Northwest Indian Fisheries Commission

NWIFC News

Summer 2008
www.nwifc.org

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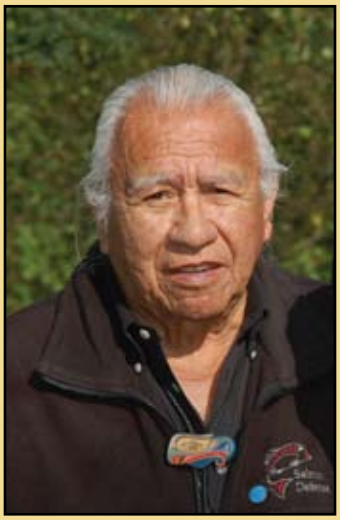
Being Frank

They're Counting On Us

By Billy Frank Jr.
NWIFC Chairman



Step by step we are working to restore the health of Puget Sound, the rivers and our Pacific coast. We're working through the Puget Sound Partnership cleanup effort and also implementing the Tribal/State Ocean Ecosystem Initiative – an ecosystem-based approach to management of our Pacific coastal waters – to make this part of the world a healthier place for all of us.

But we've really just begun the work needed to repair centuries of environmental abuses. That's why it's important to acknowledge where progress is being made, so others can learn from the example and be encouraged. Port Gamble Bay is a good example of what happens when voices are raised together from the nooks and crannies of western Washington.

Situated on Puget Sound near Hood Canal, the bay is home to a large population of herring, salmon, shellfish – and the Port Gamble S'Klallam Tribe.

Port Gamble Bay has one of the largest remaining herring stocks in Puget Sound. Herring are an important indicator species of the health of the underwater environment. They are a primary food source for Puget Sound chinook and steelhead, both listed as "threatened" under the federal Endangered Species Act. The bay is also home to two large geoduck tracts and acres of oyster and clam beds along the tribal reservation tidelands.

The bay's natural resources are priceless to the tribe, but are increasingly threatened by developers.

For 150 years, the bay, fish, wildlife and the tribe suffered from the environmental impacts of the Port Gamble Mill operations until its closure in the mid-1990s. That's why I am especially encouraged by a recent state Department of Ecology announcement of plans to further clean up the old sawmill site. Contaminated soils and wood debris will be removed, and more cleanup work is planned in cooperation with the tribe and public.

Still, development pressure on the bay continues today. The Port Gamble S'Klallam Tribe recently fended off construction of a proposed 230-foot-long multi-use dock at the old mill site. Adding man-made structures puts the bay's environment at risk. Docks create shade, which in turn harms eelgrass and other species important to herring and salmon. The tribe already is concerned about possible shellfish bed closures by the state Department of Health in response to pollution from marinas in the area. Increased boat traffic around the proposed dock would only add to the problem.

Every day, struggles like Port Gamble Bay are playing out all over western Washington. Each river, bay and creek is worth the fight it takes to protect and preserve it, because each contributes to a restored healthy environment.

If you listen carefully, you'll hear a voice supporting all of these efforts, a voice that may sometimes be hard to hear. It's the voice of generations yet to come, and their message is strong: we're counting on you.

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Tribal contact information is available at www.nwifc.org, under *Member Tribes*.

On the Cover: Nancy Shippentower-Games and Don McCloud pull in their net during the Puyallup Tribe's elders-only fishery for spring chinook. (See story next page) *Photo: E. O'Connell*

Tribe Opens Elders-only Fishery

'It means a lot to us to be back on the water. This is in our DNA.'

For the first time in two decades, the Puyallup Tribe of Indians opened a series of small ceremonial and subsistence fisheries on spring chinook. The first was an elders-only fishery in early June.

"I didn't sleep too much last night, I was excited to get out today," said tribal elder Don McCloud.

McCloud and his sister, Nancy Shippentower-Games, had caught one fish so far on the first day of fishing – a 30-pound chinook they planned to cook for Father's Day. Other fish caught by tribal members will be eaten during family gatherings or ceremonies such as funerals.

Ten boats and more than 20 fishermen over the age of 50 took part in the opening. "It's good to see so many boats out there today," said Herman Dillon Jr., chairman of the tribe's fisheries commission. "It's been a long time coming."

Increasing runs of spring chinook allowed Puyallup tribal elders to fish this year. *Photo: E. O'Connell*

The recent large returns of spring chinook to the Puyallup River watershed have been the result of hard work by tribal and state salmon co-managers. Last year, 6,000 spring chinook returned to the White River, a tributary to the Puyallup.

The Muckleshoot Tribe operates a hatchery program on the White River focused on restoring the spring chinook stock. The Puyallup Tribe also operates a handful of acclimation ponds for spring chinook in the upper White River watershed, and the state Department of Fish and Wildlife raises some White River spring chinook at one of its facilities.

Don McCloud fishes for spring chinook during the Puyallup Tribe's elders-only fishery. *Photo: E. O'Connell*

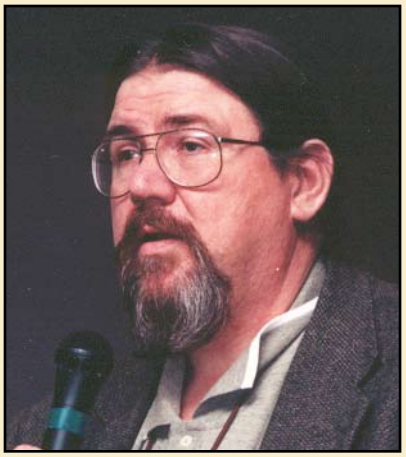
"It means a lot to us to be back on the water," Shippentower-Games said. "This is in our DNA."

"Being back on the water fishing for these salmon means that after working with everyone to bring these fish back, the run is turning around," said Dillon. "These fish aren't just for us, they aren't Indian fish – they're for everyone." – *E. O'Connell*

NWIFC Elects Officers

The NWIFC Board of Commissioners held its annual elections at the May meeting. Billy Frank Jr. of Nisqually received a vote of confidence to continue as the chairman. Frank was elected last year to a three-year term.

Lorraine Loomis (right), Swinomish fisheries manager, was re-elected vice-chair and Quinault Indian Nation policy representative Ed Johnstone (far right) was elected treasurer. Both officers hold one-year terms.



Puyallup tribal member Renee Ogden, a shellfish department intern, and David Winfrey, shellfish biologist, survey a beach recently purchased by the Puyallup Tribe.

Puyallup Tribe Acquires Shellfish Harvest Area

The Puyallup Tribe of Indians recently purchased tidelands on Vashon Island to provide tribal members with access to intertidal shellfish. The 11-acre parcel includes 1,000 feet of shoreline and is located near the northern tip of the island.

"This beach is a good place for our people to get together, have family digs and exercise our treaty rights," said Eric Bennett, the tribe's shellfish manager.

The tribe needs to buy tidelands because most of the tribe's treaty-reserved shellfish harvesting areas are polluted or paved over.

"Even the places that haven't been developed are too contaminated," Bennett said. "It's pretty hard to find a good place to dig clams around here."

The tribe bought the property with a geoduck clam fishery tax.

"Our geoduck harvesters pay into an account that we use to expand the tribe's access to other shellfish," Bennett said.

In terms of one species, the new tidelands are ready for harvest. "There are plenty of butter clams on the beach right now," said David Winfrey, the tribe's shellfish biologist. "But the tribe might end up planting Pacific oysters or manila clams."

"We hope to buy more beaches," Bennett said. "We're always looking for places within our traditional fishing area where we can harvest."

Already three groups of tribal members have requested access. "As soon as we bought the property, we started getting requests," Winfrey said. "People were waiting a long time for there to be a place to harvest."

Before tribal members can start making regular visits to the beach, the tribe has to construct a trail. "Right now there isn't very easy access. We have a lot of elders that would like to be able to harvest shellfish," Bennett said.

"Just because the beaches have disappeared or have been closed because of pollution, that doesn't mean shellfish aren't part of our lives."

– E. O'Connell

Plankton Answer Deep Questions

An upclose study of plankton in Port Gamble Bay and Hood Canal could provide telling results about the health of Puget Sound for the Port Gamble S'Klallam Tribe.

Plankton is the most basic level of the food chain for the marine ecosystem. Its levels are a key determinant of an ocean's carrying capacity.

"If you look at aerial photos from the last 10 years, the nearshore development throughout Puget Sound has increased dramatically," said Hans Daubenburger, the tribe's habitat biologist. "We need to keep an eye on how that's affecting the underwater environment."

The tribe wants to be aware of any potential problems such as fish kills, harmful plankton blooms or oil spills, so that it can take immediate action. Since 2007, Daubenburger has been collecting samples monthly in Hood Canal and Port Gamble Bay from as deep as 400 feet below the surface.

"Hood Canal and Port Gamble Bay are two areas in Puget Sound where we have a historical record of plankton samples, dating back to the 1970s," said Naomi Yoder, a fisheries biologist with the National Ocean and Atmospheric Administration Fisheries. "It's one of the places in Puget Sound where we can actually compare data we collect now to data collected in the past."

The areas are traditional salmon and shellfish harvesting sites for the Port Gamble S'Klallam Tribe, and provide critical habitat for Puget Sound chinook and Hood Canal summer chum, both listed as "threatened" by the federal Endangered Species Act.

"With the listed chinook and chum using these waters, we need to know more about what's going on," Daubenburger said.

– T. Royal

Point No Point Treaty Council biologist Steve Todd samples plankton near Port Gamble Bay.
Photo: T. Royal

Waterfront Classrooms

Learning Stewardship at the Beach

Jamestown uses gross-out factor to describe pollution

Shelby Schleve scrunched up her nose at the butter clams lying open on the picnic table, their slimy innards exposed. But it didn't take long for the Sequim Middle School eighth-grader to start poking at the clam's digestive system for a closer look.

"We're learning there's some pretty nasty stuff in the watershed," she said, after hearing about fecal coliform bacteria.

For the past four years, the Jamestown S'Klallam Tribe, Clallam Conservation District and Dungeness River Audubon Center have conducted field trips on Dungeness Bay. The students learn about water pollution and more importantly, how to keep pollution out of nearby streams and the bay.

With a plastic model representing Dungeness Bay, Jennifer Coyle-Bond of the conservation district added cupcake sprinkles to represent animal waste and fertilizers, soy sauce to represent oil from cars and powdered hot chocolate to represent loose soil from construction zones and logging. All were flooded into the "bay," using spray bottles mimicking a rainstorm, creating a mucky body of water.

"Dungeness Bay is still impacted by both elevated bacteria and nutrients, but we have seen a downward trend over the last five years," said Hansi Hals, the tribe's environmental planning manager.

Reasons for improvement likely include better management of farms, identifying and fixing failing septic systems, and reminding dog owners to pick up after their pets. – *T. Royal*

Top right: Jamestown S'Klallam Tribe marine ecologist Aleta Erickson (left) explores the inside of a butter clam with Sequim eighth-grader Shelby Schleve.

Right: Skokomish Tribe habitat division manager Alex Gouley (left) shows clams from the Skokomish tidelands to eighth-graders from Hood Canal School.

Photos: T. Royal

Skokomish tidelands textbook example of habitat restoration

Since earthen dikes were breached last fall on the Skokomish tidelands, Alex Gouley has been a busy man.

The Skokomish Tribe's habitat division manager is planning the next phase to restore the 300-acre estuary back into a natural salt marsh, and he's been teaching others the importance of the effort.

Gouley leads group tours to explain how the area has been successfully restoring itself since last fall. People walk away with a new appreciation for the importance of free-flowing tidelands, he said.

Prior to last September, a mile-long dike prevented the delta from receiving a natural tidal flow, severely affecting the health of the estuary and eliminating important juvenile salmon rearing habitat.

Recently, a group of eighth-graders from Hood Canal School, located next to the Skokomish reservation, learned about the tidelands.

"Chemicals get into the water, settle into the river and affect the water and the life in it," said Celina Brandsen, an eighth-grader at Hood Canal School.

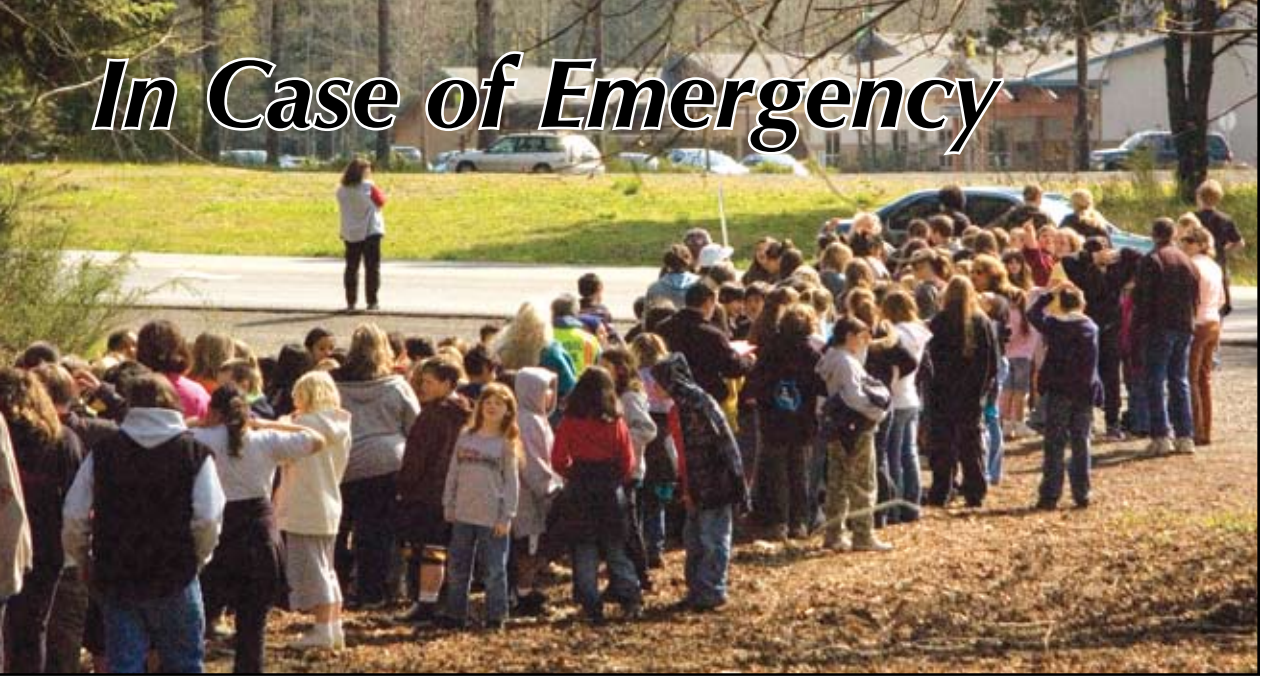
"I learned how sediment builds up and can hurt the river if it's not flushed out," added eighth-grader Alexandra Gaines.

The next step, to restore Nalley Island on the eastern side of the estuary and adjacent to the Skokomish River, is in the design phase.

"Restoring this area toward a natural state is important for the Skokomish people, as it's a current harvest area with cultural and spiritual significance," Gouley said.

– *T. Royal*

In Case of Emergency



Above: Third-graders Haylie Strong (foreground) and Destini Hannah clamber up the new evacuation trail.

Above left: Hood Canal School students practice evacuating via a trail built by the school's eighth-graders. *Photos: T. Royal*

Students create Skokomish evacuation route

Worse case scenario: It's midday and a large earthquake occurs along a fault line running between the two Cushman dams in the Skokomish River Valley. Both dams are breached, and the roads and bridges leading out of the valley are severely damaged. The resulting flood could put the Skokomish reservation under 32 feet of water within one to two hours. Homes, tribal government buildings and the Hood Canal School would be severely damaged or destroyed.

But before the water level rises, the reservation's 1,200 residents and the school's 350 students can make it to higher ground via a new evacuation trail.

As part of the school's environmental curriculum, seventh- and eighth-graders worked with the Skokomish Tribe's Department of Natural Resources to develop the quarter-mile trail that leads to an elevated area in the woods, 100 feet above the floodplain.

During an evacuation drill in April, it took 18 minutes for all the students to get to this safe zone.

"There is the chance that people could be trapped on this delta area," said Ron Figlar-Barnes, the tribe's natural resources coordinator. "Now that the trail has been tested, it's proven to be a viable option for evacuation."

The project began when the scenario was identified as a potential disaster by the Federal Emergency Management Agency. Figlar-Barnes and Laurie Byrd, a math and environmental education teacher at Hood Canal School, worked with students to create an escape trail.

The students cleared the trail and helped plan and facilitate the school evacuation drill. The school plans to hold an annual drill and incorporate the community next year.

– T. Royal

Sauk-Suiattle Tribe Unbridling River from Riprap

The Sauk-Suiattle Tribe is resolving the meandering Sauk River's erosion problem one house at a time.

The tribe worked with the Skagit River System Cooperative to acquire a $1.2 million grant to buy four properties on 55 acres of floodplain upstream of the reservation. The houses and 500 feet of riprap will be removed in hopes of restoring the river's natural movement.

The dynamic Sauk River has moved 1,000 feet during the last 50 years. Houses that were once far from the river have become waterfront property, threatened by the bank's continuing erosion. Skagit County and the U.S. Army Corps of Engineers put riprap in the river several times, at great expense, in an attempt to protect the road and the houses.

Riprap constrains the natural movement of the river – designated as wild and scenic by the U.S. government – and degrades salmon habitat. It also is a potential threat to the reservation downstream.

With the riprap removed, it is expected that side channels will form, enhancing salmon habitat in this tributary to the Skagit River.

"This is a very productive part of the Sauk for salmon," said Richard Wolten, natural resources director for the Sauk-Suiattle Tribe. "Riprap is bad for fish. Salmon don't use large rocks the way they use river banks."

Skagit County is working with the tribe, contributing funds and labor to the project.

"We have erosion threatening houses throughout the Sauk Valley," Wolten said. "This is one approach that benefits everyone involved." *– K. Neumeyer*

Riprap is bad for salmon and threatens the Sauk-Suiattle reservation downstream. *Photo: K. Neumeyer*

Training Hones Oil Spill Response

Makah drills local responders, pushes for fish-friendly cleanup

Despite the best efforts of hundreds of people and resources, 2 million gallons of a 3 million gallon oil spill hit the Olympic coast – in a simulated spill drill in Ocean Shores.

The drill proved a point tribes have made for decades: prevention is the best defense against oil spills. "As soon as oil hits the water, you are involved in environmental trade-offs in terms of the tools you can use," said Chad Bowechop, manager of the Makah Tribe's Tribal Office of Marine Affairs. "If chemical dispersants are used to move oil into the water column rather than have it hit the beach, fish larvae and other marine life is destroyed."

In May, Makah participated in a 250-person, Exxon Mobil-sponsored drill with private industry, federal, state, local and tribal participants. It was the first time the tribe was involved at the incident command level. Representatives from the Quinault Indian Nation also participated.

Bowechop credited the U.S. Coast Guard, District 13 and the state Department of Ecology for urging Exxon Mobil to involve the tribe. "We have worked really hard to get up to speed in many facets of oil spill response and it's great that our status as resource trustees is recognized and supported."

> **'The best spill response is the rescue tug.'**
>
> *– Bill Parkin, marina manager, Makah Tribe*

During two real oil spills in the past, the Makah Tribe witnessed devastation to fish, marine mammals and cultural resources. Since then, the tribe has pushed in federal and state forums for better protection of the coast from spills.

A year-round rescue tug stationed in Neah Bay is part of those efforts, though its future funding remains tentative. Additionally, the oil skimmer *Arctic Tern*, with a crew that includes two Makah tribal members, is home-ported there along with trailers of equipment and trained Neah Bay residents.

"We learned from the *Tenyo Maru* oil spill in 1991 that we had to fight for our seat at the table in oil spill prevention and response," said Micah McCarty, Makah Tribe chairman. "Our goal is to create our own professional oil spill response team."

"During a spill, it comes down to how fast and how many people and resources you can throw at a spill in the first hours," Bowechop said.

Local responders provide the best initial attack because most state or federal response can be up to half a day away.

The tribe continues to push for more mechanical forms of oil skimming rather than using chemical dispersants that harm other resources.

"One of the things underscored by the two drills held out here these last two months is that our weather frequently doesn't permit the use of dispersants or burning the oil in place," Bowechop said. Weather also can prevent skimmers from operating. "The best spill response is the rescue tug," said Bill Parkin, Makah marina manager. "You just don't want a spill to happen." – *D. Preston*

Makah tribal member Brandon Moss helps retrieve an oil boom from the Wa'atch River in Neah Bay during an oil spill drill in June. *Photo: D. Preston*

A fawn waits its turn to be fitted with a radio-tracking collar. *Photo: D. Preston*

A black-tail deer on the North Olympic Peninsula shows symptoms of hair loss syndrome. *Photo: Rob McCoy*

Hair Loss Syndrome Weakens Fawns

Hair loss syndrome (HLS) is one of the culprits in the decline of black-tail deer on the North Olympic Peninsula.

That's the early conclusion of an ongoing black-tail deer study begun two years ago by the Makah Tribe. After Indian and non-Indian harvest of black-tail deer on the North Olympic Peninsula dropped significantly between 1992 and 2003, the Makah tribal council listed the black-tail deer as a species of concern. The deer are important to Makah ceremonial and subsistence needs.

HLS is caused by a non-native species of lice that causes hair loss from incessant licking and scratching, and can eventually lead to death. Effects are most pronounced during the winter.

"We also wanted to gather information about black-tail fawn survival rates and mortality sources, because there isn't much available," said Rob McCoy, Makah wildlife division manager.

Beginning in 2006, 100 fawns were captured and fitted with radio collars on timberlands owned by the Makah Tribe and private landowners. Loose stitching of the collars allowed for growth of the fawns and quick release if it got caught on brush. Biologists and technicians used gloves to minimize transferring human scent and each fawn was returned to the spot where it was found.

Makah personnel closely tracked the fawns. When a radio signal indicated a fawn died, tribal staff moved quickly to find it and determine the cause of death. So far, the study has found that fawns are more vulnerable during the first four weeks of life and then again during the winter.

"One of the surprises of the study was the fact that of those fawns that died during the winter in 2006, none died as a direct result from HLS, even though more than half of them had it," McCoy said. Predators accounted for most of the 43 percent winter mortality rate. Of those with HLS, only half survived the winter, while those without HLS had a 64 percent winter survival rate.

Dan Signer of KBH Archers Club of Bremerton slips a male deer into a bag held by graduate student Shannon Murphie. The bag holds the fawn while it is fitted with a radio collar. *Photo: D. Preston*

> **'If you have a population in apparent decline, you have to protect the females.'**
>
> *– Rob McCoy, wildlife manager, Makah Tribe*

"Although fawns didn't die directly from HLS, those who have it appear to be more susceptible to predation," McCoy said. "It's hard for a deer to detect threats when it's obsessed with itching and licking."

Estimates of deer populations are used to establish state and tribal harvest levels, particularly for female deer. These estimates use the number of fawns seen during surveys before the fall hunting seasons and assume fawn survival is stable during the winter. "We found higher winter mortality rates than expected and that means we may have been overestimating deer populations," McCoy said.

McCoy said the study underlines the need to protect female deer from harvest. "There aren't that many does harvested out here anyway, but if you have a population in apparent decline, you have to protect the females."

– D. Preston

Stillaguamish Buffalo Flourish

Above: Stillaguamish tribal Chairman Shawn Yanity hopes buffalo meat will improve tribal members' health. *Photo. T. Royal*

Right: Mature buffalo gather around one of the herd's new calves. *Photo: K. Neumeyer*

Tribe offers bison as 'healthy alternative'

The Stillaguamish Tribe is expanding the dietary options for its members by raising buffalo.

Days after the first eight buffalo were delivered from the Yakama Indian Nation in April, one of the four cows gave birth. Shortly thereafter, two more calves were born in the Stillaguamish Tribe's pasture.

The tribe plans to acquire seven more adult buffalo by the end of the year. The herd primarily will benefit the many members of the tribe who suffer from diabetes. They will receive the lean buffalo meat, rich in omega-3 fatty acids and iron, through the tribe's diabetes program.

"With the high rates of diabetes in Indian Country, we decided to provide buffalo to our tribal members as a healthy alternative," said Stillaguamish Chairman Shawn Yanity.

"Salmon runs have declined and we don't have access to deer and elk like we used to."

The tribe conserved 56 acres of pasture for the herd and to protect the land from development. "We want to be a model for others to preserve farmland while protecting nearby wetlands at the same time," Yanity said.

Raising buffalo also will benefit the tribe culturally, he added. "We can incorporate hides, bones, tails and hooves into our ceremonies and regalia." *– K. Neumeyer*

Scouring Skagit Basin for Habitat

Skagit River tribes are working with Puget Sound Energy (PSE) to find the best possible elk habitat in the greater Skagit River basin.

PSE plans to acquire elk habitat to preserve and enhance as partial mitigation for the Baker River hydroelectric project. This is a requirement for relicensing the dam with the Federal Energy Regulatory Commission.

One of the biggest threats to the region's elk herds is the continued loss of habitat, as private timberlands are lost increasingly to residential development. Providing technical expertise and input to PSE during this process is one way the tribes help protect elk habitat against future degradation and restore what has been lost.

The Sauk-Suiattle, Upper Skagit and Swinomish tribes are participating with dozens of other stakeholders in PSE's relicensing process to ensure protection of wildlife, fish and cultural resources.

Because the elk habitat acquisition is aimed at maximizing forage potential, any properties acquired likely will be enhanced.

– K. Neumeyer

During a visit to a candidate property, biologists Chris Danilson (left), Sauk-Suiattle, and Chris Madsen, NWIFC, note tree scarring, suggesting the presence of an elk. *Photo: K. Neumeyer*

Quileute Indian Nation, State Improve Fish Passage

Frank Geyer, Timber/Fish/Wildlife biologist for the Quileute Indian Nation, and Steve Rondeau, fisheries technician, inspect a new culvert on a tributary to the Dickey River west of Forks. *Photo: D. Preston*

The Quileute Indian Nation is working with the state departments of Natural Resources (DNR) and Fish and Wildlife (WDFW) to assess and inspect all the culverts on state-owned forestlands to assure a better future for salmon and trout on the North Olympic Peninsula.

"Since the inception of Road Maintenance and Abandonment Plans under the Forests and Fish Report in 2000, we've looked at all of DNR's culverts within the Quileute Indian Nation's watersheds," said Frank Geyer, Timber/Fish/Wildlife biologist for tribe.

Through the forest practice regulations developed within the Timber/Fish/Wildlife program and its predecessor – the 1999 Forests and Fish Report – state, federal, tribal and environmental representatives, and the timber industry aim to protect fish and wildlife habitat while providing for the economic health of the timber industry.

Together, the state and tribal co-managers are working to ensure that the hundreds of DNR culverts carrying streams under roads are passable for fish where necessary.

In a landmark treaty rights ruling in 2007, federal Judge Ricardo Martinez ruled that state culverts that block fish and diminish salmon runs violate Indian treaty fishing rights. The tribes and state are now sitting down to develop a comprehensive remedy for repairing the culverts quickly.

"When it comes to replacing these pipes, it's a balancing act," Geyer said. "We're trying to ensure that fish passage requirements are met, including culverts big enough to withstand 100-year flood events, but also trying to minimize costs to landowners. You don't want to have to come back later and fix a problem either."

During a recent visit to inspect a fish-blocking culvert on a tributary to the Dickey River, Geyer and WDFW fish biologist Dan DaFoe consulted fish habitat maps and walked the stream above the culvert. The priority is to replace culverts that have the greatest amounts of usable fish habitat above them in terms of quantity and quality.

The tribal and state co-managers also meet to review completed culvert replacement projects and discuss fine-tuning them with DNR engineers.

"Once the stream adjusts to the new culvert, it's easier to see where small fixes like moving a log or adding more gravel somewhere will improve things," Geyer said. "Making these culverts passable during flood events is critical for the fish and habitat as well as infrastructure. The fixes have also improved access for adult salmon, allowing them to access additional spawning habitat."

– D. Preston

Generations

Elsa Payne, Quileute Indian Nation member, is pictured with some of her baskets in LaPush in 1929. The renowned basket weaver was part of Chief Payne's family.

Making baskets by hand is an ancient skill still practiced today. Baskets were used for trading and gathering, and for their beauty and novelty.

Photo: Quileute Indian Nation

Stillaguamish Tribe Studies Lost Pots

More than 3,000 abandoned crab pots litter the waters of North Puget Sound. Left on the sea floor, the pots continue to trap Dungeness crab and other species, which die and become bait that lures more crab into the pots.

In 2003 and 2005, the Stillaguamish Tribe removed 333 abandoned crab pots from Port Susan, containing 952 live crab and the remains of countless dead crab. Without exact figures, fisheries managers are unable to factor in those mortalities when developing population estimates and harvest regulations.

To find out how many crab are killed by abandoned gear each year, the Stillaguamish Tribe has deployed 12 test pots, commercial and recreational, in both shallow and deep waters of Port Susan, a popular, high-density area for crabbing.

The pots were baited before they were put in the water and will not be re-baited. Divers are inspecting the pots every two weeks, counting and tagging the catch, noting whether any crabs have escaped or died, been partially eaten or decomposed. Species other than Dungeness crab are recorded and released.

"We're learning what species and how many creatures are being killed by these pots, which is mortality information that fisheries planners haven't had," said Jen Sevigny, wildlife biologist for the tribe.

The Tulalip Tribes also are contributing funding to the project.

"Not only do these abandoned pots diminish the Dungeness crab resource, but they also hurt the salmon that feed on crab larvae," said Shawn Yanity, chairman of the Stillaguamish Tribe. "We don't care whose pots these are, we want to find out how much damage they're causing and remove them."

Crab pots get lost in a number of different ways. Crabbers sometimes underestimate the water's depth or simply are unable to locate a pot when its surface float becomes separated.

The tribe will share the results of the study with the state Department of Fish and Wildlife. – *K. Neumeyer*

Crabs trapped in the Stillaguamish Tribe's research pots are tagged so researchers can find out what happens when crab pots are left on the sea floor. *Photo: K. Neumeyer*

Researchers Crayton Fenn and Jeff June keep tabs on the tagged crabs that were trapped during the Stillaguamish Tribe's study of crab mortality from abandoned pots. *Photo: K. Neumeyer*

Dungeness Crab Fast Facts

- Scientific name: *Cancer magister*
- Found from Alaska to the southern coast of California, the crab was named for the town of Dungeness, Wash., where the first commercial harvesting was done.
- Dungeness crab can grow as wide as 10 inches.
- Dungeness crab are scavengers that feed on clams, worms, fish and crustaceans, including other crabs.
- Crabs grow by shedding their old shell, or molting. Young crabs molt several times during their first two years. After that, molting occurs once a year, when a crab grows about 1 inch.

Hatchery Recovers from Massive Fish Loss

Nearly 2 million juvenile chinook crowded the holding ponds at Gorst Hatchery this spring – a much different sight from two years ago when more than 1 million fish were killed in two separate incidents.

In May 2006, silver-sided juvenile chinook floated lifeless on the water's surface after 1.6 million were killed in a weather-related event. Three months later, an additional 100,000 were killed in an act of vandalism. That left only about 130,000 for release, meaning returns in 2009 will be dismal.

But this past May, as 3-inch-long smolts scurried about in the ponds, with an excited fish occasionally breaking the surface for a jump, it was time for these juveniles to make their way to saltwater.

Kitsap Poggie Club member Norm Reinhardt helps fish move out of the hatchery pond and into Gorst Creek. *Photo: T. Royal*

With the help from tribal fish culturist Doug Nolan and Kitsap Poggie Club volunteers, 1.8 million marked chinook, all fin-clipped for identification as hatchery fish, were released from the hatchery into Gorst Creek in May and June. From the creek, these fish will eventually make it to Puget Sound and finally, the ocean.

"We're so thrilled to have such a healthy brood this spring, which will begin to return in 2010 as 3-year-olds," said Jay Zischke, the tribe's fisheries manager.

Following the two fish kills, the tribe upgraded the hatchery's alarm system, which seems to be working well, he said.

A juvenile chinook makes its way to the fresh waters of Gorst Creek for the first time. *Photo: T. Royal*

"With this many fish being sent into Puget Sound, it bodes well for both tribal and non-tribal fishing opportunities in the future," Zischke said. "The Gorst facility is one of the largest fall chinook rearing facilities in the region and is a significant contributor to the Central Sound fall chinook fishery."

The rearing facility, a cooperative with the city of Bremerton and state Department of Fish and Wildlife, has been in operation since 1982, supplementing the Sinclair Inlet/Gorst Creek area with fall chinook fishing opportunities every year. Kitsap Poggie Club volunteers also play an important role, caring for the fish at the hatchery.

– T. Royal

Sharing Dinner ...or Not

An immature bald eagle lands in hopes of horning in on a mature bald eagle's fish carcass in Neah Bay. *Photo: D. Preston*

Passages

Alvin Steven Penn

Alvin "Harry" Steven Penn, 68, former Hoh tribal councilman, fisherman and fisheries policy member, passed away April 16 while fishing.

Penn was born to Steven Esau and Nellie (Fisher) Penn in Queets. He married Esther Irene Sampson.

He enjoyed fishing, hunting, baseball and watching his children and grandchildren participate in sports.

"He worked and worked and pushed and pushed for the 19 homes we got down here and the tribal center in the 1980s," said Mary Leitka, who served on tribal council with Penn. "He was also involved in one of the first important hunting court cases."

Leitka recalls marching in the streets of Seattle for fishing rights with Harry near the federal building. "We're still fighting for our fishing rights because of the good work Harry did."

Penn was known for cooking fish for many guests, as he did when hundreds of canoe journey participants stayed on the Hoh River as part of their travels. "He taught his children the right way to do things," said Leitka.

"There are fewer and fewer elders – we aren't just losing a grandfather and father, we're losing a teacher," said Leitka.

He attended the Assembly of God Church, belonged to the Hoh River Canoe Club and was on the Hoh Tribe's hunting and fishing committee.

Sherman Williams Sr.

Spiritual healer and Upper Skagit tribal elder Sherman Williams Sr., "Kaya xod," passed away May 21.

Born in 1927 in Concrete, Wash., Williams grew up on the Skagit River. He married his wife, Arlene Mary Heck Williams, more than 65 years ago in Montesano, Wash.

After working as a timber faller in the Aberdeen, Queets and Taholah areas, Williams and his family returned to the Skagit Valley where he was a commercial fisherman and spiritual healer in the Upper Skagit Indian Tribe.

As a cultural elder, Williams was an adviser for the Upper Skagit Smokehouse Organization and taught tribal members about hunting, fishing, bark gathering, traditional medicine and berry picking. He was an ordained minister.

Williams fought for the Upper Skagit Tribe's treaty rights to fish and hunt in its traditional usual and accustomed territory. The tribe named the Kaya xod Landing for him on the south side of the Skagit River at Loretta Creek, in honor of the work he did for the tribe.

Besides three of his sisters, Williams is survived by his wife, five children, 19 grandchildren, 25 great-grandchildren and one great-great-grandchild, in addition to numerous nieces and nephews. He was preceded in death by his parents, nine siblings and two children.

Blessing the First Salmon

Tribal member Jesse Edwards blesses a salmon before releasing it to the west, during a quiet moment at the end of the Swinomish Tribe's Blessing of the Fleet ceremony.

Other salmon were released to the north, south and east, after the tribe celebrated the salmon fishery with a feast for 500 people, including 350 pounds of salmon, 300 pounds of crab and 250 pounds of prawns. *Photo: K. Neumeyer*

Whaling Focus of Teens' Award-Winning Film

Rachel Haugland (left) and Olivia Boots talk to Makah tribal members Keith Johnson and Darrell Markishtum (rear) following a presentation in Neah Bay of the teens' award-winning documentary about Makah whaling. *Photo: D. Preston*

Decades of compromise and conflict surrounding the Makah Tribe's treaty right to whale have been distilled into an award-winning 10-minute documentary by two Sequim High School juniors.

"Makah Tribe: The Enduring Battle for Tribal Sovereignty" competed in the National History Day competition in June at the University of Maryland, against 100 other documentaries from around the United States. Rachel Haugland and Olivia Boots, the film's 16-year-old creators, won a statewide contest followed by second place in a regional competition to reach the national level. National History Day is a program for students in grades four through 12.

Students research a topic related to the annual theme and create papers, exhibits, performances, documentaries or Web sites. The topic for this year was "Conflict and Compromise."

Perhaps more nerve-wracking than competition, however, was screening the video for the Makah community in Neah Bay in early June.

"I was a little nervous, but mostly about our abilities being up to the task to communicate how important whaling is to them," Haugland said. "But we were also really excited to show it to them because everyone had been so helpful and supportive when we were doing research."

The video follows the tribe's struggle to exercise its treaty right to whale and includes the discovery and excavation of the village of Ozette, where artifacts clearly revealed the tribe's whaling heritage. The students' research began in the Makah Cultural and Research Center and included interviews with elders, whaling crew members, anti-whaling activists and marine mammal biologists.

"Probably the biggest surprise for me was the amount of factual and legal information there is supporting the tribe's right to whale," said Haugland. "Most of what you see reported in the media is about the emotions surrounding the issue." *– D. Preston*

Dwane Butler and his daughter, Holly Butler, 10, watch the film during a screening in Neah Bay. *Photo: D. Preston*

Tribe Continues Quest to Exercise Treaty Whaling Right

The Makah Tribe's effort to exercise its treaty right to harvest gray whales continued with a review of the tribe's request for a waiver of the Marine Mammal Protection Act (MMPA).

A draft environmental impact statement about the harvest request was issued May 9 by the National Oceanic and Atmospheric Administration (NOAA) Fisheries. Public comments have been received and written comments are being taken until August on the document that includes a range of harvest options, including no harvest.

A preliminary decision regarding the tribe's request could come by the end of the year from NOAA Fisheries. If a hunting option were recommended, regulations would be issued and reviewed by the head of NMFS as well as an administrative law judge in a formal hearing.

Meanwhile, of the five Makah tribal members who conducted an unauthorized whale hunt last year, three pleaded guilty in federal court to unlawful taking of a marine mammal in violation of the MMPA. The remaining two were found guilty of that charge as well as conspiracy.

The population of gray whales in the eastern north Pacific Ocean is estimated at 17,000 – at or above historic levels. A harvest of up to five gray whales per year will not have any impact on the overall population of gray whales.

The Makah Tribe has at least a 1,500-year-old whaling tradition. Since the gray whale was removed from the federal Endangered Species List in 1994, the tribe harvested one gray whale in 1999.

– D. Preston

Suquamish Tribe

Searching for Best Nearshore Habitat

Tiny bubbles disturb the water's surface as the Suquamish Tribe's research boat approaches Pilot Point, one of the last undeveloped beaches on the east side of Kitsap County. It could be herring or shiner perch rippling the water.

While these types of forage fish are important to the nearshore environment, the biologists on board are most interested in the salmon. A 100-foot-long beach seine is played out and hauled in hopes of finding salmon in these waters.

This scene last summer was part of the beach seine study led by the Suquamish Tribe, complementing the East Kitsap nearshore habitat assessment coordinated by Kitsap County. The focus of the beach seine study is to gather information on the juvenile salmon that are living in the nearshore during the spring and summer. The study is also aimed at identifying areas that need habitat protection or restoration to help boost natural salmon production.

"We actually don't know much about the nearshore habitat in Puget Sound," said Paul Dorn, the Suquamish Tribe's salmon recovery coordinator. "We need to document the changes that are occurring in these habitats to better understand how these changes affect the wild salmon's use of our estuaries and nearshore."

Juvenile salmon feed and rear in nearshore habitat for up to two years before moving out to sea. Eelgrass thrives in this area, providing food and shelter for the young fish. Nearshore habitat throughout Puget Sound is often damaged by construction of man-made structures, such as bulkheads, and sources of pollution, such as failing septic systems. The project is examining nearshore habitat for about 150 miles, from the southern end of Kitsap County, at Manchester, to the very tip of the peninsula, at Foulweather Bluff. The project started in early 2002 and will continue through 2009. – *T. Royal*

Above: Suquamish Tribe's Paul Dorn and Kitsap County's Kathy Peters observe a small coho. *Top left*: Beach seine crews pull in a seine near Hansville. *Photos: T. Royal*

Spartina Removal Success in Estuary

Suquamish GIS manager Tom Curley observes some of the dead spartina found at Doe-Keg-Wats after a successful application of an herbicide. *Photo: T. Royal*

The Suquamish Tribe is confident it has removed most of the invasive spartina from the Doe-Keg-Wats estuary.

The invasive spartina grass, also known as cordgrass, has been causing problems in the area since the mid-1990s. Doe-Keg-Wats is a 132-acre wetland area near Indianola that is a traditional ceremonial and harvesting site for the tribe. The tribe is focusing its efforts on a 1.5-acre tidal zone to determine what eradication efforts will work best.

"The spartina root system vigorously spreads while also trapping sediment, interfering with the function of the estuary," said Tom Curley, the tribe's Geographic Information Systems (GIS) manager. "It could potentially make Doe-Keg-Wats a meadow, choking out excellent habitat for the juvenile salmon."

Curley worked with the Washington Department of Agriculture to map out and remove the plants. The most successful effort has been applying an herbicide, Imazapyr, which is not toxic to humans, animals and fish. The herbicide is applied to the undersides of the leaves of each plant.

"It's amazing what few spartina plants are left; we've probably killed 80 percent of it," Curley said. "When we first started in the mid-1990s, we probably removed six or seven pickup trucks full of the plants. This was one of the worst infestations in Puget Sound and we're making some major progress." – *T. Royal*

Teaching the Next Generation

Above: Edward Smith of the Skokomish Tribe, 3, gets the hang of clam seeding the beaches of Potlatch State Park in May. Smith helped distribute 1 million manila clam seeds on the beach. *Photo: T. Royal*

Above: Children admire a rainbow trout caught during the Upper Skagit Tribe's Kid's Fishing Day. The children got to take the fish home, along with cedar saplings to plant. Each year the tribe invites area preschoolers to fish and learn about tribal culture. *Photo: K. Neumeyer*

Left: Lummi Nation girls taste the first salmon, shared by the community during the First Salmon Ceremony in May. The girls and their classmates danced in celebration, and they also helped hand out small servings of the fish and collect the bones. The remains of the salmon were paddled by the West Shore Canoe Family into Portage Bay and returned to the water. *Photo: K. Neumeyer*