

Northwest Indian Fisheries Commission

NEWS

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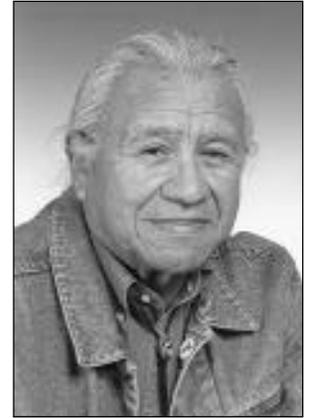


Inside:

- Mass Marking Forces Court Action
- Forestry Program Seeds Future
- Divers Leaping For Safety
- Dairy Waste Polluting Shellfish Beds
- Genetic Marking Aids Management
- Plan Offers More Fish Protection

Let's Get Back On The Right Path

**By Billy Frank Jr.
NWIFC Chairman**



Whoever you are, whatever you do and wherever you live in the state of Washington, it is to your benefit to support state and tribal co-management of the fisheries resource.

There are a number of reasons why this is undeniably true. For one, it's the law. Co-management is legally mandated by federal law. For another, it avoids litigation that can waste millions of dollars, years of time and tons of energy; yet seldom accomplishes a thing. Co-management also provides an opportunity for the people of this nation to do something they can be proud of — keep their word. The tribes are here to stay, and their treaty rights are as valid as the Constitution that protects them.

So, what does this mean to the fish? For that matter, what does it mean to us humans?

By staying out of court and at the government-to-government negotiation table, we can seek common solutions to common problems. We can work together, as a team, to protect and restore salmon habitat. We can produce cooperative harvest plans and catch accountability programs. I know we can do these things, and much more, because we have already done them. In fact, the past 15 years were unofficially dubbed the “era of cooperation” between the state and the tribes, and it was an era of progress. Co-management, based on understanding and mutual respect, is the one and only path to progress in natural resource management in the future.

Over the past year, however, the spirit of cooperation between the state and the tribes has been threatened. There are many reasons this has been the case, ranging from partisan politics to increased pressure to exploit the environment. These things lead to the path of renewed conflict.

The tribes don't want that, and neither should you. We are all in the same boat. Through co-management, tribes and other governments can keep that boat afloat. Without it, we all sink.

One of the first things we will see is intervention by the federal government into the affairs we should be managing ourselves. It will come in the form of listings of salmon species under the Endangered Species Act, a sign of failure by all of us to meet our responsibilities in the proper manner.

As Mitch Johnson, chairman of state Fish and Wildlife Commission stated in a recent joint gathering, “Only through regular, meaningful dialogue will we be able to evolve a clear understanding of the processes that should guide state and tribal discussions — discussions that will meet the needs of both parties by protecting the natural resources we care about while maintaining the fabric of our communities.” He said that fabric is torn right now but made a firm commitment to uphold court decisions defining tribal fishing rights. He is also committed to support the continued development of state/tribal cooperation, pointing out that we need to work together to repair that fabric.

We agree, but it won't be easy. There are those who wish to divert us, despite the fact that such diversion could be disastrous for us all. This is a critical time for those who truly care about our common future in this state, and who understand the need for the spirit of cooperation, to speak out in support of that spirit and help us all get back on the right path.

On The Cover: Ben Ives, Port Gamble S'Klallam tribal member, paints a cedar totem, one of four that he and three other S'Klallam carvers are creating for the tribe's longhouse. *Photo: D. Williams*

Northwest Indian Fisheries Commission News

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Mass Marking Dispute Forces Court Action

The state Department of Fish and Wildlife's refusal to honor an agreement on mass marking young hatchery coho forced western Washington treaty Indian tribes to seek a federal court order to stop the plan.

"The tribes do not oppose the concept of mass marking or selective fisheries. All we ask is the state take the time to make sure it's done right," said Billy Frank Jr., chairman of the Northwest Indian Fisheries Commission.

The tribes' request for a temporary restraining order to stop the marking was granted in October by Federal District Court Judge Barbara Rothstein in Seattle.

"It's been a long time since we've had to go to court with the state on something like this," said Frank. "But the state's refusal to honor its legal commitment to the tribes as co-manager of the resource cannot go unchallenged."

At issue was the state's intention to mark all — about 12 million — of its 1995 hatchery coho production from Puget Sound and coastal areas north of Grays Harbor. The fish were to be marked by clipping the adipose fin near the tail. That mark, however, is the same one used by tribal, state and federal hatcheries along the West Coast to mark hatchery fish that have had coded wire tags inserted into their snouts. When those fish are harvested as adults, the tags provide fisheries managers with information on their origin, age, migration patterns and other data critical to fisheries management. The coastwide coded wire tagging program provides the data that is the foundation of domestic fisheries management in the region, and also is required under the Pacific Salmon Treaty between the U.S. and Canada.

The state Department of Fish and Wildlife was under a legislative mandate to mark all of its 1995 coho production now being reared in its hatcheries. The idea behind the experiment is that the mark would enable sport fishermen to distinguish hatchery fish from wild fish in mixed stock areas such as the north coast and Strait of Juan de Fuca, where large numbers of hatchery and wild fish mingle before seeking out their streams of origin. Fisheries have been restricted in those ar-



A young hatchery salmon has its adipose fin clipped to indicate that it is carrying a coded wire tag. Information obtained from the tagging program forms the basis of fisheries management in the region.

reas in recent years to protect weak wild stocks.

A number of tribes signed a Memorandum of Understanding with the department in May that specified how the agency would proceed with mass marking. A key condition was that full scale mass marking would not occur unless Canada agreed to sample its fisheries to detect Washington-bound coho carrying coded wire tags to maintain the viability of the coastwide coded wire tagging program. Canada refused, citing technological concerns, yet the department proceeded with mass marking in violation of the MOU.

Other fisheries managers also expressed concerns about the possible loss of coded wire tag data, including the National Ma-

riner Fisheries Service, which asked the agency to delay mass marking.

"We need reliable data from the coastwide coded wire tagging program to be able to assess the effects of mass marking and selective fisheries, and to make them work," Frank said.

"We can have mass marking and selective fisheries, and we can have a coastwide coded wire tagging program. But we must make sure that we are not sacrificing one for the other. We must put the resource first," Frank said.

Since granting the tribes' request, Judge Rothstein has continued the restraining order indefinitely while the parties work out a joint plan, under court direction, to implement mass marking and selective fisheries.

NWIFC News Available On World Wide Web

The Northwest Indian Fisheries Commission News is now available via the NWIFC home page on the World Wide Web. The address is <http://mako.nwifc.wa.gov>.

The home page contains information about member tribes of the NWIFC, tribal natural resource management activities, links to related sites and a wide range of additional information. The site is updated frequently with new information and features.

Seeding The Trees For The Forest

Everyone has a family tree, but did you know that trees have families, too?

The Quinault Indian Nation (QIN) Forestry Genetics program is home to more than 1,500 tree families. The tribal program has been tracking families of trees for 20 years to provide healthy progeny for future Western hemlock, Sitka spruce and Douglas fir forests.

Quinault Tree Improvement Forester Jim Hargrove has guided the growth and development of nurtured tree seedlings from the first meager nine-acre plot of ground to the present-day 25-acre operation located not far from the mouth of the Quinault River. The QIN plants an average of 1 million to 1.5 million seedling trees each year to reforest harvested tribal and trust lands on the reservation.

"Twenty years ago, no single source existed that could guarantee the quality and origin of the seed we needed," said Hargrove. "So, we started our own seed orchard and it's really paid off. Soon we will produce enough seed to cover all of our replanting needs."

The Quinault Department of Natural Resources (QDNR) forestry staff has assembled a state-of-the-art seed program establishing the tribe as a leader in applied forest genetics. In fact, the seed operation has been so successful that government agencies and private forestry managers, such as ITT-Rayonier and Simpson, now participate in sharing seed and data.

"Just a handful of hemlock seeds can grow hundreds of seedlings."

— Jim Hargrove

Several goals were established early in the QDNR tree improvement program. Staff looked for trees that were straight, healthy, and taller or faster-growing than their neighbors. Other desirable characteristics such as disease resistance and high quality fiber for speciality pulp wood were also identified and incorporated into the program. Once a preferred tree is located, tree improvement crew members cut off the top of the tree and graft it to



Mitch Bumgarner, tribal tree improvement crew member, prunes the lower branches of a tree to hasten growth. *Photos: K. Boysen*



A grafted western hemlock tree in the QIN orchard.

existing seed orchard trees. "Some species like Western hemlock yield very small cones with tiny seeds. Just a handful of hemlock seeds can grow hundreds of seedlings," Hargrove said.

Grafting Western hemlock and Douglas fir has been practiced at the Quinault seed orchard for 13 years using test information to add better quality trees each year. Test site plantations have been located throughout the reservation to monitor the enhanced characteristics of each species. Most Quinault timberland is replanted the year following harvest. If seed that comes from the seed orchard is used to plant the reservation's forests, an additional 10 to 15 percent faster growth can be expected. Not only is recovery faster, but new habitat is also produced for the benefit of wildlife such as deer, elk and birds.

Research has also revealed that other tree species respond better to the variety of soil and habitat conditions throughout the reservation. For

instance, Sitka spruce, white pine and Lodgepole pine thrive in wetland and swampy areas whereas Douglas fir growth is actually retarded in excessively wet soil.

Increasing recovery and maintaining the diversity of tree species is a continuing goal of the program. In 1995, four alder test sites were installed to determine if planting alder can overcome brush competition in river bottom areas. Often underbrush outgrows alder which depresses alder recovery in some areas. Experiments are also under way for improving alder growth, and cottonwood is being planted to increase available pulp wood in the years ahead. The program also works with Western red cedar and Silver fir in selected locations around the reservation, according to Hargrove.

"We are taking a thoughtful approach to ensure genetic diversity for the long-term health of our forest stands," Hargrove said. — *K. Boysen*

Divers Leap For Safety

You couldn't tell from all the grins and high-fives that Suquamish tribal geoduck divers were learning life-or-death skills. But jumping out of a helicopter hovering 30 feet above the choppy surf of Agate Pass seemed to make emergency rescue training a whole lot of fun.

The divers were getting hands-on experience of the elite Snohomish County Search and Rescue team's capabilities. The exercise was mutually beneficial: The rescuers were able to practice their skills, and the divers were able to learn what it's like to be rescued.

There are an estimated 200 tribal geoduck, urchin and cucumber divers in western Washington.

The Oct. 27 training session, attended by 11 Suquamish divers and organized by tribal seafood business manager Carolyn St. James, was part of the tribe's ongoing efforts to make its commercial diving operations as safe as possible.

"We wanted to give the divers and tenders an idea of what an actual rescue would be like — what the procedures would be like, and what they could do while they waited for the rescuers to get to the scene," said Randy Hatch, fisheries manager for the Suquamish Tribe.

After a safety review, the divers were flown to the jump site — a buoy some 200 yards offshore. Each diver gingerly made his way out onto the helicopter's skid and waited for the sign to jump.

"The butterflies were definitely there, but at the same time, I've never had so much fun — it was terrific," said Randy George, one of the tribal divers who took the leap. "I know who to trust now. Our divers are trained."

"The air crew had very, very high comments about all of you, and I have, too," said dive instructor Dennis Lucia, who led the divers through the training. "I guarantee you that when there's an incident, that person in trouble has an excellent chance for survival because of this training."

Hatch said the safety of the tribe's divers has been the focal point of the entire dive program.

"The tribal council has always felt it was better to be safe and take that extra safety measure. It might make our safety regulations a little more cumbersome, but we feel it's worth it," he said.

The Suquamish Tribe has 18 people in its dive training program — 15 divers and three tenders, who act as the supervisor of each dive operation.

"The tenders are another layer of safety we've put in," Hatch said. "Our tenders have gone through the surface air supply course, cardiopulmonary resuscitation, plus emergency first aid, and their basic job is to keep an eye on the operation. They're the ones responsible for making the call as to whether the diver goes in the water." — *D. Williams*



Above, a Suquamish geoduck diver takes a wild ride back to the beach. Left, diver Randy George reacts to his helicopter jump. Photos: *D. Williams*

Tulalips Again Forced To Cancel Shellfish Harvest

Federal marshals might accompany Tulalip shellfish harvesters the next time the tribe decides to exercise its treaty shellfishing rights on privately-owned Hat Island.

For the second time this year, the tribe canceled a shellfish harvest due to threats of violence from Hat Island residents. Based on a two-year-old federal court decision af-

firming the tribes' right to harvest shellfish available on beach property, the tribe had scheduled a harvest for the evenings of Nov. 13 and 14 during low tides. However, tribal survey crews were physically threatened by persons on the island when they attempted to confirm beach markers in preparation for the harvest.

"We found it necessary to cancel the har-

vest out of concern for the safety of our people," said Francy Sheldon, Director of the Tribal Fisheries Department. "We are in the process of consulting with federal officials now to seek federal enforcement of tribal treaty fishing rights. We will not abandon our right to harvest on Hat Island, which is a traditional harvesting place of deep cultural significance to us."

Dairy Waste Polluting Shellfish

Lummi Nation clam digger Buddy Solomon says a shellfishing closure on Portage Bay beaches due to pollution will hurt, but not devastate, his income. Instead, he worries about Lummi elders during the winter months.

“We have senior citizens that depend on clamming for their little income,” said Solomon, who is also a Lummi fisheries commissioner. “It’s going to hurt them really bad. There are no other areas for them to go.”

The Lummi Nation, on a request by the state Department of Health, voluntarily closed commercial harvest of oysters and clams along the Portage Bay shoreline of the Lummi Reservation until the source of the pollution is corrected or the area is reclassified. Manure run-off from dairy farms into the Nooksack River is believed to be the culprit, and worsening conditions could lead to a prolonged or permanent closure.

Solomon said Lummi Bay and Onion Bay beaches remain open to shellfishing, but accessibility is difficult for elders. “There are banks and cliffs and it’s a long way to go to climb up and pack 40 pounds of clams,” he said.

Also, many of the shellfish there aren’t of Portage Bay’s market quality. Ironically, the market price for manila clams (\$1.75 per pound with some buyers) is outstanding right now, and many Lummi diggers are essentially shut out.

Lummi Natural Resources Director Merle Jefferson said the closure represents a significant loss of revenue to the tribe and its members. There is a bed of oysters cultured in the area which was planned for harvest at the period of peak value just before Christmas. In recent years, when the need was great because of failed salmon seasons, Jefferson said Lummi diggers have depended on harvests before Thanksgiving through Christmas to provide revenue to get them through the holidays.

The closure follows on the heels of a large dairy waste spill on the Nooksack River, identified by both the Nooksack and

Lummi tribes. A complaint was filed in October alleging that a dairy farmer near Everson illegally spilled up to 400,000 gallons of raw dairy waste into side channels of the river. The spill occurred when waste was over-applied to fallow corn fields and excess manure ran off into river side channels which carry flow in the winter months

Nooksack tribal water quality specialist Chris Woodward is coordinating Nooksack and Lummi monitoring of the site. “The enforcement here is real spotty,” she said. “It’s obvious farmers have a clear message they can do whatever they want.”

The Department of Ecology ordered the farmer to remove all the waste from the channels and dispose of it in a location where it will not enter the river again.

However, it is unlikely that all the waste can be removed either because it is not accessible or because it has washed into the rivers as flows rose in the past month. Waste has also soaked into the ground along the side channels. Woodward reports a manure smell in the side channels even after they have been cleaned and suspects groundwater pollution. She expects continued water quality problems and damage to fisheries.

Lummi shellfish biologist Michael Cochrane submitted a report to the Department of Ecology in 1990 warning of the threat to Portage Bay shellfish from dairy waste entering the Nooksack River. Whatcom is the No. 1 dairy-producing county in the state.

“We believe the primary cause of the problem is the dairy waste management practices in the lower watershed,” Cochrane said.



Leroy Deardorff, Lummi to shellfishing because



Georgianna Kautz, Nisqually tribal fisheries manager, stands on a dike along the lower Nisqually River that was breached recently to create new fish and wildlife habitat. Photo: T. Meyer

Land That Produced Cow

The Nisqually Tribe recently returned a dozen acres of diked farmland at the mouth of the Nisqually River to the ebb and flow of the tides, creating badly needed fish and wildlife habitat. While 12 acres of new saltwater marsh may not sound like much, it is when you realize just how fast estuarine areas are disappearing in the Puget Sound region.

In 1800 there were about 22,500 acres of coastal wetlands along the shores of Puget Sound. Since then, nearly 14,000 acres have been diked, filled and converted to uses for agricultural, port, industrial, residential and commercial development, according to a 1990 report by the Puget Sound Water Quality Authority.

The new habitat was created by breaching a 30-foot-high dike built almost a century ago. The tribe purchased the acreage from



Environmental director surveys a Portage Bay beach that is closed off of pollution. Photo: L. Harris

Cochrane's research suggested a glaring correlation between the high levels of fecal coliform in Portage Bay after periods of high water flows in the river.

"We are furious that the Department of Ecology, which has the responsibility to protect water quality, has not taken the proper actions to correct the deteriorating water quality in the Nooksack River which has been identified since the late 1980s," said Jefferson.

Lummi and Nooksack natural resources departments are planning meetings with the U.S. Environmental Protection Agency and the Department of Ecology to demand immediate and stringent action to stop future dairy waste pollution from known problem farms. — L. Harris

Is Now Producing Fish

farmer Ken Braget and has an option to purchase the entire 400-acre farm bordering the Nisqually National Wildlife Refuge, but has not yet obtained funding.

Estuarine areas — where freshwater and saltwater meet — are salmon nurseries. Their nutrient-rich waters frame the food web that supports many commercial fish and shellfish stocks. Juvenile coho and chinook often will remain at the mouth of a river for as long as a year before moving out to sea.

Restoring the farmland to its natural state honors the tribe's historical bond with the river, said Georgianna Kautz, tribal fisheries manager. "We're real excited about this project," she said. "And we're looking forward to creating more fish habitat in the future." — T. Meyer

Tribes, State, Farmers Improve Elk Habitat

While many farmers try to discourage wild animals such as elk from grazing on their property for fear of crop and fence damage, a Dosewallips River valley couple are encouraging elk to take up residence on a portion of their land.

Vern and Ida Bailey, who have spent more than a half-century on their riverside farm five miles from Brinnon have essentially turned over 40 acres of property to the elk. By allowing state and tribal wildlife managers to spread four tons of fertilizer on the acreage, the Baileys' cooperation could result in fewer reports of elk damage in the lower Dosewallips River valley, because the animals should find ample winter forage without munching on neighbors' lawns and gardens.

"We don't use that pasture, we just let a few horses on it," Vern Bailey said. "The elk are here anyway, so why not improve this place so they can use it?"

A herd of about 45 elk roam the Dosewallips River valley from the headwaters in Olympic National Park to the saltwater at Brinnon. Some of the animals spend the summer in the park, but move with winter's cooler weather down the valley where they encounter farms and homes. Reports of damage to crops, lawns, fences and other property have increased as the number of elk has increased.

The Baileys have agreed to allow the Point No Point Treaty Council (PNPTC) and Washington Department of Fish and Wildlife (WDFW) to spread the fertilizer, which is intended to help provide winter-time forage for the elk.

"It is important that the Dosewallips elk herd remain at a viable level for recreation, and habitat enhancement projects such as this are an important step in protecting this herd's future," said WDFW wildlife biologist Jack Smith.

The pasture enhancement project occurred in October. PNPTC Wildlife Program Director Sally Nickelson said the fields should continue to provide high-quality grass for the elk throughout the winter. PNPTC purchased four tons of fertilizer, while WDFW provided the tractor and operator to spread the material.

"It's starting to look real lush already in that pasture," said Vern Bailey. "They'll be using it quite a lot this winter."

The agencies will cooperate in weekly monitoring of the herd's response to the project throughout the fall, winter and spring.

"Our main concern is keeping this a wild herd," Nickelson said. "We don't want this herd to get used to being around people. We want to see them stay up in the drainage and out of town."

Tribal game managers closed the Dosewallips region to tribal hunting in 1990 in response to low animal numbers. Three years later, the state closed the region to non-tribal hunting. In April 1995, 17 animals from a Sequim-area elk herd that had become accustomed to grazing on homeowners' lawns and flowers were captured and relocated to the Dosewallips area. — D. Williams

Genetic Marking Balances Needs Of Fish, Fishermen

The Tulalip Tribes are using genetic mass marking techniques to balance the protection of wild fish from the Stillaguamish and Snohomish rivers with the need to produce harvestable numbers of hatchery chum salmon for Indian and non-Indian fishermen.

Tulalip marks all chum and chinook salmon before they leave the tribal hatchery, allowing Tulalip fisheries managers to distinguish hatchery stocks from the more fragile wild runs. That way, the tribe can emphasize its selective fisheries program and target the marked stocks through a variety of innovative management techniques.

“Our local fishing area has always been managed for wild stock production,” said Francis Sheldon, Tulalip fisheries manager. “Our hatchery mass marking programs employ the best current science to allow us to protect wild stocks as necessary, while at the same time giving our people access to the hatchery fish produced on the reservation.”

“Our local fishing area has always been managed for wild stock production,”

— Francis Sheldon

Now, because of a ground-breaking genetic mass marking program, the hatchery’s chum salmon theoretically won’t have to be marked again. By manipulating gene frequencies over a four-year chum cycle, the fish now possess a permanent genetic trait that identifies each as a Tulalip hatchery chum.

“We are using the marked chum in three ways,” said Tulalip harvest management



Richard Young, Tulalip harvest management technician, takes a sample from a Battle Creek chum salmon for genetic identification. Photo: L. Harris

biologist Kit Rawson. “We are monitoring natural spawning areas to see if our hatchery fish are straying there. We are using our marked chum as an indicator for Puget Sound fish in Canadian and U.S. mixed-stock fisheries. And we are also using the entry timing of the marked chum into our terminal area fisheries in Port Susan, Port Gardner and Tulalip Bay to help us increase the harvest rate in hatchery fish and reduce the rate on local wild stocks.”

The tribe developed the genetic mark by tagging fish returning to the hatchery, taking muscle samples and sending the samples to the state Department of Fish and Wildlife genetics laboratory in Olympia the same day. The state faxed the results of genotypes to the tribe the next morning, so that crews knew which fish to spawn and which fish not to spawn.

Now that its fish are marked, Tulalip fisheries technicians can take weekly tissue samples from chum that are caught by tribal fishermen, from in-river returning salmon and from chum that return to the hatchery. The samples are sent to the state lab for identification and the results are critical in helping the Tulalips manage mixed stock fisheries.

“We will continue to seek out innovative ways to protect wild fish while maintaining the viability of our important fisheries based on hatchery runs,” Sheldon said. — L. Harris

USFWS: Tribal Net Fisheries Pose Little Harm To Murrelets

A “Biological Opinion” by the U.S. Fish and Wildlife Service (USFWS) concluded that treaty net fisheries in western Washington are not a primary cause of marbled murrelet mortalities.

“...It is the Service’s biological opinion that the 1996 through 1998 Treaty Puget Sound Salmon net fishery, as proposed, is not likely to jeopardize the continued existence of the murrelet,” the report says.

The bird has been protected under the Endangered Species Act since 1992, and all activities with the potential of negatively affecting their survival — including development in sensitive areas, and net fisheries in certain areas, must be examined.

Marbled murrelets are sea-going birds that nest in old growth forests and feed on small saltwater fish. The birds become sexually mature after three to five years, and females lay just one egg per year, making the strengthening of the bird population a slow process. There are an estimated 5,000 to 6,000 marbled murrelets in Washington, and between 18,500 and 32,000 murrelets on the West Coast.

As with past Biological Opinions, USFWS concluded that the continued destruction of the coastal old growth timber stands is the number-one threat to the murrelet’s future. Commercial fishing practices and oil spills are noted as secondary factors in the bird’s decline. The tribes believe that other activities affecting murrelet populations should be altered or halted before treaty-protected fisheries are affected.

The tribes have developed a plan to describe the distribution and abundance of marbled murrelets in northern Puget Sound and Hood Canal. The information is being gathered in cooperation with state and federal agencies.

Previous monitoring plans in past years have demonstrated that few — if any — murrelets are killed during treaty fisheries.

A new Biological Opinion will not be required until 1999, unless the amount of incidental take of murrelets — 28 in 1996, and 33 in 1997 and 1998 — is met or exceeded.

— D. Williams



Bill Washington, SSC fisheries technician, sorts the results of a beach seine as part of a study looking at juvenile chinook. *Photo: L. Harris*

Smolt Study Helps Skagit Chinook Restoration Effort

When young Skagit River chinook salmon make a move, biologists with the Skagit System Cooperative are right on their tails.

By collecting juvenile chinook throughout the entire Skagit River system, from the Suiattle River to Skagit Bay, biologists are tracking the migration patterns and life histories of the fledgling fish in a long-term study aimed at finding effective methods of rebuilding the distressed fish runs.

SSC, the fisheries management arm of the Swinomish, Upper Skagit and Sauk-Suiattle tribes, is wrapping up its second year of work on what it hopes will be an eight-year project. The data collected will eventually help SSC develop a computer model that can evaluate cost-effective chinook restoration strategies in the Skagit River system.

“The model will help assess the effects of various habitat restoration projects, and which expenditures will result in the greatest increase in salmon returning to the Skagit system,” said Lorraine Loomis, Swinomish Tribal Fisheries Manager. “We want to enumerate the fish that rear in different habitat types at different times, and find out which strategies result in the greatest return of adults.”

Skagit spring and summer/fall chinook together once comprised the largest natural chinook runs in Puget Sound. But by 1977 a consistent decline in numbers prompted tribal actions to save the fish, beginning that year with a complete shutdown in tribal fishing for spring chinook.

“Annual commercial catches of chinook in Skagit Bay and Skagit River have declined from about 40,000 to 50,000 in 1935 down to a few hundred to a few thousand a year,” said Bob Hayman, SSC Chief of Fisheries Services. Only 458 chinook were harvested in 1994.

Based on poor escapement levels, three of six Skagit system chinook stocks were listed as depressed in a 1992 state and tribal inventory of salmon and steelhead stocks. Escapement is the number of salmon allowed to return to their river of origin to spawn and maintain the run.

As the project continues, SSC hopes to develop a computer model that can simulate the production of each chinook life history type through each stage of its life, from incubation to spawning, and compare the before-and-after benefits of each proposed restoration action.

“This is a very valuable project because it will provide the essential information needed to increase Skagit chinook production,” said Loomis. “We need to do everything we can to insure the viability of these important salmon runs.” — *L. Harris*

Paddle To LaPush Scheduled In 1997

Thousands of people will travel to the coastal Indian community of LaPush in the summer of 1997 for an unprecedented international gathering of canoes. The Quileute Tribe will host the A-KA-Lat Gathering — Paddle to LaPush, 1997, with other Washington coastal tribes, July 26-30. The tribe accepted a challenge for the paddle three years ago at Bella Bella in British Columbia.

The celebration follows a series of Native American gatherings aimed at restoring the traditions of the Pacific Northwest Indian canoe voyaging. Tribes from Canada and Washington state traveled to the Paddle to Seattle in 1989, Bella Bella in 1993 and the Commonwealth Games in Victoria, B.C., in 1994. Last summer, two Hawaiian ocean-going canoes, the Hawai’iloa and Hokule’a, visited the West Coast and Southeast Alaska.

TFW Plan Offers Better Stream, Fish Protection

An emergency rule addressing inaccuracies in identifying fish-bearing streams and leading the way toward better protection of those streams was adopted in November by the Washington Forest Practices Board.

The state assigns a classification to streams, based in part on the presence or absence of fish, with the classification determining the level of riparian (streamside) protection. Type one, two and three waters contain anadromous and resident fish, while type four and five waters do not.

The Timber/Fish/Wildlife group, a forum of state, tribal, environmental, and forest landowners, developed a plan to improve the state's stream classification system. On Nov. 14 the board approved TFW's proposal, which will remain in effect for 120 days.

The emergency rule broadens the definition of a fish-bearing stream based upon physical characteristics. It includes streams of less than 20 percent gradient and a width greater than two feet in western Washington, three feet in eastern Washington, as well as basin area criteria.

Tribal habitat biologists quantified the extent of stream mistyping through field verification of state water type maps beginning in the early 1990s. A study completed in 1994 by Point No Point Treaty Council biologists, for example, showed the maps correctly identified only half of the fish-bearing streams in several Hood Canal watersheds.

Historically, habitat protection programs have focused on fish-bearing streams and their habitat, while ignoring the smaller streams. But, biologists found, small streams have proven to be a crucial part of a watershed, acting as conduits of water, sediment, and other materials that determine quality and quantity of downstream fish-bearing habitat.

Watershed analysis was tailored to create basin-specific standards for riparian protection, but it will take many years before the process is completed on all watersheds. In the meantime, resource managers have serious concerns about the continued sur-



Carol Bernthal, Point No Point Treaty Council senior habitat biologist, collects stream data. *Photo: D. Williams*

vival of some of the endangered fish stocks in western Washington.

"Ultimately, the final solution to this problem will be an actual field review of all streams in Washington state," said Billy Frank Jr., Chairman of the Northwest Indian Fisheries Commission. "Such a comprehensive review, though burdensome, is the only way to ensure appropriate protection for fish."

The greater challenge, Frank said, will be crafting a holistic watershed management strategy for the state. Such a plan could avoid the listing of certain salmon and trout populations under the federal Endangered Species Act, as well as fulfill water quality mandates as required by the federal Clean Water Act.

— *D. Williams*

Chinook Enhancement Paying Off On Stillaguamish

Plentiful early returns of summer chinook salmon have the Stillaguamish Tribe optimistic that its 10-year wild stock restoration efforts are paying off.

"The final numbers aren't yet in, but initial indications are that it's some of the best spawning we've seen in 15 years," said Kip Killebrew, Stillaguamish fisheries enhancement biologist. "In past surveys, we didn't see near the number of redds (egg nests) or see as many spawned out carcasses as we have this year."

John Drotts, Stillaguamish harvest management biologist, said the early numbers bode well. Drotts said partial carcass counts on a 16-mile mainstem section of the North Fork already number 257 chinook, up from 206 total fish in 1994 and 191 in '95.

"In 1996 we've had so many fish we've had to sub-sample the carcasses," Drotts said. "I would say easily there's another 100 to 200 fish out there we are skipping. The number on the mainstem stretch is probably closer to 450. The numbers are way up, no doubt."

The tribe hasn't enjoyed a true chinook fishery on the river since 1983, when decades of poor land-use practices and devastating environmental conditions in the Stillaguamish Basin, coupled with high ocean harvest pressure, finally took a disastrous toll on salmon numbers. The tribe began its chinook natural stock restoration in earnest in 1986 and has since released in the neighborhood of 1 million chinook fry into the river. — *L.Harris*

Makahs Establish Whaling Commission

The Makah Tribe has established a whaling commission to develop regulations to govern the harvest of gray whales.

The commission is an organization of the traditional heads of Makah families. Family leaders will apply the principles of Makah customary law to establish rules and regulations governing the conduct of all ceremonial and subsistence whaling by Makah tribal members.

Emphasizing the importance of the Whaling Commission, Makah Tribal Council Chairman Hubert Markishtum said: "Since 1855 we have reserved the right by treaty to hunt and fish in the sea around us. Our treaty right is a property right — a fundamental right upon which this great land, the United States, was founded and is sustained today. The Makah people can do no less than stand up for our inalienable right to hunt whales. It's no different than our right to harvest other natural resources on our reservation for economic viability. We respect the whale, we have honored the whale for centuries in our songs and sacred traditions. The people of Makah have spoken clearly on this."

"We came to the conclusion that restoring whaling must be accompanied by the old ways of decision making — by consensus and by family representation," said Ben Johnson Jr., president-elect of the newly-formed commission. "Whaling is too vital to our tribe and must include a responsible body to manage increasingly complex resource decisions.

"The commission sees whaling as the way to unify and rejuvenate cultural, spiritual and hunting practices that were put on hold for 70 years. People are excited by the prospect of having whales again. It's already having a positive effect on the morale of our tribe," Johnson said. "Many people wel-

come the idea that so many families are directly involved. This commission will be new but old at the same time. It's organized in the traditional way with hereditary leadership rather than elected positions."

For the Makahs, whaling has always been central to their livelihood as a primary source of food. No more is harvested than needed and every part of the whale is used in some fashion — for food, for shelter or for ceremonial regalia.

"A deep spiritual hunger will be satisfied when the Makah people can harvest whales again," said former tribal chairman and whaling commission member George Bowechop. "Something will die inside our soul if we do not do this. We owe it to our children. That's one of the reasons why our past chiefs were so specific in reserving the treaty right to hunt whales," he said.

Traditionally, each family gets a different part of the whale to be used according to each family's ancestral rites. "Each family has ancestral ceremonies, songs and dances that reflect the sacred nature of the whale," said whaling commission treasurer Ernie Cheeka. "The memory of the whale is in our genes."

The Makahs supported protection of the gray whale while it was on the Endangered Species Act list for over 20 years. In 1994 the gray whale was de-listed. The current gray whale population has rebounded to historic high levels of over 23,000 animals, and the commission feels that taking five whales a year is prudent within responsible biological management practices. The tribe also has the full backing of the federal government consistent with its support of indigenous ceremonial and subsistence harvest rights worldwide. — *K. Boysen*

Cooperation Rebuilding Hood Canal Summer Chum

A joint effort to rebuild a weakened run of Hood Canal summer chum salmon is beginning to show positive results, with some rivers seeing more fish than have ever been recorded.

The recovery program began at the Quilcene National Fish Hatchery in 1992 in response to extremely poor Hood Canal summer chum returns. The runs were so low that the stock faced a possible listing under the Endangered Species Act.

The rebuilding plan, a cooperative effort between the tribes of the Point No Point Treaty Council, the U.S. Fish and Wildlife Service, and the Washington Department of Fish and Wildlife, involves capturing wild summer chum and moving them to the hatchery.

The tribes have contributed to the program by supplying the hatchery with live summer chum harvested in beach seine fisheries for coho salmon in Quilcene Bay. Those fish, combined with fish taken from the river by hatchery personnel, make up the majority of the summer chum available for the recovery program.

The fish are spawned at the hatchery, and their offspring are

returned to the river to begin their saltwater migration. Hatchery spawning ensures a much higher number of live offspring per mating couple than a normal river spawning scenario would.

"This year, with as much spawning as there was both here (in the hatchery) and in the river, there's going to be a strong release back into the system," said Larry Telles of the Quilcene National Fish Hatchery. "We should be able to release about 650,000 fry from this year's returns."

The 1996 returns were mainly the four-year-old survivors of 216,000 fry released in 1992. Only 24,500 fry were released in 1993; 344,000 were released in 1994; and 441,000 summer chum fry were released last year.

Most streams emptying into Hood Canal with summer chum runs reported stable or improved returns. The Hamma Hamma and Duckabush rivers had slightly higher returns, while the Dosewallips and Quilcene river systems reported the highest summer chum returns since records have been kept. — *D. Williams*

Tribes, Utility Reconnect Habitat

Passages

A heavy rain pounded the Marblemount area where crews from Seattle City Light helped fashion an access channel at the mouth of a small Bacon Creek tributary. Just downstream, a Skagit System Cooperative fisheries technician planted willow stakes through biodegradable matting that was holding the drenched stream bank in place.

The hope is that, this winter and spring, as many as 1,600 juvenile coho salmon will use the tributary and thrive in high-quality rearing habitat that was previously unavailable. The new access will also accommodate spawning adult salmon.

The two agencies are wrapping up work on a cooperative project aimed at opening nearly a half mile of rearing habitat cut off from Bacon Creek and the Skagit River by a series of natural and human-caused disturbances. Winter flooding, a Highway 20 bridge, construction of power lines and the damming of the Skagit conspired to squeeze off a traditional Bacon Creek salmon rearing refuge.

“There was good habitat in the tributary, but it was disconnected from the Skagit and Bacon Creek as a result of a number of disturbances,” said John Klochak, SSC restoration scientist. SSC is the fisheries management agency of the Swinomish, Upper Skagit and Sauk-Suiattle tribes. “We decided to reconnect this high quality habitat. This project fits with our overall watershed restoration strategy, which emphasizes reconnecting intact, high quality habitats that have become fragmented.”

Through summer and fall, the two agencies teamed up to complete the project in several phases — the first to replace a culvert at Bacon Creek Road. Next came the primary project element — providing juvenile fish access to the habitat with a roughened channel. Wood weirs, installed by Upper Skagit and Seattle City Light crews, span the channel to provide an anchor for large boulders, cobbles and gravel, which give the young coho room to pass. Other project elements included installing large woody debris for fish cover in a reach where power line clearing impacted the stream, and planting stream-side vegetation to stabilize the bank and keep the stream cool. — *L. Harris*



John Grossglass, SSC fisheries technician, stabilizes a stream bank with willow stakes as part of a joint project near Bacon Creek. *Photo: L. Harris*

Reggie Ward, Sr.

Quinault elder Reggie Ward, Sr., 69, died recently following a series of illnesses.

Reggie was a renowned character actor who played Mr. Whirlwind in the television series “Northern Exposure,” and appeared in a number of documentaries and commercial productions. Around the Pacific Northwest, he was hailed for his contributions to teaching young people the traditions and native history of the Olympic Peninsula.

Born in 1926 at LaPush, Reggie was descended from both the Quileute and Quinault tribes. A Navy veteran, he served in the Pacific in World War II. His career included time as a fisherman and fish-buyer at LaPush.

Not content with fishing at the age of 46, Reggie attended Grays Harbor College and went on to complete a bachelor of arts degree at the University of Washington.

Most recently Reggie could be seen leading the combined Quileute and Quinault dance, song and drum group at various tribal powwows, the Salmon Homecoming Celebration and other events.

A candlelight service was held in his memory Nov. 4 at the Shaker Church in LaPush. — *K. Boysen*



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