisheries.

“Without Janet’s bravery, we may never have won recognition of our treaty fishing rights,” said Billy Frank Jr. “Janet was out on the river, out on the front line, fighting for what was right.”

During one particular protest on the Nisqually River, McCloud was arrested and served six days, refusing to eat while in jail. She also helped shape public perception of the treaty rights battle by publishing “Survival News,” a mimeographed newsletter that presented the tribes’ point of view during the struggle for fishing rights.

In the years following the Boldt Decision, McCloud traveled worldwide, speaking on tribal fishing rights, sovereignty and culture. McCloud also founded the “Sapa Dawn Center,” which means grandfather dawn. Meant to empower families and youth, the center has become a sanctuary for hundreds of tribal children.

Her husband, Don McCloud, preceded her in death in 1985.

## Case Returning Salmon

“This is a great project for the entire community,” Dorn said. “A new park along Dogfish Creek will showcase salmon returning to the area and educate people about the watershed that is so vital to salmon and other wildlife. It’s a great addition to all the improvements that are being made throughout the Dogfish Creek watershed.”

A bridge was recently constructed over the mouth of Liberty Bay, where a culvert had impaired salmon migration for more than 40 years. The bridge has helped flush silt from the creek, creating a healthier estuary for juvenile and adult salmon. The improved stream flow also will help other wildlife and encourage the growth of native vegetation along the creek.

Dogfish Creek is important habitat for Puget Sound chinook salmon, which are listed as “threatened” under the federal Endangered Species Act. The creek also is habitat for coho and chum, as well as for cutthroat and steelhead trout.

“Landowners who are willing to do their part and aid us in restoring important salmon habitat have helped us a great deal,” Dorn said. “Their efforts have made a big difference in our commitment to try and help salmon and all the other wildlife along Dogfish Creek and Liberty Bay.” – *D. Friedel*

# Crab Abundance Breaks Boom/Bust Cycle This Year

Coastal tribal fishermen have been surprised by an abundant crab season for a second season in a row.

“The trend is usually a boom year followed by a much lower year,” said Joe Schumacker, Quinault Indian Nation (QIN) marine shellfish biologist. Last year, both QIN fishermen and Quileute fishermen set crab catch records, landing 1.7 million pounds and 700,000 pounds respectively. By comparison, 311 non-Indian crabbers landed nearly 20 million pounds in that same year.

Recent bad weather has kept tribal fishermen off the water, but through early December, QIN fishermen had landed nearly 1.2 million pounds of crab and Quileute tribal fishermen had landed about 250,000 pounds. Inconsistent crab abundance in the Neah Bay area makes the crab fishery less significant for the Makah Tribe. The Hoh Tribe plans to participate in the future.

“Not only are crabs abundant, the shells were harder earlier and the meat condition is the best it has been in the past few years,” said Kris Northcut, harvest management biologist for the Quileute Tribe. “If the weather hadn’t kept them in port so much these last couple of weeks, we’d be on pace to exceed last year’s total,” he said. The price paid to fishermen has been slightly higher this year, holding at \$1.50 a pound or better for the meaty crabs.



Dewey Penn, foreground, and Jason Lawrence, Quileute tribal fishermen, prepare new crab pots for fishing in LaPush. Photo: D. Preston

Last season’s plentiful harvest allowed fishermen to invest in new boats and gear, improving their ability to fish this season. Many will continue to catch crab into the spring as weather allows. “Weather is definitely the only limiting factor this year,” said Schumacker.

– D. Preston

## Generations

Tyler “California” Hobucket, a renowned Quileute dancer, displays a wolf mask. The photograph was taken in the 1930s in LaPush. It is printed here with permission of the family.

Photo Courtesy Of  
Hah-Yeh-Letsa



# Volunteers Eye Nisqually Salmon

Salmon beware, you're being watched.

The Nisqually Indian Tribe, for the second salmon spawning season, has trained dozens of volunteer salmon watchers across the Nisqually watershed. "This is the type of salmon research that any person with an extra 15 minutes a week can do," said Ann Marie Finan, salmon recovery outreach coordinator for the tribe.

On a recent Thursday, Mary Fitzpatrick and Cheryl Stephan stand quietly on the banks of Toboton Creek in the Bald Hills, scanning the water for a salmon. "It's very stimulating to be out here," said Fitzpatrick. "This program makes you think about where you live and how your life affects salmon."

The section of Toboton Creek that Fitzpatrick and Stephan watch doesn't get many salmon, but monitoring it is still important. "So far we have seen one salmon, a female coho, all season," said Fitzpatrick. "That may not sound like a lot, but many people out here don't even realize there are salmon in these small streams that go right past their houses."

The information Fitzpatrick, Stephan and dozens of other salmon watchers are gathering is helping salmon recovery happen. "Salmon watchers act as our eyes and ears in the watershed and give us a heads up when something may need attention," said Jeanette Dorner, salmon recovery manager for the tribe. For example, a malfunctioning culvert could quickly be spotted by a salmon watcher, but might go unnoticed otherwise. "This information may help determine where we focus habitat protection and restoration efforts."

Neither the Nisqually Tribe nor the State of Washington – the salmon co-managers in the Nisqually River watershed – has the staff to watch the many small streams across the 700 square mile watershed. "The Nisqually watershed is huge; we couldn't possibly keep a constant eye on many of these little streams without the help of volunteers," said Dorner.

Salmon watchers are trained to identify salmon at sessions offered by the Nisqually Tribe, which include trips to the tribe's two hatcheries. Volunteers are expected to watch for 15 minutes, even if they don't spot any fish. Even a count of zero fish can provide im-

portant information about the health and accessibility of habitat for salmon.

The Nisqually Tribe also tracks salmon in the watershed by conducting



Salmon watcher Cheryl Stephan surveys a stretch of Toboton Creek near Yelm. *Photo: E. O'Connell*

regular spawning surveys, sampling juvenile salmon as they leave the river and carrying out an extensive fisheries monitoring program. – *E. O'Connell*

## Stillaguamish Remove Salmon Barrier

In the shadow of a fallen log, dozens of fry swim through a deep, still pool fed by a drizzle of cool water. Sounds like perfect fish habitat, and it is – until the young salmon try to return upstream, where a 35-foot-long bulkhead and tons of broken concrete from a fallen bridge block their path.

To fix the problem, the Stillaguamish Tribe recently removed the remains of the bridge from Koontz Creek, a tributary of the Stillaguamish River's north fork. This will open up miles of upstream habitat for coho, chum and pink salmon, especially juveniles.

"Clearing out this part of the creek will particularly help young salmon at a crucial life stage. Every fish species in the area will benefit from access to this habitat," said Pat Stevenson, environmental director with the Stillaguamish Tribe.

"This barrier also impaired the river's natural functions: it prevented large woody material and quality spawning gravel from reaching certain parts of the ecosystem," said Stevenson. "Removing it allows logs and sediment to naturally flow throughout the river, which is important for fish." – *J. Shaw*



The Stillaguamish Tribe removed tons of concrete, wood and metal left by a collapsed bridge, opening miles of upstream fish habitat. *Photo: J. Shaw*

# Geoduck Shells Aid Management

A clamshell's primary function is to guard against predation. The Tulalip Tribes are using geoduck shells to protect the giant bivalves in a different way, gathering data from them to improve management.

"Geoducks are important to us, culturally as well as economically," said Daryl Williams, environmental liaison with the Tulalip Tribes. "We want to get as much information as possible about our local geoduck populations so we can develop the best possible management strategy, and the study we're doing now will help us accomplish that."

Like a tree, a geoduck's shell forms a ring for every year it lives. Tree ring size is affected by drought and other environmental disturbances; geoduck rings get bigger when temperatures are warmer and food is plentiful. Information gathered from geoduck shells can tell researchers a great deal about the large burrowing clam's life history – and help managers determine appropriate harvest rates for a given area or tract. During this study, where a targeted 632 geoducks will be collected from the waters near the town of Langley in Saratoga Pass, research will focus on the age and distribution of the tasty molluscs.

Most scientific information about geoduck populations comes from studies conducted in Hood Canal. Faced with a dearth of data for their usual and accustomed fishing areas, the Tulalips are taking the initiative to study tracts in the northern reaches of Puget Sound and closer to home.

"We believe in doing the work necessary for truly responsible management," said Mike McHugh, shellfish manager for the Tulalip Tribes. "We could rely on data from other areas, but that might not tell us the whole story. By gathering information that is specific to local geoduck tracts, we can see what's really going on with these clams in the North Sound."



Consultant Webster Peirce fillets a geoduck for use in a study conducted by the Tulalip Tribes. *Photo: J. Shaw*



Rocky Brisbois, Tulalip Tribes fisheries technician, displays a geoduck harvested as part of a management study. *Photo: J. Shaw*

Learning about the age and life history of geoducks here will tell the Tulalips a great deal about "recruitment" — that is, how many new clams are showing up in the area every year. Geoducks are broadcast spawners, which means that young clams float freely through the water early in life. In some areas, recruitment is high, with young geoducks landing in the tract to replenish the population every year. In other areas, fewer young geoducks are found to show up every year.

Learning more about the relationship between adult geoduck and recruited geoduck is a goal of this study. Knowing the frequency and distribution of specific age ranges for a particular tract is critical to determining how much harvest is sustainable for the tract or area. For an area such as the North Sound, this information will allow the development of a regionally specific sustainable harvest rate without the bias from high density South Sound tracts that appear to recruit at much higher levels than tracts in the north.

Because less than 2 percent of known geoduck populations exist in the North Sound, little information is available about them. The Tulalip study aims to change that.

"This information will give us a look into the history of geoduck recruitment over the last 150 years or so," said McHugh. "This information will allow us to take a real serious look at the way we are managing these remote clam populations on the fringe of geoduck distribution. The last thing I want to be known for is the guy who opened the door for over-harvest of geoduck in the North Sound area of Puget Sound."

The clams gathered for the study were distributed to the Tulalip tribal community for ceremonial and subsistence purposes. — *J. Shaw*

## Geoduck Fast Facts

- Geoducks can live over 100 years. The oldest known geoduck lived to be 163.
- Geoducks are the world's largest burrowing clam; the heaviest geoduck caught on record weighed 14 pounds.
- Puget Sound contains about 500 million pounds of geoducks, which is a greater amount of biomass than any other regional marine animal.
- Females living 100 years can produce about 5 billion eggs. Geoducks are "broadcast spawners," meaning offspring float freely until finding a home of their own.
- Why is it spelled geoduck? The name comes from a Nisqually word, "gwe-duc," which means "dig deep." Early non-Indian settlers spelled it either "goeduck" or "gooeyduck," but the word was recorded incorrectly by the editor of an East Coast dictionary, and it's been "geoduck" ever since.
- A Suquamish story says that geoducks (and other clams) were sent to the ocean bottom because they couldn't stop gossiping. This is why, the story goes, geoducks spit water when people dig for them: The siphons fill with seawater when they gossip beneath the surface. – *J. Shaw*

## Suquamish Eye Shellfish Harvest In Cleaned Up Dyes Inlet

For the first time in decades, tribal and non-tribal shellfish harvesters could take to the beaches of Dyes Inlet to harvest clams and oysters without the threat of digging up contaminated bivalves.

The waterway near the City of Bremerton has long been a problem spot for shellfish harvests because of sewage discharges and the flow of contaminants into the inlet from nearby developments. But after years of studies and much-needed improvements to Bremerton's stormwater system, the Washington Department of Health is recommending recreational and commercial shellfish harvests be allowed on nearly three miles of beach along Dyes Inlet and at Erlands Point near Bremerton.

The recommendations are a result of a cooperative effort between the Suquamish Tribe, the state Department of Health, the U.S. Navy, the City of Bremerton and the Kitsap County Health District. The groups are working together to study and clean up Dyes Inlet.

"This took a true team effort to get these beaches re-certified," said Paul Williams, shellfish program manager for the Suquamish Tribe. "Cleaning up Dyes Inlet has been a priority for the tribe, as well as other agencies and property owners in the area. We have been working for years to get this done."

A history of pollution problems has plagued Dyes Inlet for decades. Contamination from untreated waste, stormwater run-off and failing septic systems concerned state health officials enough to close the inlet's beaches to non-tribal commercial shellfish harvests in the 1960s.

Since then, the tribe and other groups have been studying the pollution problem and the City of Bremerton has committed to an \$18 million upgrade to its stormwater system. Those studies have concluded – through a Navy computer



Paul Williams, shellfish program manager for the Suquamish Tribe, examines clams at Dyes Inlet. *Photo: D. Friedel*

model – that sewage spills into the inlet dissipate before reaching the beaches proposed for reopening. And Bremerton's ongoing improvements to the stormwater system have almost eliminated the flow of sewage into the inlet during heavy rains.

"The City of Bremerton and the Navy both deserve a lot of credit for these beaches being reopened," Williams said. "Their effort, along with all those involved, is helping make Dyes Inlet a cleaner place. That's critical for the Suquamish Tribe because shellfish in the inlet have always been an important resource."

"All the stormwater restrictions and regulations that have been put into place have worked," said Rob Purser, fisheries director for the Suquamish Tribe. "This proves that if we work together and create responsible regulations to solve pollution problems we can create a healthy environment everyone can enjoy." – *D. Friedel*

# Dewatering Devastates White River Chinook

More than 6,000 juvenile chinook salmon died when the White River below Mud Mountain Dam was dewatered this spring, Puyallup tribal staff told federal investigators. “Draining the White River killed thousands of salmon when they were at their most vulnerable and devastated the river’s food chain,” said Russ Ladley, resource protection manager for the Puyallup Tribe.

Puyallup tribal staff presented their findings to the National Marine Fisheries Service (NMFS), the agency whose authority it is to enforce the federal Endangered Species Act. Puget Sound chinook are listed as “threatened” under the ESA. NMFS, though, eventually concluded their investigation without taking any enforcement action. “Unfortunately, NMFS has indicated that they aren’t interested in following up on the deaths of endangered chinook,” said Ladley. “What is the point of trying to protect and recover endangered chinook if thousands can be killed without penalty or due recourse?”

“Six thousand dead juvenile chinook is a lot when you consider just over 800 wild adult chinook came back to the White River last year – a relatively good return,” said Ladley. “If we’re to succeed in restoring White River chinook, we have to do a much better job protecting them from events like taking the water out of the river.”

Ladley estimated that over 17,000 coho, 6,000 federally protected chinook, and 400 chum were killed when the river was dewatered on April 9. Most likely though, many more salmon actually died. “The conservative nature of this estimate cannot be overstated,” said Ladley in a statement to NMFS investigators. “Many fish were undoubtedly overlooked either because they were hidden in structure and debris or scavenged by birds.”

Around 10 a.m. on April 8, the U.S. Army Corps of Engineer started holding water behind its Mud Mountain Dam to allow for maintenance work farther down the river at a dam



Thousands of endangered juvenile chinook were left high and dry when the White River was dewatered earlier this year. Photo: Eric Marks, Puyallup Tribe

owned by Puget Sound Energy. Instream flow in the river was dropped from above 1,100 cubic feet per second (cfs) to 300 cfs in three hours.

“We were down on the river for most of the morning, trying to save fish,” said Ladley. “Because of the short period of time the river was actually dewatered, we weren’t able to fully take in the devastation. Most of the evidence was washed away when the water started coming back up around noon.”

The fish kill will have repercussions on salmon populations and recovery efforts on the White River for years to come. “Salmon recovery on the White River has been a joint effort across tribal, state, local and federal jurisdictions. Everyone has gotten together and put a lot of energy into recovering this chinook population,” said Ladley. “Its unfortunate that all the sacrifices we’ve made – from harvest restrictions to money spent on hatchery operations – can be wiped out because of this fish kill.” – E. O’Connell

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