



# NISQUALLY INDIAN TRIBE 2024-2028 ENVIRONMENTAL PLAN



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### Acknowledgements

# A PLAN FOR OUR ENVIRONMENTAL FUTURE

**T**his document is a plan for the environmental future of the Nisqually Indian Tribe. It lays out a series of steps, some near term and others achievable only over the very long term. All of these steps, when patiently implemented, will lead to Nisqually Indians protecting

the environment of their home territory and securing a sustainable future for themselves and their descendants – a future of freely-exercised treaty rights, economic sustainability, and strong cultural identity. In summary, to have the life that their ancestors sacrificed for and intended them to have.

The funding for the development of this plan comes from the U.S. Environmental Protection Agency (EPA), and many sections of the plan reflect the elements of environmental regulation found in EPA's legal mandate.

Watershed and nearby areas. Thus, this part of the plan focuses on this homeland and lays out a process for securing environmental quality that may take generations but, if patiently implemented, will succeed.

In summary, the plan calls for the Nisqually Indian Tribe to evaluate and, if appropriate, assume portions of EPA's environmental-regulation legal authority over the Tribe's trust lands, primarily the Nisqually Indian Reservation. This portion of the plan is straightforward and, if pursued, likely can be implemented in five to ten years.

The more challenging elements of the plan address how the Nisqually Indian Tribe can secure a high-quality environment for itself and its descendants forever. Fortunately, Nisqually Indians have a homeland – the Nisqually River

**OUR VISION**

The Nisqually Tribe is the descendant legal entity of the original people of its traditional homeland and the keeper of the natural world. We preserve and protect our homeland with respect and care for the native plants, animals, rivers, prairies, tidelands and forests that have sustained us since time immemorial. We also have rights secured by treaty that support the legal authority of the Nisqually Tribe to conduct these preservation and protection actions.

No plan is without risks, however, and the greatest risk for the Nisqually environmental future is the unknown impacts of climate change. Therefore, this plan evaluates possible and likely climate change impacts and various steps that can be taken to mitigate these impacts.

Also, the plan recognizes the importance of adaptive management – the willingness to modify the plan as the Tribe obtains more information and better insights into how to best achieve the plan's ultimate goals. This is a living document that will be updated regularly and implemented through a series of workplans.

# The Nisqually Tribe over the Past Fifty Years



*Members of the Nisqually Tribe Canoe Family welcome the first salmon with a song while a Tribal fisherman sets his net on the river.*

**SETTING.** The Nisqually Indian Reservation is located in Thurston County and Pierce County, Washington, approximately fifteen miles from the Olympia/Lacey metropolitan area and forty miles from Tacoma. The Reservation total 5,000 acres. Of these, 3,300 acres are controlled by the U.S. Army and used for military training. Of the remaining 1,700 acres, the Tribe owns 450 acres in Trust status, with 900 acres held in individual Indian allotments and 350 acres held under non-Indian ownership.

Off-reservation, the Tribe owns 2,621 acres of timberlands and salmon shoreline along Busy Wild Creek, the headwaters of the Mashel River.

**PRAIRIE AND FOREST.** The Nisqually Tribe's physical environment has changed significantly in the last one hundred years. Tribal elders recall a time when the entire reservation area was prairie, but since annual burning has been restricted, the landscape has shifted to primarily conifer forest.

**HOMES.** In 1970 there were only about two dozen tribal-member homes on and near the Reservation. Today there are over 130 tribal-member homes and fifty non-native homes, and the Tribe is planning to construct another forty homes and residences in the next five years.

**BUSINESS.** In 1970 the only commercial enterprise on the Reservation was seasonal fireworks sales. Today, the Nisqually Tribe is one of the largest employers in Thurston County, employing over a thousand people at combined tribal business and government facilities. In 1970, the Tribe operated out of a small office in Yelm and owned one acre – the tribal cemetery. Today, the tribal government operates five discrete campus facilities to serve tribal members.

**POPULATION.** In 1970 the on-Reservation population at Nisqually amounted to only twenty people and the tribal service-area population to less than two hundred. The population increased from two hundred to 8,400 from 1970 to 2023, which represents a 6,000% increase in just over fifty-five years.

**TRIBAL SERVICES.** Much of this increase has been due to tribal families returning to the Reservation area from other reservations as housing and employment opportunities have become available. The impact on tribal programs has been enormous. Funding levels have remained at the same levels or even decreased, forcing the Tribe to provide ever-increasing services with the same resources. Many of these returning families have low incomes, possess minimal skills and educational levels, suffer serious health problems, and have returned to the area with high hopes of improving their personal and family situations.

The status of the tribal community can best be described as “improving but fragile.” The Tribe has periodically carried out comprehensive community-needs surveys to document living conditions, health status, and quality-of-life status within the community. These assessments have confirmed that while there has been significant improvement in tribal standards of



*A huge increase in population has had an enormous impact on Tribal programs and administration.*



*Today's tribal economy is largely based not on natural resources but on Tribal enterprises.*

living and basic health, housing, employment, and income indicators over the past several decades, there are still critical conditions and problems that continue to undermine the health and stability of individuals and families, particularly for young children, women, young adults, and elders. These problems include persistent levels of poverty, impacts from opioid and substance misuse, child wellness and welfare issues, and lack of affordable housing.

**SURROUNDING AREA.** The Reservation's pace of growth has largely been matched by population growth and development in the Nisqually homeland off-Reservation. Fort Lewis and McChord Air Force Base survived the nationwide base closures of the 1990's, merged, and doubled in size, driving population and commercial growth in the area immediately surrounding the Reservation. Pierce and Thurston counties have both grown significantly.

**NATURAL RESOURCE ECONOMY.** The Nisqually natural-resource economic base has long been in a state of jeopardy, despite tribal treaty rights being affirmed by early court cases and the landmark 1974 Boldt Decision. Habitat conditions have continued to decline, and with them the Nisqually Watershed's salmon populations. Today's tribal economy is largely based not on natural resources but on revenues and jobs generated by Nisqually tribal enterprises, such as the Tribe's casino.

**SUMMARY.** Increased population and development impacts are putting an increasing strain on the Tribe's homeland and on the ecosystems that have sustained the Tribe since time immemorial. The Tribe's mission of environmental protection and stewardship has become much more challenging over the last fifty years.

# NISQUALLY TRIBE ENVIRONMENTAL PROTECTION PROGRAMS

**N**isqually environmental protection staff and programs are included in the Tribe's Natural Resources, Planning, Public Works and Legal departments. These programs include:

## DEPARTMENT OF NATURAL RESOURCES

- *Salmon Recovery/Puget Sound Recovery.* The Nisqually Tribe is the federally and state recognized Lead Entity for Salmon Recovery in the Nisqually Watershed and is also the Lead Entity for overall water planning for the Nisqually Watershed.
- *Off-reservation forestry.* The Tribe owns 2,621 acres of commercial timberlands in the watershed's Mashel River sub-basin that it manages in coordination with the Nisqually Community Forest to provide economic, environmental, and social benefits for the Nisqually Tribe and the larger Nisqually Watershed community.



The Nisqually Tribe is the state- and federally recognized lead entity for watershed planning in the Nisqually Watershed.



Nisqually Tribe planning meeting.

## PLANNING DEPARTMENT

- *Environmental Planning.* Since the early 1990s, the Nisqually Tribe has received funding through the EPA General Assistance Program (GAP). This program provides critical environmental-planning staff capacity focusing on Nisqually community priorities, including environmental protection, on-Reservation forest management, and wildfire prevention management.
- *NEPA Compliance.* The Planning Department coordinates with the Bureau of Indian Affairs to ensure that all new construction and land use on the Reservation complies with the National Environmental Policy Act (NEPA) and with all permitting requirements.
- *Nisqually-BIA Trust Forestry.* The Planning Department administers the Tribe's on-Reservation Trust Forestry program with the Bureau of Indian Affairs, which manages the Tribe's land-acquisition program for consolidating Trust and fee lands. Our Trust Forest encompasses over 1,400 acres and provides multiple-use, adaptive management, conservation and economic benefits for the Tribe.



*Engineered logjams, pioneered by the Tribe's Department of Natural Resources to improve salmon habitat on the Mashel River (above), are now used throughout the Pacific Northwest.*

## **PUBLIC WORKS DEPARTMENT**

The Tribe's Public Works Department ensures that the Reservation community's water systems comply with the Safe Drinking Water Act. Public Works operates three on-Reservation community water systems. Public Works also operates the Tribe's wastewater treatment plant and ensures that new construction complies with stormwater management best practices in compliance with the National Pollution Discharge Elimination System (NPDES).

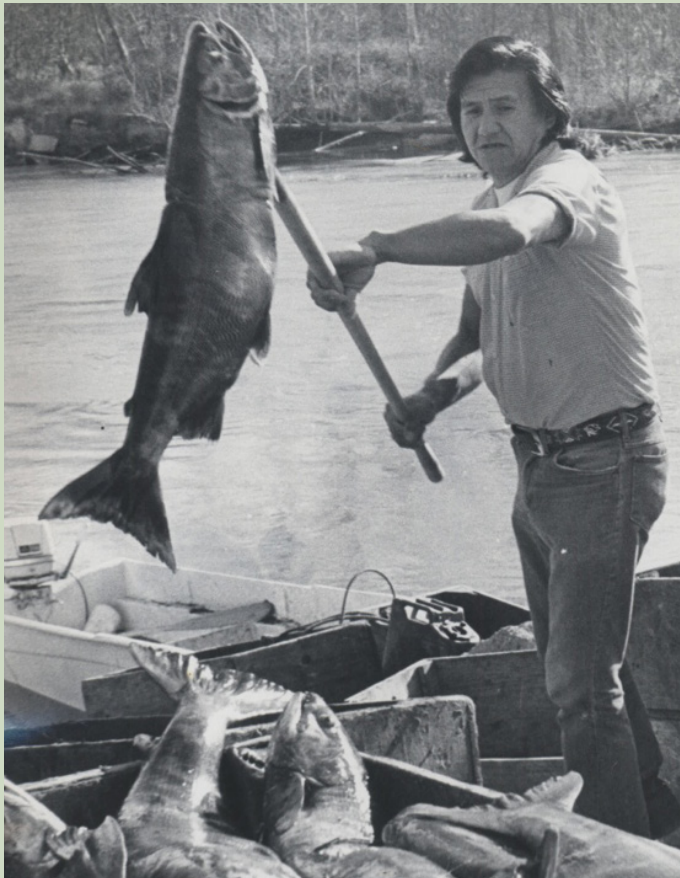
## **LEGAL DEPARTMENT**

The Tribe's Environment and Natural Resources Code (Title 14) identifies actions requiring tribal permits on the Reservation and establishes procedures for issuing those permits.



*Public Works Director Tony Berkson inspecting new monitoring equipment installed as part of upgrades for Reservation water systems.*

# NISQUALLY TRIBE ENVIRONMENTAL



*Billy Frank Jr. (left) and Willie Frank III (right): Salmon are central to Nisqually culture, but recovery of threatened Chinook and steelhead trout requires a long-term commitment.*

**In interviews and surveys Nisqually Tribe community members, elected leaders, and staff identified the following issues as current environmental priorities:**

## **1. RESTORE SALMON RUNS TO LEVELS THAT SUPPORT A COMMUNITY TREATY-RIGHT FISHERY.**

**T**wo Nisqually Watershed Pacific salmonid species (Chinook salmon and steelhead trout) are listed as threatened under the Endangered Species Act (ESA) and two others are significantly threatened and potentially could be listed. As a result, the Tribe’s fishery has been negatively impacted, with fishing opportunity severely reduced despite treaty-right provisions.

To address ESA listing, the Nisqually Natural Resources Department has developed recovery plans for the listed species and supports a large salmon-recovery program funded by several sources, including community funding and the

EPA-funded Puget Sound Recovery program. The Tribe relies on and works closely with multiple governmental agencies and nongovernmental organizations to execute its salmon-recovery strategies.

However, recovering from ESA listing requires funding and implementation of recovery actions over a very long and continued time frame. Therefore, the Tribe will need ongoing annual support for staffing its salmon recovery program and capital funds to implement salmon recovery projects on a watershed-wide scale.



# PROTECTION PRIORITIES 2024-2028

## 2. PROTECT AND HARVEST TRADITIONAL NISQUALLY FOODS AND MEDICINES BY PROTECTING AND RESTORING THE HABITAT AND NATURAL SYSTEMS THEY DEPEND ON.

The Nisqually Tribe's right to gather traditional foods and medicines on open and unclaimed lands is protected by treaty, but many traditional foods and medicines that the Tribe has long depended on are threatened, imperiled, or simply too scarce to harvest, and traditional gathering locations are often located on private or public lands that can be challenging to access.

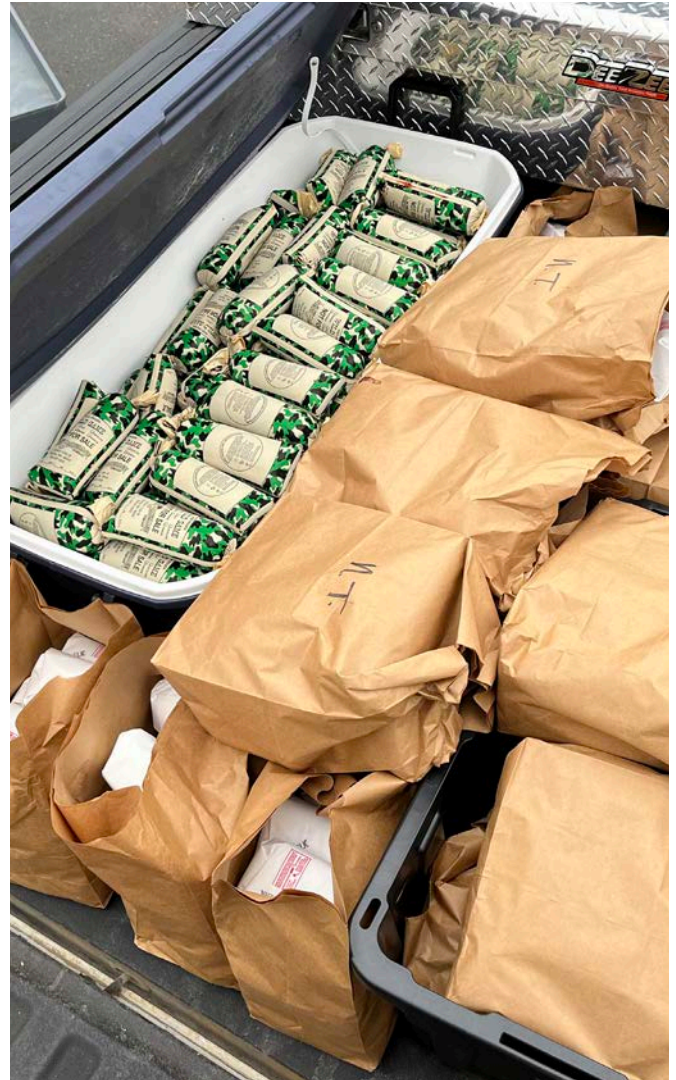
However, the Tribe has no dedicated staff capacity to advocate for and implement protection and restoration of traditional plant food and medicine habitats. To do so requires creating, funding and filling one or more dedicated staff positions charged with developing a native-foods program and providing the resources to implement that program.



The Nisqually Community Garden crew makes tinctures and salves in springtime.



Camas blooms on prairie habitat. The Tribe harvests camas both on-and-off-Reservation for a variety of uses.



Elk meat for Tribal elders.

### 3.

## DEVELOP STAFF AND COMMUNITY CAPACITY TO ADVOCATE FOR ENVIRONMENTAL VALUES – ESPECIALLY BY DEVELOPING YOUTH ENGAGEMENT PROGRAMS.

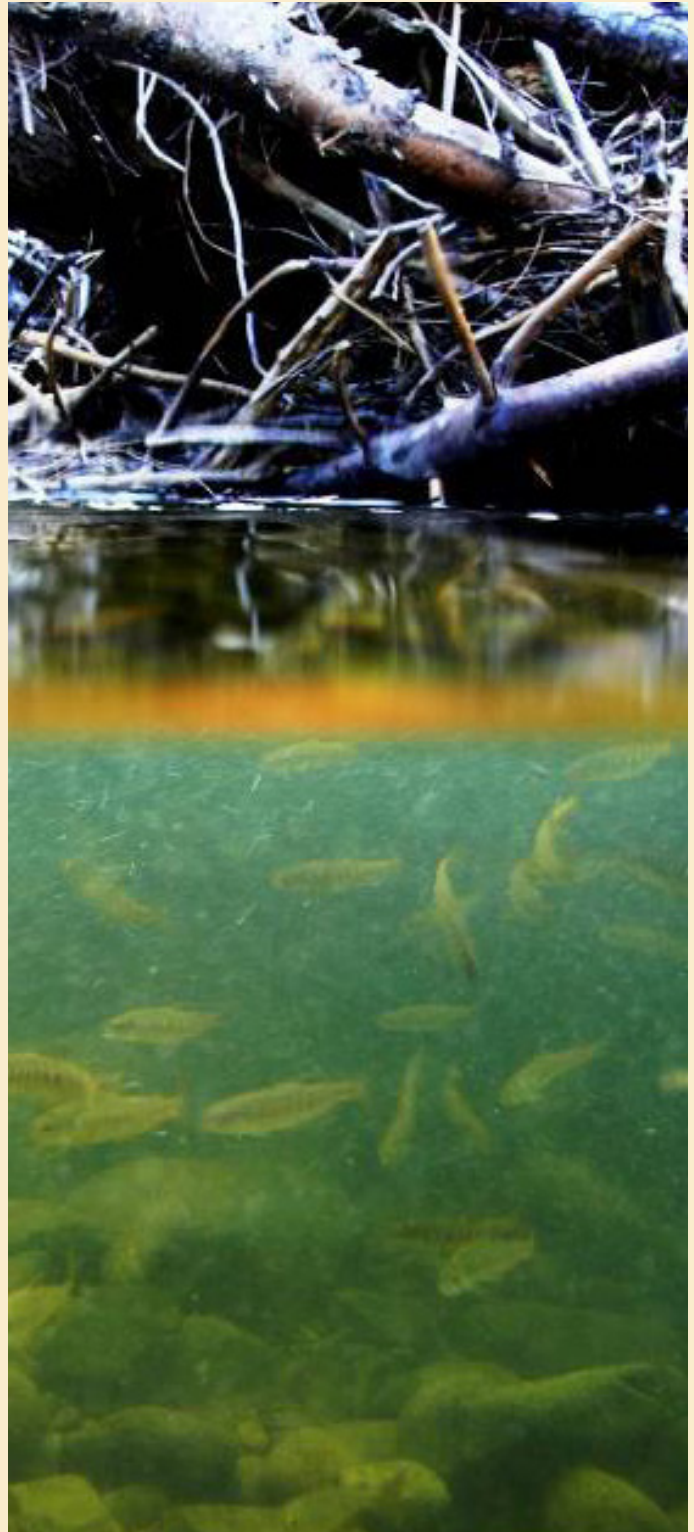


*Tobin "Sugar" Frank shows the next generation of Nisqually how to fish. The Tribe needs to develop and support a youth environmental-leadership program.*

**T**here is no coordinated effort within the Nisqually tribal community to develop and implement a community-wide environmental sustainability program, one that includes planning, outreach and education and engages the entire community in adopting sustainable goals and practices. Some Nisqually Tribe staff and community members are adopting sustainable best practices as they can, but the larger community is not. There are no dedicated resources and no staff capacity to support doing so.

Of particular concern is that there are no programs to provide Nisqually youth with opportunities to engage in environmental protection, planning, and leadership. There are occasional Tribal youth climate summits and programs offered in the region, and the Nisqually River Education Fund, a program run by the nonprofit Nisqually River Foundation, does have active and ongoing outdoor-education programs and continuing education for watershed teachers. But there is no coordinated effort, no staff capacity, and no programmatic funding to provide such opportunities for Native youth.

This Environmental Plan calls for establishing dedicated staff positions to design a coordinated, community-wide sustainability program and to develop a Nisqually community youth environmental education and leadership program.



*Young salmon beneath an engineered logjam on the Mashel River. This Environmental Plan calls for a coordinated effort within the Tribe to develop a community-wide environmental sustainability program.*

4.

# EMPOWER THE NISQUALLY TRIBE TO REGULATE WATER QUALITY AND QUANTITY ON-RESERVATION THROUGH TREATMENT AS STATE STATUS; DEVELOP LEADERSHIP AND SUPPORT ROLES IN PROMOTING CLEAN-WATER BEST PRACTICES THROUGHOUT THE NISQUALLY WATERSHED.

**I**t is critical to the health and well-being of the Nisqually Tribe that the Nisqually River’s surface and ground waters are clean and free from pollution and continue to have sustainable minimum flows for salmon habitat. The Tribe’s Public Works Department monitors Reservation drinking water per the Safe Drinking Water Act, and it reviews development proposals for stormwater impact and recommends mitigation. However, the Tribe does not regulate surface or groundwater quality or quantity.

To be effective, the Tribe needs to be empowered by the Environmental Protection Agency, through granting of “Treatment as State” status, to regulate for water quality and quantity. To achieve that status, the Tribe needs a dedicated staff position to develop the program and the resources to implement it.

In addition, at some point the Tribe should evaluate the feasibility of creating its own public-utility district.

A critical issue in the near and long term is pollution from road and highway runoff, industrial sites (including the Holroyd asphalt plant), Joint Base Lewis McChord, and legacy dump sites and deteriorating septic and waste systems throughout the watershed.

Of critical concern also is the impact of massive and escalating commercial clearcut logging operations on critical off-Reservation habitat for threatened salmon species. The Tribe needs acquisition funding to acquire

large tracts of timberlands off-Reservation, along key tributaries, that if managed sustainably will improve streamflow significantly.



*Medicine Creek Springs, an area the Nisqually people consider a spiritual place and a place for healing.*



## 5.

## PROTECT THE HEALTH OF THE NISQUALLY WATERSHED BY ACQUIRING AND MANAGING FORESTLANDS AND PRAIRIES, ON- AND OFF-RESERVATION, FOR ECOLOGICAL BENEFIT.

The Tribe's 1,700-acre Reservation is forested throughout, and the Tribe manages these forestlands to maximize their conservation values and potential for economic and cultural resources. Priorities include restoring degraded lands, providing forest access to Tribal members, and consolidating fractionalized allotment interests under Tribal ownership.

As well, since 2021 the Tribe has been acquiring off-Reservation commercial timberlands in the upper watershed, where heavy and accelerating commercial exploitation of forestlands has severely impacted downstream stream and habitat health. The Tribe now holds title to 2,621 acres of timberlands along Busy Wild Creek, the headwaters of the Nisqually Watershed's Mashel River sub-basin, and is managing these lands to restore and protect their ecological and cultural benefits.

The Tribe is using grants and capital funds to acquire title to upper watershed forestlands and change land-management practices, but these funds are scarce. Nor does the Tribe have dedicated staff positions for resource-land acquisition and management sufficient to meet current and future needs. Currently, there is only one Tribal Forestry Program position, funded by the EPA.

The Tribe needs dedicated Forestry Program funding to build capacity for planning, implementation, and management of on-Reservation forestlands. For off-Reservation forestlands, the Tribe needs capital funds for land acquisition and program funding to increase resource-land acquisition and management-staff capacity.

Recently, EPA awarded the Tribe, through the state's Department of Ecology, a low-interest, \$14.1 million Clean Water State Revolving Fund loan that funded purchase of the Tribe's off-Reservation timberlands, which include nine miles of critical salmon habitat shoreline. Further funding at this scale, through both loans and grants, will be needed to change land management



*Tribal Council Member Chay Squally, Nisqually Community Forest. The Tribe should continue to acquire timberlands in the upper watershed, where commercial exploitation has severely impacted downstream health.*

Photo courtesy Nisqually River Foundation.

sufficiently to recover threatened salmon species. But acquisition funding needs to be supported by capacity funding to acquire and manage these lands.

Also, as noted above, at one time the Reservation was almost entirely prairie, but it has long since been taken over by conifer forest. Prairie habitat is vital to Nisqually tribal culture, and Nisqually watershed prairielands harbor at least four species currently listed under the Endangered Species Act. The Tribe needs to develop a program for acquisition and restoration of off-Reservation prairielands and will require capacity funding to do so.

The Tribe also needs to maintain ongoing and close coordination between its forestry and land management programs, and its emerging environmental protection program, to ensure that tribal forestry, land management, land use, and master planning programs support the community and Reservation environmental-protection vision and goals, under a sustainable-management approach.

6.

## ENSURE THAT ON-RESERVATION RESIDENTIAL AND COMMERCIAL DEVELOPMENT PROTECTS CLEAN AIR AND WATER BY MANAGING AND MITIGATING TRANSPORTATION AND DEVELOPMENT IMPACTS.

The Tribe’s current permitting process considers environmental impacts for governmental buildings, but the Tribe’s Environmental Code was last updated some time ago, and sections of the Code are outdated and need to be reviewed and updated. Nor does the Tribe have staff capacity to extend its land-use jurisdiction over non-tribal areas of the Reservation. In particular, the Tribe needs more dedicated planning staff for residential permitting.

Protecting air quality is important to the Tribe.

Protecting air quality is important to the Tribe. Some tribes have assumed federal regulatory authority for managing reservation air quality, and that’s an option for Nisqually going forward. In the meantime, it’s important to support Tribal members in understanding and managing the current system of clean air regulations as they impact Tribal activities on the reservation, and in particular to support Tribal members in working with the Olympic Region Clean Air Agency (ORCAA.)

7.

## BUILD CLIMATE-RELATED FLEXIBILITY AND RESILIENCY INTO ALL NEW CONSTRUCTION OF TRIBAL HOMES AND BUILDINGS AND RETROFITTING OF EXISTING BUILDINGS (ENERGY EFFICIENCY AND RENEWABLE ENERGY).

The Tribe’s Building Department has an active program for constructing new homes and governmental and commercial buildings on the Reservation, and to a limited degree the Department is incorporating clean-energy systems and energy efficiency into their design, construction, and operation.

Recently, the Tribe was awarded a Climate Pollution Reduction planning grant that will fund a greenhouse-gas emissions inventory of all Tribal buildings (and will later be expanded to include the transportation, public works, and solid waste sectors).

However, there is only limited project funding available for green design, and construction funding is extremely hard to secure. The Tribe also needs funding to incorporate clean-energy systems and energy efficiency into the retrofitting of existing residential, governmental, and commercial buildings.



The Tribe will install solar panels and backup batteries on its new Elders Village homes. The Tribe should also incorporate clean-energy systems and energy efficiency into the retrofitting of existing residential buildings.

## 8.

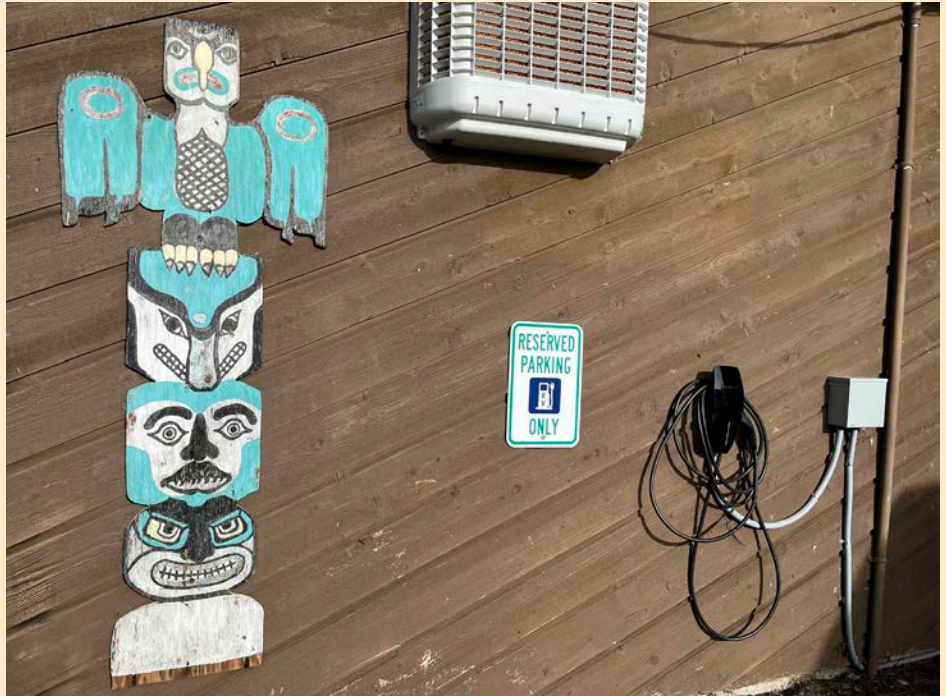
### ENCOURAGE ADOPTION OF CLIMATE-FRIENDLY TRANSPORTATION PRACTICES IN THE RESERVATION COMMUNITY.

**T**he Nisqually Tribe wants to see its government, enterprises, and community adopt clean transportation technologies and practices and supports their doing so.

The Tribe has already taken steps in this direction: There are now twenty electric-vehicle charging stations on the Reservation. However, they are funded by tribal enterprises and government only as financially feasible, and only four are currently accessible by the general community. The Tribe should have at least thirty stations available for community use but to do so needs to provide more construction funding.

The Tribe also needs funding to replace aging fossil-fuel vehicles – private, commercial, and governmental – with electric or other types of clean-energy vehicles.

A critical first step will be completion of a greenhouse-gas emissions inventory for the



*The Tribe has twenty electric-vehicle chargers on the Reservation. The community needs many more.*

Tribe’s transportation sector as part of developing a comprehensive climate adaption plan. The Tribe has received a Climate Pollution Reduction planning grant that it anticipates using to fund the inventory.

## 9.

### REDUCE SOLID WASTE IMPACTS OF THE RESERVATION COMMUNITY (RESIDENTIAL, GOVERNMENTAL, COMMERCIAL, AGRICULTURAL, AND FISH-PROCESSING).

**T**he Nisqually tribal government does not have a formal recycling program, but in surveys the Reservation community consistently lists developing one as a highest priority. While there is some limited recycling capacity in governmental facilities, community members don’t have the option of curbside recycling.

The tribal government strongly supports making recycling available to the fullest extent possible and clearing the Reservation of solid-waste and debris

dumping. However, it must provide funding to build staff capacity for developing and implementing solid-waste management and recycling programs and for continuing education for existing staff about how to reduce waste and expand recycling.

Potential technical assistance and funding sources include the Washington Department of Ecology and Washington State Recycling Association as well as Tribal Solid Waste Advisory Network and EPA Tribal Solid Waste Programs.

**10.****PROTECT THE NISQUALLY RESERVATION COMMUNITY BY PREPARING FOR SHORT- AND LONG-TERM CLIMATE IMPACTS.**

**E**nvironmental planning for the Nisqually community must address climate change. Some tribal programs are beginning to incorporate adaptation and mitigation into their planning, but the Tribe as a whole does not have a climate adaptation or mitigation plan and is not prepared for expected climate impacts. The causes of climate change are global but local mitigation is needed in the near term.

The first step is to develop a comprehensive mitigation plan, and the Tribe was recently awarded a Climate Pollution Reduction planning grant to begin that work in its building, transportation and other sectors by completing greenhouse-gas

emissions inventories. A fully developed plan must address a spectrum of climate-related impacts and issues, such as extreme heat, particularly on elders; weatherization of existing tribal housing and buildings; energy-efficient building design and construction; on-Reservation tree planting, both for shade and for carbon sequestration; and acquisition and restoration of large-scale, off-reservation watershed forestlands both to sequester carbon and to benefit streamflow, water quality, and salmon habitat.

The Tribe will also need dedicated funding to build staff capacity for plan implementation and ongoing planning.



*Solar panels, Elders Center. Some Tribal programs are beginning to address climate change impacts, but the Tribe as a whole needs to develop a climate adaptation plan.*

# Appendices

## APPENDIX A: NISQUALLY COMMUNITY ENGAGEMENT SUMMARY

In Spring 2023, the Tribal Planning and Natural Resources departments co-hosted a Nisqually community workshop to identify and discuss environmental priorities.

### Highest priority issues (cited by approximately 80% or more of total participants) Reservation cleanup concerns:

- Abandoned vehicles, boats etc
- Impacts from homeless camps
- Waste from homeless camps
- Opioid-injection drug paraphernalia
- Household recycling program
- Housing annual cleanup event
- Billy Frank Jr. cleanup event
- Funding to clean up old building materials on Tribal lands

### Reservation housing and Tribal development concerns:

- Upkeep and updates for older housing
- Air conditioning for Tribal homes
- Solar panels for Tribal buildings and homes
- Weatherization program to reduce energy costs to Tribal families
- Optimization of Green Building Practices, such as non-polluting green materials

### Native plants, trees, landscaping concerns:

- Plant more trees as part of Tribal development projects
- Provide Tribal community with trees for planting
- Support sustainable landscaping (traditional plants, rain gardens)
- Develop site-clearing policies and procedures to preserve native plants

### Other priorities:

- Assure safe drinking water
- Continue salmon recovery efforts
- Address Salish Sea pollution

Over 50 people participated at the workshop and a total of 93 community members completed the survey. Here is a summary of the issues the community identified:

### Need more information - Top Responses (Approx. 20% or more of total participants)

- Comprehensive climate change plan
- Air conditioning for Tribal homes
- Older housing upkeep & updates
- Plan for WA State transition from gas vehicles
- Holroyd gravel pit expansion
- Asphalt recycling facility in the Nisqually Valley

### Top “Lower Priority” issues – approximately 15% or more of total participants

- Artillery noise from JBLM
- Holroyd gravel pit expansion
- Reservation powerlines
- Increased public transportation options
- Plan for WA State transition from gas vehicles

### KEY QUOTES FROM THE WORKSHOPS



*“My primary environment concern is everything – the air, the water, the land, the elements and the People. When we do not take care of these elements then we do not take care of one another because we are all connected. We as Indigenous People know that we are the stewards of this land, and if we do not pay attention to what we do ourselves along with what others do then we are not taking care of the land or the Tribe.”*



*“I think we should show people the effects that we are leaving on polluting our earth. I think everyone should know how this is affecting our salmon, our wildlife and the land that we are leaving for our children.”*



*“Protecting the plant wildlife as best we can from pollution and harm from development projects, and rising populations in our area.”*





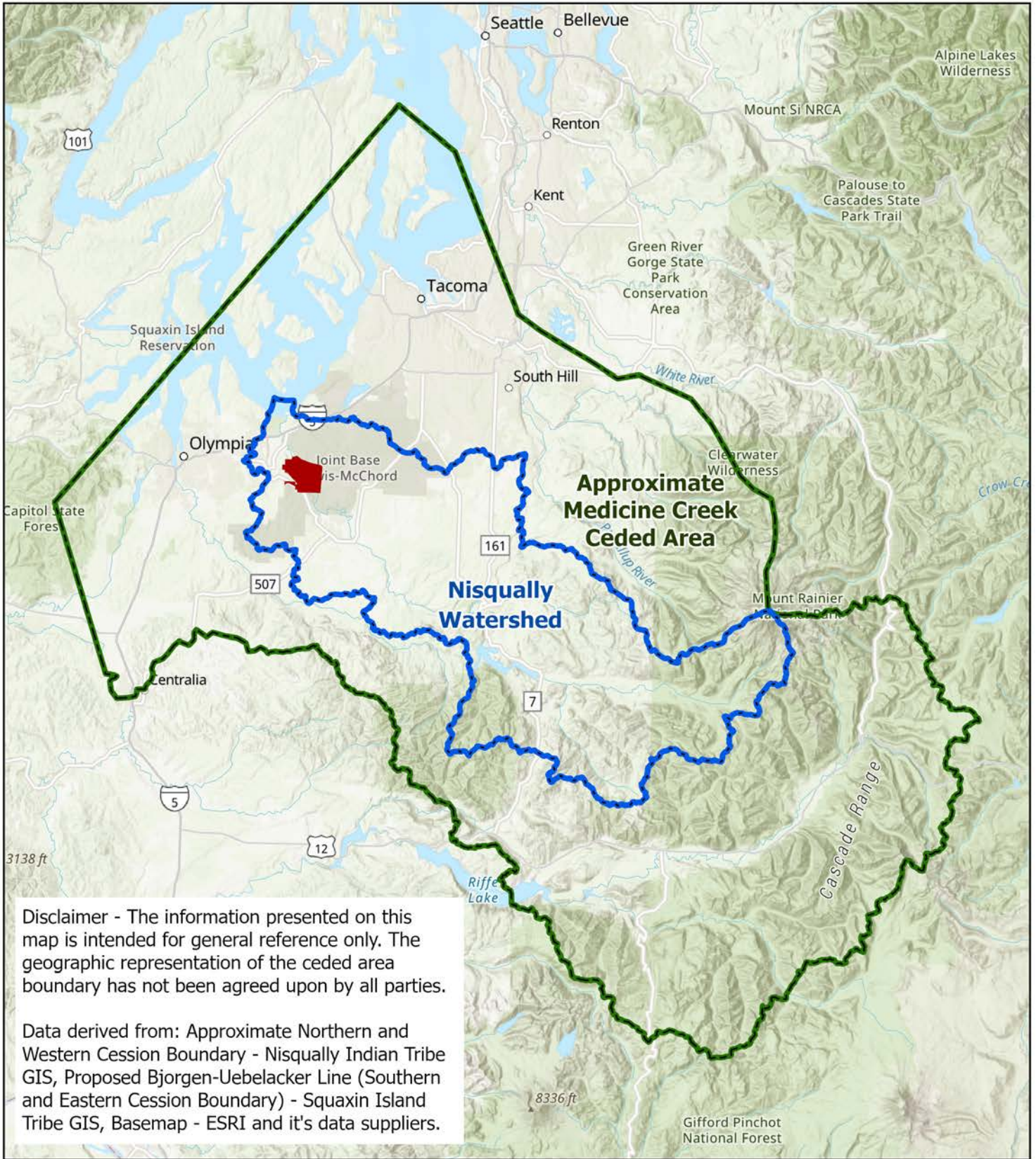
Members of the Muckleshoot, Puyallup and Squaxin Island tribes, all parties to the Medicine Creek Treaty, helped the Nisqually Tribe plant descendants of the Medicine Creek Treaty tree, and all took seedlings home to plant.



**WE RECEIVED MANY WRITE-IN COMMENTS ON THE SURVEY FORMS.  
THE TOP ISSUES ADDRESSED IN THE COMMENTS ARE:**

**ISSUES/CONCERNS**

**# OF COMMENTS**

Homeless/Yard Clean-up/Abandoned Vehicles/Trash	43
Clean Water For River	23
Wildlife/Salmon Protection	20
Recycling/Composting	15
Green Energy/Energy Efficiency	17
Habitat Restoration/Protection	11
Traditional Foods/Medicines	13
Tribal Land Use	12
Land Acquisition	10
Housing	12
Habitat Restoration/Protection	11
Youth Education	11
Forestry	9
Tree Plantings	9



-  Nisqually Reservation
-  Nisqually Watershed (WRIA)
-  Medicine Creek Treaty Ceded Area



**Nisqually Indian Tribe**  
Cartography by: K. Anderson, 9/13/2023

## APPENDIX B: TREATY RIGHTS

**A**ny consideration of an environmental plan for the Nisqually Indian Tribe must begin with the basis of the Tribe itself in federal law.

In 1854 the Washington Territorial governor, Isaac Stevens, was directed to negotiate treaties with the various Indian Tribes of the Territory. The first such treaty negotiation occurred in late December 1854, within the Nisqually River Watershed at a traditional tribal meeting ground along Medicine Creek.

These negotiations resulted in the Treaty of She-Nah-Num, or Medicine Creek, of 1854, ratified by the U.S. Senate in March 1855. The Nisqually Indian Tribe is one of the successor sovereign nations of the tribal signers of the treaty and is responsible for maintaining the rights secured by this treaty.

The primary purpose of the treaties for the United States was to secure full ownership of the land owned by various tribes in aboriginal title. Another purpose, important for the Indian

signers, was to secure for these tribes and Indian people the right to continue to live on identified reserved lands and in certain ways throughout their homelands. In other words, treaties secured for the Nisqually Indians the right to a secure and sustainable future for themselves and their descendants.

**T**he Medicine Creek Treaty, as subsequently modified by Executive Order, established the Nisqually Indian Reservation and the rights of the Nisqually Indian people to have a safe and productive homeland for themselves.

These were binding legal agreements between the parties and continue in force today. Regarding the federal government, the responsibility to protect and enforce the treaty agreement falls, to some extent, to all federal agencies.

For the purposes of the Nisqually Indian Tribe's Environmental Plan, the scope of the plan must include all issues that impact the continuation of the Nisqually Indian Reservation as a safe and productive homeland for the Nisqually Indian people.



*Members of the Medicine Creek Treaty tribes view the original treaty prior to it going on display at the Smithsonian's National Museum of the American Indian, in Washington, D.C.*

## FISHING, HUNTING AND GATHERING



The Medicine Creek Treaty reserved for its signers certain rights off the established Indian reservation. Article 3 of this treaty states, in part:

***The right of taking fish at all usual and accustomed grounds and stations, is further secured to said Indians in common with the citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands; Provided, however, that they shall not take shellfish from any beds staked or cultivated by citizens . . . .***

Similar articles are found in all of the Pacific Northwest treaties (the so-called Stevens Treaties). They provide for off-reservation fishing, hunting, and gathering rights. However, what that language means practically led to extensive litigation, beginning in the 1880's and continuing until now.

For the purposes of the Nisqually Indian Tribe's Environmental Plan, the fact that the Tribe has treaty rights off its reservation means that the scope of the Environmental Plan must necessarily include environmental questions and issues that involve off-reservation lands.

**Fishing:** The environmental elements for salmon, shellfish and other fisheries are substantial and therefore merit a separate section of this Environmental Plan. See Appendix C, "Fishing Rights."

**Hunting:** Nisqually Indian hunters have always hunted a variety of game to provide for their families' many needs. These activities continue today. Hunting regulations are established by the Nisqually Fish Commission and set rules for the hunting activities of all Tribal hunters.

The primary hunting targets are deer and elk, the large game animals that provide quantities of meat. In addition, hunting is also conducted for ceremonial reasons and to provide food for

community events. The hunting of marine mammals has been suspended in recent decades but is under consideration for reinstatement.

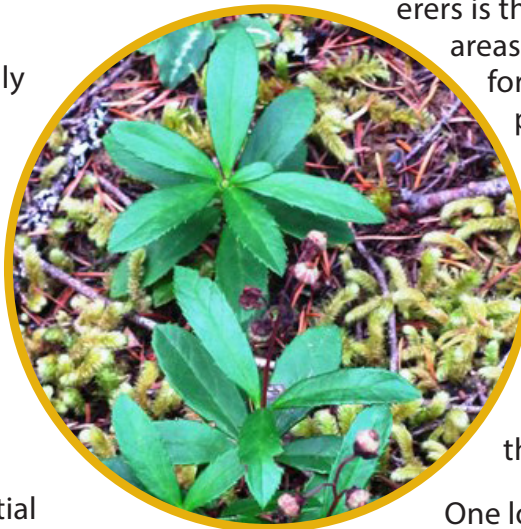
The primary difficulty encountered by hunters is access to traditional hunting areas. Secondary issues include various disease threats that may impact certain target species. One long-term question is the impact of the changing climate on hunting activities and the health and productivity of game species.

**Gathering:** Nisqually Indians have always gathered plant products, both for food and for traditional medicines. These activities occur by means of individual and family activities and larger community activities. Each year for centuries Nisqually Indians have journeyed to the mountains in the late summer to gather huckleberries, an important activity for food gathering and for the annual ceremonial round.

The primary difficulty encountered by tribal gatherers is the loss of traditional gathering areas through changes in land use – for example, conversion of native prairies into pasture. Most of the resource sites available for gathering during treaty times have been lost, and access to remaining traditional gathering areas is often restricted. Currently, the nutritional value of gathered traditional plant products is less important than their cultural or ceremonial value.

One long-term question to be addressed is the impact of the changing climate on traditional gathering activities and the health and productivity of the target plants, in particular mountain huckleberries.

*Gifford Pinchot National Forest* – Gifford Pinchot National Forest (GPNF) is a major forest manager in the Nisqually Indian Tribe's Usual and Accustomed hunting and gathering area. (Part of the Nisqually watershed is within the Mt. Baker-Snoqualmie National Forest, but that territory is managed by GPNF). The Tribe has established cooperative working relationships with GPNF for managing huckleberry harvests and hunting access.



*Prince's pine, or pipsissewa, traditionally gathered for medicinal uses.*

## APPENDIX C: FISHING RIGHTS

**A**s discussed under the Treaty Rights appendix, the Nisqually Indian Tribe, as a matter of federal law, has the right to harvest salmon and other finfish, and shellfish, in the Tribe's usual and accustomed places. By implication, Nisqually and other tribes also have a treaty right to a certain level of habitat protection for the fish and shellfish species.

As anadromous fish, salmon utilize a wide range of habitats, from their freshwater spawning and juvenile rearing areas to estuaries and the greater Puget Sound area, which they migrate through as they transition to and from their third important habitat, the Pacific Ocean itself. Within the freshwater area, the key issues for salmon success are stream flow and water quality.

The stream flow issue is discussed at some length in the watershed planning section of this Environmental Plan. Mainstem flows in the Nisqually River are subject to federal license requirements and are well protected. Tributary flows, in contrast, are more complicated. The tributary streams for salmon use for spawning are closed by the State of Washington to further out-of-stream water diversion. This is good.

**H**owever, tributary stream flows depend on many factors other than diversions. Recent studies indicate that differing land-use patterns can change stream flows, especially during the critical summer low-flow months. Thus, recent approaches to protecting summer stream flows focus on the overall landscape of the tributary sub-watershed. For forested tributaries, managing commercial forests for longer rotations can increase a stream's base flow substantially. Thus, simply changing a land-use pattern can be a benefit for stream flow and an element of a long-term environmental plan.

Stream water quality depends on upholding various water quality measurements. Many

water quality standards have little impact one way or another on salmon habitat. An exception might be sediment; large discharges (i.e., landslides) of fine sediment into tributary spawning areas likely has negative impacts on habitat for a short time, and proper maintenance of roadside culverts in steep-gradient land is one important way to limit the risk of landslides.



For the mainstem Nisqually River, sediment from the upper watershed is cut off by Alder dam and reservoir. Thus, and ironically, it is possible and perhaps likely that the absence of sediment in the mainstem river is having a negative impact on salmon habitat, particularly in the Nisqually Delta estuary. Studies investigating the impact of this possible lack of sediment are underway, including investigating whether they might be made worse by a future rise in sea level.

**T**he greatest risk to the quality of stream habitat for fish is toxic inputs. Under the off-reservation water quality section of this plan we discuss three of these issues for the Nisqually watershed, polybrominated diphenyl ethers (PBDEs), 6PPD-quinone, and per- and poly-fluorinated substances (PFAS).

Diminished water quality is also the single greatest challenge facing Tribal shellfish harvest. The Nisqually Tribe has its own oyster beds, and its divers also annually harvest hundreds of thousands of geoduck, a large and important sub-tidal commercial clam. Tribal members, exercising the Tribe's treaty rights, also dig a variety of clams and harvest mussels for personal consumption. Since shellfish are sometimes eaten raw, the key water quality standard regarding them is anything that would negatively impact the health of their ultimate consumers – humans. Also, some toxins cannot be eliminated by cooking alone. Therefore, the Nisqually Tribe's shellfish program, the Washington Department of Health, and local health departments frequently conduct water quality testing.

## APPENDIX D: WATER AND WATER RIGHTS

**T**here is no resource more important to secure for the protection and implementation of Nisqually treaty rights and community development than water – abundant water of excellent quality for now and into the distant future. Therefore, a major portion of the 2023 Environmental Plan is about water.

Water, obviously, comes from precipitation, and the Nisqually Indian Reservation and watershed are well placed to receive abundant rainfall. The Pacific Ocean is less than one hundred miles distant, and its usual wind and current patterns bring regular rainfall in good amounts, although the actual precipitation in any one year may vary substantially. Projecting from the records at the weather station at the Olympia Airport, we know that the Reservation and nearby areas annually receive about fifty inches of precipitation.

For the Reservation and the broad area surrounding it, almost all precipitation percolates into the ground and enters the aquifers. This is because it's an area of prairies, with porous sand and gravel soils. As a result, there is a very substantial groundwater source, although the ability to tap into that source varies from location to location.

Annual precipitation in the Nisqually Watershed increases as elevation increases. In the Eatonville area annual precipitation is about 65 inches. Annual precipitation at Longmire, in Mount Rainier National Park, is 86 inches, and at Paradise, this increases to 116 inches. Above two thousand feet in elevation, much of the precipitation in winter falls as snow.

**O**ne important characteristic of water is that it's always on the move. We call this never-ending journey the water cycle. Water cannot be captured and controlled like landed property. Rather, it can be put to beneficial use only while it is moving nearby. Generally called "water rights," this right to use water is an essential element of the Nisqually Indians' free use of their homeland, a use secured to them by treaty. Water that remains in streams, or in the ground, during its journey is also of benefit.

When we think and write about water rights, we are thinking about two different things. The first is the



*The Nisqually Tribe takes government officials on tours of the Nisqually River to show the imminent danger of the two Interstate 5 bridges washing out in a major flood. The Tribe is intimately involved in planning options for replacing the bridges.*

putting of water to beneficial use – the use of water for irrigation, drinking water and the like. The second is leaving water in streams to protect instream habitat to benefit fish and other natural resources. In this report we refer to both as beneficial uses and as water rights.

From the late 1970's on, the Nisqually Tribal government and its Planning, Natural Resources and Public Works departments have worked on water issues, and these efforts take two distinct tracks.

First, there is water and water rights for the Nisqually Indian Reservation, both for its current situation and for its full development as a homeland for the Nisqually Indian people into the distant future.

Second, there is maintaining instream stream flow to support salmon production and thus the Tribe's treaty rights to harvest salmon (treaty rights also apply to other activities, but water to support these activities is generally assumed to be met by instream flows for fish). Each of these will be considered separately.

**On-Reservation Water** – All drinking water on the Nisqually Indian Reservation comes from wells that tap into aquifers that underlie it. As the Reservation and its facilities and residences have expanded steadily since the 1970's, so too has their drinking-water delivery network. Meeting the Tribe's expanding water supply needs has been the responsibility of the Tribe's Planning Department and, more recently, its Public Works Department, supported by the Indian Health Service.

The history of the development of these drinking-water wells and delivery systems follows the general thread of Reservation growth. The first production well and delivery system was developed in 1977 in association with the first tribal center and the initial on-reservation federal Housing and Urban Development Agency housing communities. Additional wells and delivery systems have been established in association with casino development and expansion of Tribal housing and other facilities in the vicinity of the Youth Center. Production from current wells is sufficient to meet current Reservation needs.

In the last decade, the City of Olympia received permission to transfer its full water rights from McAllister Creek, a surface water source, to a new wellfield located upgradient and tapping a deep aquifer transiting to Puget Sound. The city and the Nisqually Indian Tribe signed an agreement concerning this transfer.

For more information on the new wellfield, see appendix E, “Nisqually Tribe Water Agreement with the City of Olympia.”

**Instream Flows** – The Nisqually River is about 72 miles long, having its headwaters at several glaciers in Mount Rainier National Park and its mouth in Puget Sound at the Nisqually delta. The Nisqually River is the largest freshwater stream entering southern Puget Sound, and, with its relatively natural estuary conditions, it provides critical habitat.

Minimum instream flows for the Nisqually River have been established downstream of the two hydroelectric projects (Tacoma Power and Centralia City Light) operating on the Nisqually River. These flows are the result of lengthy studies that determined ideal minimum flow requirements to benefit salmon habitat, and these minimums were written into the federal licenses for the two projects. They are also elements of litigation settlement agreements signed by the Nisqually Indian Tribe and the two municipal utilities.

Securing instream flows for tributary streams followed a different track, with the Tribe using a regulatory process developed by the Washington Department of Ecology – the Instream Resources Protection

Program (IRPP). As a result of the IRPP investigations and administrative process, the State of Washington adopted rules that provided minimum flows for the Nisqually River and the Mashel River and closed all other streams in the salmon migration area to future out-of-stream water rights.

For the future, we are reviewing what impacts, if any, climate change will have on stream flows. Current projections for climate change impacts suggest that the average amount of annual precipitation for the Nisqually Watershed will not change significantly. However, it is likely that less precipitation will fall as snow and that this will change the pattern of seasonal stream flows.

**Watershed Planning** – In 1997 the Washington State Legislature, responding to requests from throughout the state, enacted the Watershed Planning Act. Its purpose was to develop a comprehensive and cooperative method of determining what the current water resource situation is in each of the state’s watersheds and to provide local citizens and governments with the maximum possible input concerning goals and objectives for water resource management and future development.

The Nisqually Indian Tribe was chosen to be the Lead Agency for watershed planning in the Nisqually Watershed. Working through a Planning Unit, a series of reports and plans have been developed in the intervening years. See Appendix I, “Watershed Planning,” for a more complete discussion.

**Water Quality Testing** – At present the Nisqually Tribe does not have the ability to conduct its own water quality testing, either for instream flows to support salmon restoration or for safe drinking water for the community. Thus, one of the key elements of this Environmental Plan is to seek funding for the Tribe to develop capacity to do professional water quality testing. This capacity would benefit the Tribe’s drinking water system, its shellfish program, its food sovereignty program and the long-term health of its important off-reservation streams.



## APPENDIX E: THE NISQUALLY TRIBE'S WATER AGREEMENT WITH THE CITY OF OLYMPIA

In the 1940's the City of Olympia obtained water rights for Medicine Creek Springs, also known as McAllister Springs, at the headwaters of Medicine Creek, and developed facilities that made this site the city's major source of drinking water. But early this century, for various security reasons, Olympia sought to move its water facilities to a new wellfield, a site that would tap into groundwater at a location south of the springs. Olympia was not seeking additional water rights; it was seeking to transfer its full existing water rights, including undeveloped rights, to this new location and into the deeper aquifer.

The likely impacts of this change were many, including the possibility that the new wells could draw water away from the aquifers underlying the western portion of the Nisqually Indian Reservation.

But building on positive relationships and common goals developed during the watershed planning process, in May 2008 the Tribe and the City signed a historic agreement (the "Water Memorandum of Agreement," or Water MOA) to establish a new regional water source, to be called the McAllister Wellfield. This wellfield, when fully developed, will

provide a sustainable water supply for both Olympia and the Nisqually Tribe. In addition, the Water MOA provided for transferring ownership of the culturally and environmentally important McAllister Springs property to the Nisqually Indian Tribe for permanent protection.

Eventually the Washington Department of Ecology agreed to a water rights transfer that included elements of the Water MOA and authorized the transfer of Olympia's full water rights to the new McAllister Wellfield. Of this, 3.0 MGD (million gallons/day) are allocated to the Nisqually Indian Tribe and available for development at the Tribe's option. (To put the figure 3.0 MGD into perspective, in 2022 the Tribe's typical daily water use was about 130,000 gallons per day.)

As a result of Ecology's actions, these off-reservation water rights are secured to the Nisqually Tribe forever. To access this water, the Tribe will need to develop a pipeline to deliver it from the McAllister Wellfield to the Reservation. These water rights are sufficient to provide for a minimum of 7,500 households and meet the Tribe's water needs far into the future.



May 2008: Cynthia Iyall, then Chair of the Nisqually Tribal Council, and then-Mayor Doug Mah of Olympia sign an historic agreement to establish the McAllister Wellfield, which will provide a sustainable water supply for both Olympia and the Nisqually Tribe. The agreement also provided for transferring Medicine Creek Springs to the Tribe for permanent protection.

Photo courtesy City of Olympia.



## APPENDIX F: WATER-QUALITY ISSUES

**T**he Nisqually Tribe will need to address three critical water-quality issues within the next few years:

### 1. Polybrominated diphenyl ethers (PBDEs)

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Analysis of samples collected by the Washington Department of Fish and Wildlife (WDFW) in 2014 (in the river, estuary, and nearshore) and 2015 (at the WDFW outmigrant trap) from juvenile Nisqually steelhead trout found concerning levels of polybrominated diphenyl ethers (PBDEs). Polybrominated diphenyl ethers (PBDEs) and polybrominated biphenyls (PBBs), a similar chemical, belong to a class of chemicals that are added to certain manufactured products to reduce the chances that the products will catch on fire.

In 2017 WDFW and the Nisqually Indian Tribe conducted a source-assessment study using passive samplers (semi-permeable membrane devices, or SMPDs), water, and biofilm sampling. The results showed that further study with better spatial resolution was needed, specifically in the Mashel, Ohop, and Muck tributaries. A second round of sampling was completed in 2021 (phase 2), this time with PBDE concentrations measured from biofilms and insect larvae collected at sites in the three tributaries (and no passive samplers). The results showed that the Eatonville Wastewater Treatment Plant was the likely source of PBDEs.

The report lists some next steps, including sampling fish directly from the Mashel River to see what levels of PBDEs they currently have (since original fish samples taken in 2014-15 may not represent the current levels).

The EPA has initiated rule making aimed at phasing out these chemicals. For more information, see: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/polybrominated-diphenyl-ethers-pbdes>

### 2. 6PPD-quinone (Oxidized Tire Dust)

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For decades observers in urban areas have noted that coho salmon adults have been dying from exposure to stormwater runoff – water that washes from roads, carrying with it a wide variety of pollutants.

In 2020, researchers determined that a chemical called 6PPD-quinone was responsible for the harmful

effects on coho. 6PPD is a chemical used in motor-vehicle tires to slow tire wear. But it does not eliminate that wear, and as tires eventually do wear down they release 6PPD into the environment as particles known as “tire dust.” 6PPD-quinone is formed when these particles react with ozone from the atmosphere.

When it rains, this new chemical then washes into stormwater and can end up in streams. Studies indicate that 6PPD-quinone is ecotoxic – that is, harmful to animals, plants, or the environment –with significant potential to impact salmon and other fish populations.

The Nisqually Indian Tribe has partnered with others to develop a trial facility in the Ohop Valley to treat highway runoff to eliminate 6PPD-quinone (and other pollutants) before they reach Ohop Creek. This project is located adjacent to State Route 7 where it crosses the valley. For more information, see: <https://lilk.org/project/ohop-stormwater/>.

### 3. PFAS

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Per- and polyfluorinated substances (PFAS) are widely used, long-lasting chemicals which break down very slowly over time. Because of their widespread use and persistence in the environment, many PFAS are found in the blood of people and animals worldwide and are present at low levels in a variety of food products and in the environment. Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals.

The Environmental Protection Agency (EPA) has a new initiative focused on PFAS, and in 2023 alone the agency proposed the first legally enforceable levels for PFAS; published the first set of data on PFAS in US water systems; and published the first rule that requires manufacturers to report on PFAS made and used in the U.S.

The Nisqually Public Works Department is evaluating options for PFAS testing and treatment in the Nisqually community water supply. This is an area of emerging science and evolving best management practices that Public Works is monitoring carefully to ensure the safety of community drinking water.

## APPENDIX G: CLIMATE CHANGE



*Nisqually Community Forest: Continuing to invest Tribal funds in large-scale watershed forestlands will provide environmental, cultural, and economic benefits.*

**A**ny environmental plan for the future of the Nisqually Indian community and reservation must include some discussion of climate change threat and what actions might be taken to effectively address its impacts. The causes are global. However, there are some local mitigation actions that are available that could be adopted in the near-term.

**1. Climate Change Mitigation Plan** – Identified below and elsewhere in this Environmental Plan are actions that the Nisqually Indian Tribe might take to mitigate the potential and likely impacts of climate change. The first recommendation is that the Nisqually Tribe commit to develop, in the next five years, a comprehensive climate-change mitigation plan.

Many of the climate change actions discussed briefly below involve tribal housing. The Tribe’s housing program is not part of this Environmental Plan, but it will need to be directly involved with developing and implementing some or all of the actions discussed here and further developed in the recommended climate change mitigation plan.

The Tribe is currently working on an EPA funded Comprehensive Climate Action Plan, to be completed in stages from 2024-2025, which will identify reservation greenhouse gas emissions and identify measures to mitigate impacts from those emissions. The primary sources of reservation emissions are buildings and transportation. Mitigation impacts will likely include energy efficiency practices and climate friendly energy development.

**2. Heat Plan** – In 2021 the Nisqually area experienced a climate-induced “heat dome,” a weather condition that produced daytime temperatures in excess of one hundred degrees F., with little temperature relief overnight. The prediction is that in future summers our

area will have more of these extreme high-temperature events. These high temperatures have substantial health consequences, especially for tribal elders.

These impacts and risks can be addressed relatively easily with air conditioning, but the cost and maintenance of air conditioning may be beyond the spending capacity of some tribal families. Therefore, this Plan recommends that the Tribe investigate developing a Tribal and/or grant-funded program to make air conditioning available to all Tribal families, both on and off Reservation. Such a program could be implemented through a Tribal utility, responsible for installation and maintenance of residential heat pumps, which could be paired with installation of solar-power panels on residential roofs. (Solar panels are particularly appealing to provide power to summer-heat-mitigation air conditioning. Such panels have short- and long-term maintenance challenges, but they match well with creating a tribal utility.)

**3. Weatherization** – Predictions for climate change impacts include a greater likelihood of climate extremes. One way to mitigate these extremes is to improve weatherization for Tribal housing. Therefore, we recommend that the Tribe seek or provide funding for and implement a strong weatherization program for all Tribal housing, both on- and off-Reservation. Such a program will effectively reduce energy costs for Tribal members and, in a small way, reduce energy demand overall.

**4. Trees & Carbon Sequestration** – Trees remove (that is, sequester) substantial amounts of carbon from the atmosphere. Growing more trees can be implemented in various ways. First, simply plant more trees as an element of all Tribal development projects, both on- and off-Reservation. Also, encourage planting of trees overall, by providing young trees to the Tribal community and others and investigate the feasibility of the Tribe developing its own tree nursery.

Second, the Nisqually Tribe should investigate the feasibility of investing Tribal and grant funds in large-scale forestlands in the Nisqually Watershed and nearby areas. Implementing this recommendation would bring multiple benefits: addressing climate change, creating a long-term economic investment, benefitting stream flow (which also addresses climate change risk), and providing cultural benefits.

## APPENDIX H: NISQUALLY FOOD SOVEREIGNTY AND COMMUNITY FOOD SECURITY



*Reuben Huey Wells Jr. and John Scott IV cooking fish for the community.*

**T**he Nisqually Indian Tribe has established a community garden with the goals of growing food for the Indian community and growing traditional medicines. In recent years, the amount of land dedicated to these purposes has increased, and the Tribe now has several full-time employees at the community garden. We expect the program to continue, and likely expand, in future years.

The community garden is part of a larger Tribal initiative called “Food Sovereignty.” This initiative provides access for the Nisqually community to traditional foods, both as a cultural activity and for nutrition. Among the activities, in addition to the garden, is providing salmon and shellfish to the community at regular giveaways.

For the long term, this program is part of the Nisqually Tribe’s larger program to remain resilient in the face of a changing climate and an unpredictable future. Securing an adequate, dependable, and safe food supply is one of the Tribe’s central goals for its future generations.

**T**he connection between this food program and the federal government falls primarily with the U.S. Department of Agriculture and the U.S. Food and Drug Administration. There is no direct

connection with EPA. However, EPA’s jurisdiction overlaps with the above agencies in two areas – water quality and soil contamination – and both could impact the community garden program.

One of the issues regarding food production is the use of pesticides. At present the garden program uses no pesticides, relying instead on natural controls. However, in the future pesticides could become of critical importance for the food project to succeed. Pesticides have both short and long-term risks and therefore must be used cautiously.

The best protection the Nisqually Tribe and its food programs have against risks associated with pesticides, pollution and food contamination is to adopt and implement a series of Best Management Practices (BMPs) regarding these issues. Therefore, one recommendation of this Environmental Plan is to encourage the community food programs to research and adopt BMPs for their activities. In the near term, these practices might be voluntary versus regulatory, but over the longer term the Nisqually Tribe might choose to enact provisions of the Tribal Environmental Code that mandate these actions.



*Nisqually Community Garden.*



*Nisqually Community Garden Supervisor Chantay Anderson picking dill. The Garden grows and distributes free herbs and vegetables to the community.*

## APPENDIX I: WATERSHED PLANNING AND THE NISQUALLY WATERSHED STEWARDSHIP PLAN

**I**n 1985 the Washington State Legislature declared the Nisqually River a “River of Statewide Importance” and directed the Watershed community to create a comprehensive management plan for the river and its watershed. Updated regularly over the past forty years, the initial Nisqually River Management Plan grew into what is known today as the Nisqually Watershed Stewardship Plan (NWSP).

The NWSP is designed to guide the protection and promotion of the Watershed’s wealth of resources – its scenic beauty, its diverse animal, plant, and human life, and the health and productivity of its lands and waters.

The NWSP is managed and implemented by the Nisqually River Council (NRC) – the oldest active river council west of the Mississippi River. The

NRC is a non-regulatory coordination, advocacy and education organization. Established in 1987, it continues to meet monthly and now includes 28 members drawn from governmental agencies, private citizens, local businesses and non-profit organizations, with a goal of encouraging collaboration and strong partnerships throughout the Watershed. A Citizens Advisory Committee assures citizen representation in all decision making.

The NWSP provides the guiding framework for the NRC and its members through twelve “Stewardship Goals” that address the environmental, economic, and social components of sustainability in the Watershed. The NRC monitors and updates these goals on a continuous basis, with a full report and update of the NWSP every five years, which allows for adaptive management and a shared vision.



*In 1985 the state legislature declared the Nisqually a “River of Statewide Importance” and directed the Watershed community to create a comprehensive management plan for it.*

## APPENDIX J: WILDFIRE PREVENTION

**W**ith climate change, the risk of wildfire is increasing almost everywhere in the country, and the Nisqually Reservation is no exception. Nearly all reservation neighborhoods are next to or intermingled with forest and dense understory brush. With longer, hotter summer seasons, drier conditions in the forest, and more human activity in and near the forests, the wildfire risk to the community is growing.

A 2019 wildfire-risk assessment by the Washington Department of Natural Resources found that in some ways the Reservation is well prepared to prevent or suppress wildfire. The Reservation has a good road network, and most streets are in good condition and well-outfitted with hydrants. “Defensible” spaces – areas from which fires can most efficiently be fought – are generally available near homes, businesses, and government structures, and the Housing Department’s land crew routinely maintains the areas the Tribe owns.

**H**owever, serious problems on the Reservation make wildfire a significant risk. Heavy fuels (trees and brush) occur throughout the Reservation and along its boundaries with neighboring jurisdictions. Half the homes on the Reservation typically have items like cars, toys, woodpiles, and yard tools close to the houses. These can ignite and spread fire rapidly to the home if a wildfire occurs. Most homes are wood construction. Access to the Nisqually River, which could theoretically provide backup water in a fire, is prohibitively difficult for emergency vehicles. Many structures have roofs exposed to forested areas, or to vegetation connected to bordering forests, making them particularly vulnerable. And the closest neighboring fire station is Thurston County Fire Department Station 32, 2.6 miles west, on Yelm Highway.

This Environmental Plan strongly recommends that the Nisqually Tribe develop a wildfire protection plan, including consideration of an on-Reservation fire-suppression team, as soon as possible and fully fund the resources needed to implement it.



*Initial fire training for Nisqually field crew provided by Ecostudies Institute, 2021 (photos courtesy Ecostudies Institute).*



## APPENDIX K: TRIBAL HATCHERIES

**S**almon hatcheries are designed to mimic the natural salmon reproductive cycle. However, the hatchery system protects eggs and fry from predation and therefore can result in much higher levels of overall production. The adults returning to the hatchery can sustain a much higher rate of harvest, which is one of the reasons for having hatcheries.

The primary need for successful hatchery operations is an abundant supply of constantly flowing high-quality water. Because hatcheries have large numbers of fish rearing together, the fish must be constantly monitored for disease outbreaks, which, if detected, must be treated promptly as directed by pathologist and veterinarian staff of the Northwest Indian Fisheries Commission in accordance with a National Pollution Discharge Elimination System permit and Food and Drug Administration regulations.

The Nisqually Indian Tribe has two hatcheries on its reservation, both located in the broad floodplain on the Nisqually River. The first is the Kalama Creek Hatchery, on the Thurston County side of the river; the larger and more recently constructed

is the Clear Creek Hatchery, located on the east, or Pierce County, side, on Joint Base Lewis McChord (JBLM).

Both facilities are staffed by full-time employees trained in fish culture and facilities management, under the general direction of the Tribe's Enhancement Program manager.

**A**ll hatcheries are sources of pollution, and both Nisqually hatcheries operate under permits issued by the Environmental Protection Agency (Clear Creek permit #130015; Kalama Creek permit #130029). Testing and reporting parameters are settleable solids, suspended solids and total water flow. The annual reports address pounds of fish on site per month and amount of food fed per month. Fish drugs and chemicals (if used) are also reported, with dilution calculations. Finally, all waste (fish poop and uneaten fish food) is disposed of at an upland location during the dry season.

Both facilities operate under the general permit requirements for upland fish hatcheries on federal or tribal lands. Because they have different histories, each hatchery is discussed here separately.



*Nisqually Tribe members Eddie Villegas (left) and Nano Perez in the Clear Creek Hatchery fish crowder, concentrating fish together for spawning.*



*The Kalama Creek Hatchery is being totally rebuilt and modernized to meet the needs of current salmon enhancement.*

## **KALAMA CREEK HATCHERY**

**I**n 1977 the Nisqually Tribe obtained a drought-relief grant to build its first hatchery facilities. The Bureau of Indian Affairs funds operation and maintenance.

The Kalama hatchery complex is in the floodplain on the Nisqually Reservation in Thurston County. Water feeding the hatchery is pumped from spring-fed streams and a well. The hatchery rears fall Chinook and coho salmon, with exact numbers currently being modified.

This complex has been in place for over 45 years, and many tribal members have worked at the site. Over these years it has been upgraded and expanded, and in 2023-25 it is being totally rebuilt and modernized to meet the needs of current salmon enhancement and management plans and to be more resilient to climate change.

Once construction is complete, the facility will be able to produce one million fall Chinook and up to 700,000 coho. It will also have the capacity to properly hold wild-stock brood fish in segregation for integration into the hatchery population or to integrate hatchery production into the wild stocks.



*Chairman Dorian Sanchez speaking at the dedication of the Clear Creek Hatchery, August 1991.*

## **CLEAR CREEK HATCHERY**

**I**n the 1980's, in response to Chinook salmon management needs, the Tribe obtained an \$11 million appropriation through the U.S. Fish and Wildlife Service (USFWS) to construct a large salmon hatchery at the Clear Creek site located on the old Nisqually reservation, now on JBLM. The hatchery was dedicated in 1991 at a major tribal celebration.

The site is leased by the Department of the Army to the Nisqually Tribe, and the facility itself is nominally owned by USFWS. The Nisqually Tribe is responsible for operation and maintenance (O&M) expenses at the facility and all salmon management decisions. Tacoma Power provides O&M funding under the terms of a litigation-settlement agreement with the Tribe.

The hatchery typically rears and releases 3 to 3.5 million fall Chinook and a variable number of coho. Water for Clear Creek comes from spring flow and wells. Recently this facility has experienced some difficulties with sufficient water supply, which will be investigated as part of the Tribe's climate-change studies.

Plans are also underway to retain an appropriate engineering firm to develop plans for additional well-water capacity at the lower site with water filtration to allow for re-use water. This will require extensive electrical upgrades to both the on-line electrical system and the back-up emergency generator system. We also will explore the cost effectiveness of a large-scale solar-power generation system to offset our increased electrical needs.

## APPENDIX L: NISQUALLY RIVER FLOODING

**A**bout one year in three the Nisqually River experiences flooding. The reason is straightforward – a lot of rain over a short time, like eight inches in a day or twelve inches over two days. But there are other factors involved as well.

First, the Nisqually Watershed is relatively small and has a steep gradient from the uplands to its lowlands (the location of the Nisqually Indian Reservation and all tribal homes). The watershed has limited capacity to hold rainwater, and that water must flow toward Puget Sound.

Second, winter conditions can make flooding worse. The ground might be fully saturated, thus unable to absorb much additional rain, or be frozen, again limiting absorption.

But the worst flood-causing condition is what is called “rain on snow.” That’s when warm rain washes out accumulated snow. Ten inches of snow equals about one inch of rain and, when melted during a storm, can add to precipitation that might on its own cause flooding.

**F**or the Nisqually Watershed, flooding is generally a quick event – streams rise and retreat rapidly. But the watershed has unique circumstances that sometimes make flood impacts

much worse. In the upper watershed, in Mount Rainier National Park and immediately downstream, rain-on-snow flooding can be especially devastating. Also, the steep gradient of the upper watershed means that streams will flow with a lot of energy and debris, making flood-driven riverbank erosion and channel changes common.

Down near the mouth of the river, two huge structures cross the Nisqually Valley, the BNSF Railroad and the I-5 fill. Under flood conditions, neither can pass all the flow, and water spreads out across the valley. Also, the I-5 fill hinders distributary channels that might otherwise drain off flow from the river itself.

Tidal influence can amplify lower-valley flood conditions. Extreme high tides can prevent river flows from discharging into Puget Sound, with flood waters pooling behind the I-5 fill and remaining there through several tidal cycles.

**R**iver flows are expressed in cubic feet per second (cfs). Downstream of Tacoma’s hydroelectric facilities, the typical winter river flow for the Nisqually River is 2,500-3,000 cfs. Flooding can occur at McKenna at flows of 10,000 cfs and above. Flooding occurs in the lower Nisqually Valley when flows reach 20,000 cfs. That’s also about the flow when the river backs up and flows through the Durgin Road tunnel.



*Kalama Creek access road flood damage, 2020*



The largest flood in recent years occurred in 1996, when the river flow reached at least 44,000 cfs (the stream-flow gauges were not able to accurately measure the actual high flow).

**Tacoma Power:** Some believe that Tacoma Power can mitigate downstream flooding by manipulating its reservoir. However, it cannot. Tacoma’s Alder-LaGrande project was funded and constructed and is operated to generate electricity. In addition, its license requires that it provide certain minimum downstream flows to protect instream fish habitat. It was not designed, funded, or licensed for flood control. And, as a practical matter, Alder reservoir is relatively small and does not have much storage capacity.

However, Tacoma’s facilities do occasionally reduce downstream flooding, usually during November and early December, when Alder reservoir has storage capacity and the Nisqually Watershed experiences heavy precipitation.

### **Nisqually Indian Reservation:**

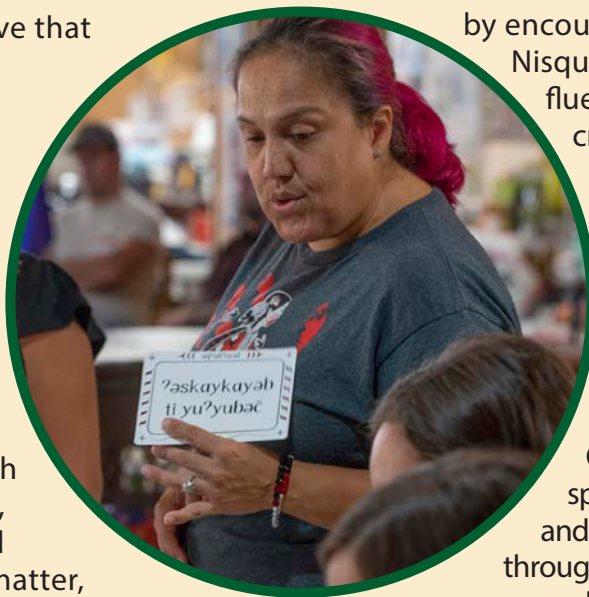
The two tribal hatcheries, Kalama Creek and Clear Creek, are located in the Nisqually River floodplain and, in past years, have sustained flood damage when total river flows exceeded approximately 25,000 cfs. There are several Nisqually homes downstream of the Durgin Road tunnel that are also vulnerable.

In 2022 the Federal Emergency Management Agency developed flood-hazard maps for the Nisqually River and some tributaries. These maps are available online and can yield information about flood risk for specific properties.

Meanwhile, because of past efforts, there now are very few structures in the Nisqually River floodplain and therefore fewer sources of pollution that might result from flooding.

## **APPENDIX M: NISQUALLY LANGUAGE PROGRAM**

Several years ago, the Nisqually Tribe created a Nisqually Language Program. Its purpose, initially, is to maintain the Nisqually language, especially by encouraging members of the Nisqually community to become fluent in it. The program has created a Nisqually Language Resource Center. The center develops informational materials (see “Nisqually Traditional Ways”) and provides language services to the local community and school districts.



*Tribal member Naiomie Wilkins hosting “Language Bingo” with the Nisqually Language Program.*

One important way Nisqually speakers are using their language and introducing it to others is through prayers. For example, a recent celebration of the 50th Anniversary of Billy Frank Jr. Nisqually National Wildlife Refuge began with a Nisqually language prayer and blessing, reminding all in attendance (as well as the natural world also listening in) that this refuge is a part of the Nisqually Indian homeland.

**W**hy is the Language Program included in the 2024-28 Environmental Plan? Language influences how its speakers view the world. English, a useful language understood by many, is limited in its ability to convey Nisqually cultural concepts. If no English word exists for an important cultural theme, it is difficult to convey that theme in English.

This Environmental Plan is oriented toward securing a sustainable future for the Nisqually Indian community and its citizens in perpetuity. The English language and the broad culture it supports may prove to have limits in the future when it comes to environmental and treaty-right sustainability, especially in the face of climate change and other threats.

Therefore, this plan recognizes the importance of the Nisqually Language Program in developing the ability of this Indian community to address its long-term environmental-sustainability needs. This may include the creation of new words that convey complicated cultural concepts to support the Nisqually community into the future.

# NISQUALLY TRADITIONAL WAYS

tiit xax kw(i) bəkʷ stab gwəxʷuwiəxʷsəxʷ ?al tiit xustali(l)s

tiit suluʷluʷ tudʷixʷ ?aciʷtalbixʷ, gwətashaydxʷ həlgʷə? gwəsəsgʷədil ?əstəci(l)təci(l).  
bələdʷələxads həlgʷə? gwələ ?al qʷibid həlgʷə? ?ə qaʷət

tiit ?iʷluʷluʷ wiwsu gwəl ?əslab həlgʷə? tiit maʷmad wiwsu

?əshikʷcəb tiit luʷluʷ gwəl səshaydxʷ həlgʷə? bəkʷ stab ?aqid həlgʷə? xʷi? kw(i)  
səsjiwʷbicəbs həlgʷə? sʷaqid həlgʷə? dʷixʷ ?al tiit qa ?aciʷtalbixʷ

slaʷiday ?ə suqʷabic gwəl həlgʷə? dxʷdigʷitubuʷt həlgʷə ?al tiit wiwsučət

?uyayus čət ?əsqʷu? bəkʷ ?əsqʷu? dxʷ?al tiit haʷt ?ə tiit ?aciʷtalbixʷčət

?əshigʷəd čət tiit ?aciʷtalbixʷ dxʷ?al tiit tusuhuy sukʷaxʷads ti tuʷaciʷtalbixʷs xʷi?  
ləsukʷaxʷacuts həlgʷə? dxʷ?al cahadiʷt

?əshigʷəd čət tiit sʷəciq bədəču? ?aciʷtalbixʷ

?əshaydxʷ čət tiit səsxʷdigʷəd ti suluʷluʷ gwələ caqid ?al dibət

ʷal tiit bəkʷ ?əsqʷu? ?əsʷuʷlab gwəsqaʷləkʷ gwət tiit ?ə ?aciʷtalbixʷ bəkʷ stab  
bəkʷ ?aciʷtalbixʷ ?al ti bəkʷ gwət dibət

*Recorded by Jean Sanders, Translated by Willie Frank, Sr.*



If someone is greedy they will lose everything in the end.

Our traditional way is to feed and make strangers comfortable.

Our older children, they look after the younger children.

We respect the old ones for their wisdom; they are not cast aside, but continue to hold a place of honor in our families and communities.

All natural things are our brothers and sisters; they have things to teach us if we are aware and listen.

We work cooperatively together for the good of our people.

We honor a person for what they have done for the people; not for what they have done for themselves.

We respect the visions of others.

We have a proud heritage that continues to live and grow within us.

We live in harmony within the circle of life, with all natural things, with our community, and with ourselves.

# NISQUALLY ENVIRONMENTAL

## *Nisqually State Park*

**T**he confluence of the Nisqually River, Ohop Creek, and the Mashel River has been a central part of the Nisqually homeland for thousands of years. Foods from the Mashel Prairie and local fishing and hunting supported a year-round village in the area. A regional intertribal overland trail network, connecting Nisqually, Chehalis, Cowlitz, Yakama and beyond, passed this way. Chief Leschi and his brother Quiemuth were born in the Mashel area village, in about 1808 and the early 1790's, respectively.

In 1856, as part of the Treaty War, the territorial militia massacred Nisqually Indians at the confluence of the Mashel and Nisqually rivers. Following the conclusion of the war, however, Nisqually people returned to this area and built a Shaker church and community cemetery on the Mashel Prairie. There were Nisqually people living on the prairie until the early 20th century, when non-native settlers gradually took it over and timber interests began turning the upland forests into commercial tree plantations. But Nisqually people continue to visit the area and gather resources, as they always have.

**T**his area is within the Nisqually Tribe's usual and accustomed area and thus is subject to the reserved rights enumerated in the Treaty of Medicine Creek. In the 1970's and 80's, Nisqually Tribal leaders supported the Mashel Prairie residents' fight to stop logging in the lower Mashel River valley. As a result, the last large cedar and fir trees along the Mashel River were preserved. Subsequently, the Nisqually Land Trust, using a salmon-habitat protection grant, acquired this shoreline property from the Weyerhaeuser Timber Company.

The Nisqually River Management Plan, which the Legislature approved in 1987, called for a major destination state park at the confluence of the Nisqually and Mashel rivers. Washington State Parks began to purchase land from the timber companies in the early 1990's, eventually acquiring a total of 1,400 acres. The Nisqually Tribal Council has declared the Tribe's intention to partner with State Parks to create a park that will protect and honor Nisqually culture and values. To further that goal, the Tribe acquired from Manke Timber a 217-acre inholding within the park and was deeded a 70-acre shoreline parcel from the Nisqually Land Trust.



*Nisqually State Park co-management: Nisqually Tribal Council and staff at Nisqually State Park with Washington State Parks staff and Rep. Andrew Barkis (seventh from left), Governor Jay Inslee (seventh from right) and Rep. J.T. Wilcox (far right).*

# PLAN SPECIAL INITIATIVE #1

## ENVIRONMENTAL PRIORITIES FOR NISQUALLY STATE PARK AREA

1. Protect and improve salmon habitat along the Nisqually River, the Mashel River, and Ohop Creek. Nisqually Chinook and steelhead trout are listed as threatened under the Endangered Species Act, and these habitat areas are critically important for their survival.
2. Remove the Mashel River bridge and associated riprap to expand quality habitat on the Mashel by allowing the river to meander naturally.
3. Expand the Ohop Valley salmon restoration project by continuing to partner with the Nisqually Land Trust, the South Puget Sound Salmon Enhancement Group and others to restore salmon habitat in the middle and upper Ohop Valley.
4. Work with State Parks to manage the park's upland forests for long-term native habitat diversity, including restoration of upland native species and treatment and management of invasive species.
5. Support creation of a docent/volunteer program to provide guided salmon-spawning tours for school groups and the public at the Nisqually-Ohop confluence. When the Ohop River Overlooks open in 2025, they will provide a valuable additional public salmon-spawning viewing area in the Nisqually watershed.
6. Create a biannual Salmon Festival at the park to celebrate the return of pink salmon and to engage the public in salmon protection and restoration.
7. Continue to partner with Washington State Parks to manage public pedestrian, motorized, and equestrian impacts to the park and particularly to sensitive riparian areas of the park parcel received from the Nisqually Land Trust.



*Welcome Pole unveiling: This Welcome Pole, carved by Ed Archie Noisecat and Ablaza Pluff, will be installed at Nisqually State Park.*



*Mashel River confluence with Nisqually River.*

## THE “DUMP”

**A**n old landfill is located near the Mashel River on a private inholding within the park boundaries owned by the Weyerhaeuser Company. There is an approved clean-up/remediation plan for the dump site, negotiated by Weyerhaeuser, the Washington Department of Ecology, the Nisqually Indian Tribe and the Town of Eatonville (the dump served the town for many years before it closed in the early 1980's).

Implementing this approved plan is not explicitly part of this Environmental Plan and should proceed on its own timeline. However, in future years, if the clean-up/remediation is not completed, it may be necessary to amend this plan to accomplish this task.

# NISQUALLY ENVIRONMENTAL

## Mount Rainier National Park

It is hard to overstate the importance of *təqʷuʔməʔ* to the Nisqually people. Otherwise known as Mount Rainier, *təqʷuʔməʔ* is the headwaters of the Nisqually River, which is the lifeblood of the Nisqually homeland. Willie Frank Sr. told the story of the mountain and her son moving from the Olympics to the Cascades and bringing the waters with them. Nisqually families have visited the mountain for socializing, gathering, and spiritual connection since time immemorial.

The federal government created Mount Rainier National Park (MRNP) in 1899, and with its subsequent creation of the National Park Service, in 1916, it imposed various restrictions on tribal access to the mountain. But tribal families kept coming up to *təqʷuʔməʔ* anyway.

In 1998 the Nisqually Tribe entered into an agreement with MRNP for gathering traditional plant materials as part of a research project. This agreement had a five-year term and was not formally renewed, but Nisqually families continued to gather, and they allowed a Park Service employee, David Hooper, to measure the impact of the harvest for his doctoral work through the University of Montana.

In 2014, the Tribe and MRNP signed a memorandum of understanding (MOU) that established regular meetings and points of contact. Under the MOU (subsequently updated), the Tribe further received a special-use permit for exclusive use of a portion of the MRNP Longmire campground for Nisqually tribal members (the Nisqually Designated Use Area). The special-use permit has been regularly extended since, and the Tribe has established a camping program at Longmire exclusively for Tribal members.

In 2016, the National Park Service approved a new procedure for tribes seeking access to gathering in national parks, which has been codified as 36 CFR 2.6.

Dr. Hooper's 2017 dissertation, "Cultural and Ecological Relationships Between the Nisqually Indian Tribe and Plants of Mount Rainier National Park" (University of Montana; available in Nisqually library and online), documented that traditional cultural knowledge that guided gathering practices resulted in a compensatory effect, meaning that plants that were gathered had more growth and vigor than similar nearby plants that were not.



*The Tribe has exclusive use of a portion of the Park's Longmire campground.*

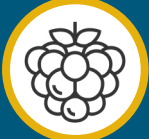
### NISQUALLY TRIBE ENVIRONMENTAL PRIORITIES FOR MOUNT RAINIER NATIONAL PARK

1. Restore and expand tribal member access to MRNP for traditional gathering, social, recreational, and spiritual practices.
2. Re-establish formal gathering rights in MRNP through the procedure outlined in 36 CFR 2.6.
3. Support MRNP in reintroducing and protecting habitat for threatened and endangered plant and animal species.

# PLAN SPECIAL INITIATIVE #2



Our mountain – *təqʷuʔməʔ* – viewed from the Nisqually Tribe Designated Use Area in Mount Rainier National Park.



# NISQUALLY ENVIRONMENTAL

## Nisqually Community Forest



*Nisqually Tribal Council Members, Nisqually Tribe Community Forest property, 2023. From left, top: David Iyall, Chay Squally, Chair Willie Frank III. Bottom, from left: Jackie Wittington, Guido Levy Jr.*

### WHAT IS A COMMUNITY FOREST?

**I**n 2010, in response to concerns over the devastating ecological and economic impacts of heavy clear-cut timber harvests by out-of-state investment groups, and a growing interest in local forest ownership and management, a group of Nisqually stakeholders led by the Tribe and the Land Trust began meeting to develop a shared vision for the future of commercial forestry in the Upper Nisqually River Watershed.

These stakeholders created an ambitious plan to build a community-owned forest that would improve and protect fish and wildlife habitat, promote local jobs through sustainable timber management, and provide access for cultural, recreational, and educational opportunities.

In 2014, NCF was incorporated as a nonprofit conservation organization and a wholly-owned subsidiary of Nisqually Land Trust. The Land Trust appoints NCF's board of directors, which includes a Nisqually Tribe representative. In all other aspects NCF operates completely independently, including having the power to buy, sell, hold, and manage land.

Currently, the Tribe and NCF continue to focus on land acquisition and forest management in the Busy Wild Creek sub-basin and the upper Mashel River, with a target of bringing 20,000 acres of timberlands back into local ownership.

**N**isqually Community Forest (NCF) was founded in 2014 through a partnership led by the Nisqually Indian Tribe and Nisqually Land Trust. It is now the largest non-profit community forest in the Pacific Northwest. Located near

Ashford and the main entrance to Mount Rainier National Park, NCF now totals 5,501 acres of working timberlands and includes over nine miles of critical salmon habitat along Busy Wild Creek, the headwaters of the Mashel River.

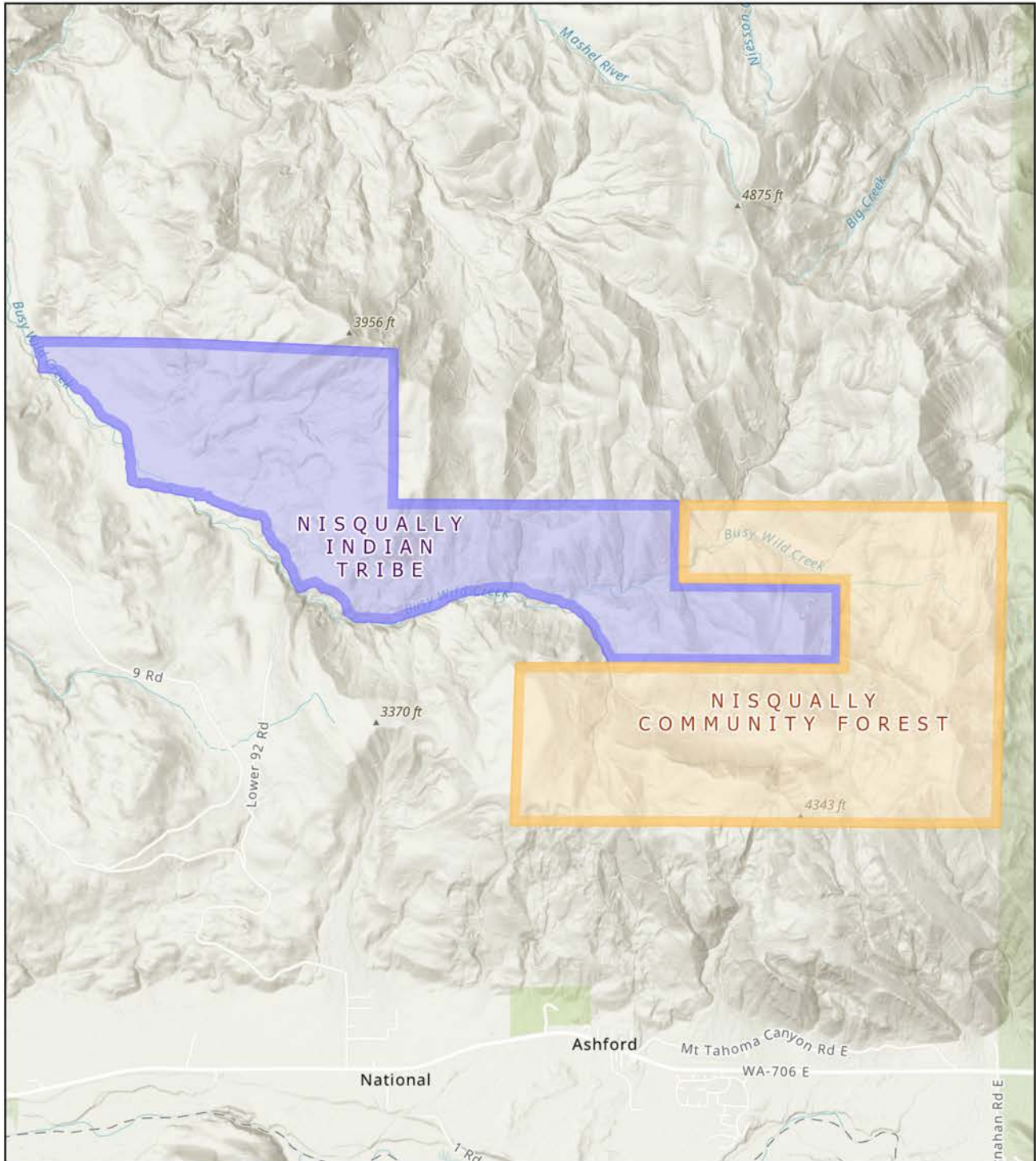
Within the community forest, the Nisqually Tribe owns 2,621 acres and the Nisqually Community Forest corporation owns an adjoining 2,880 acres. They manage these lands jointly.

*Abundant habitat for elk and other wildlife is just one of many benefits the Tribe's Community Forest property provides.*







# PLAN SPECIAL INITIATIVE #3



## Community Forest Properties

-  Nisqually Community Forest (2892.7 ac)
-  Nisqually Indian Tribe (2633.2 ac)



**Nisqually Indian Tribe**

Cartography by: K. Anderson, 12/18/2023

Data Sources: Pierce County Parcels, ESRI Topographic Background

CommunityForest\_Pro\CommunityForestAcreages\_woNLT\_Ltr

# Key Partner: Nisqually Land Trust

**T**he Nisqually Land Trust is an independent nonprofit organization founded in 1989 to support the Nisqually Indian Tribe's salmon recovery program by acquiring, managing and restoring critical salmon habitat. Today, the Land Trust protects and stewards over 10,000 acres in the Watershed and has planted over 400,000 native trees and shrubs on its properties.

The Land Trust works in three zones: The anadromous reaches of the watershed (referred to as the Lower Nisqually); the heavily forested timberlands above the river's Alder Dam complex (the Upper Nisqually); and the marine habitats associated with the Nisqually Reach Aquatic Reserve, on Puget Sound.

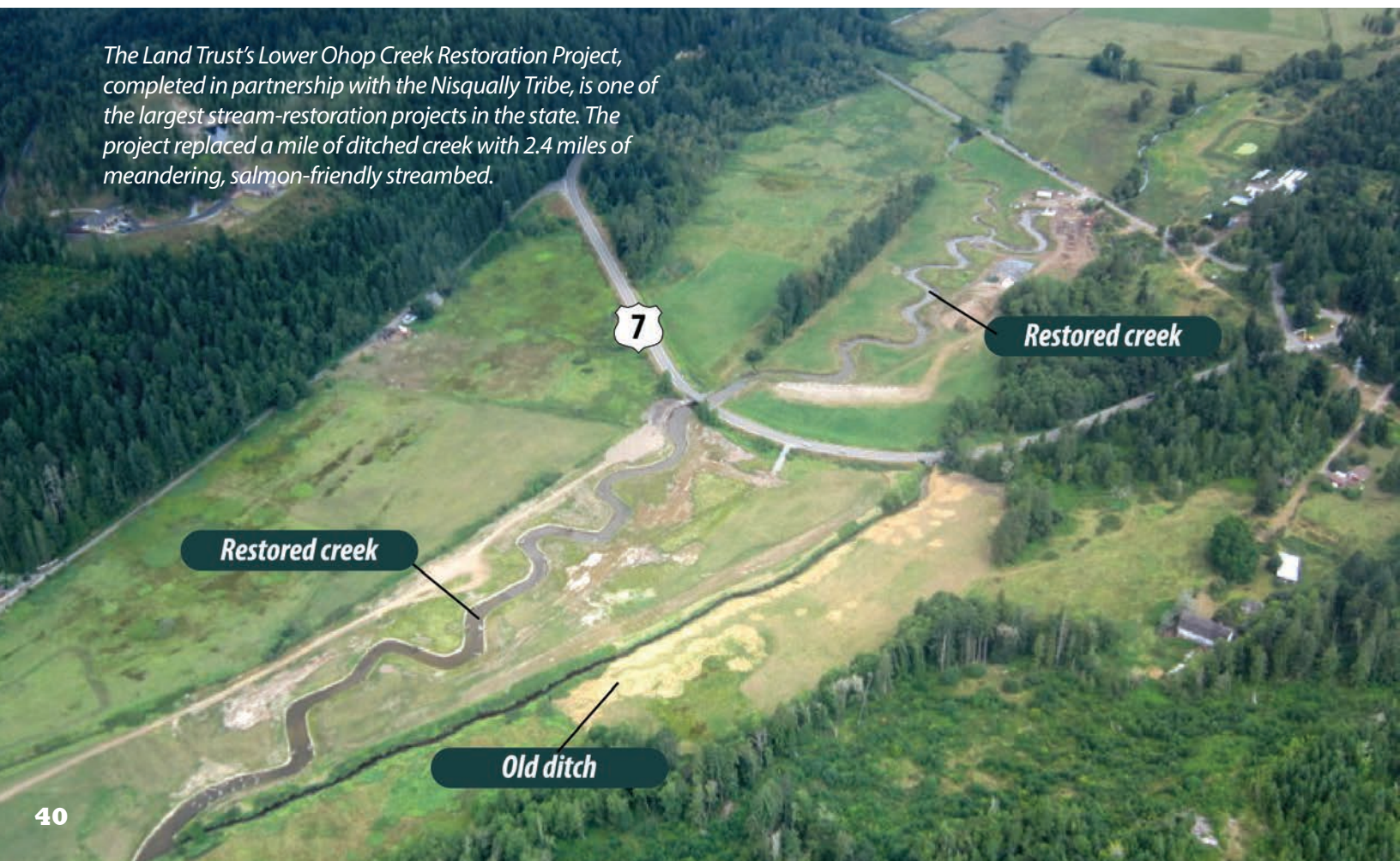
The Land Trust's guiding ethic is cooperative conservation. In addition to the Nisqually Tribe, its primary partner, the Land Trust works closely with state and federal natural-resource agencies and a

network of nonprofits, businesses, individuals and community partners. It acquires land only from willing sellers and donors, works closely with local communities, cultivates partners, and strives to connect people to the land.

**I**n addition to acquiring priority conservation lands, the Land Trust works with its partners to restore those lands to their highest level of conservation value – such as its Ohop Creek Restoration Project, developed in partnership with the Nisqually Tribe. One of the largest stream-restoration projects in Washington State, the project has completely re-meandered and restored some 2.4 miles of Ohop Creek, the second-largest salmon producing tributary to the Nisqually River. The project is now in its second phase, protection and restoration of the creek's primary spawning habitat, in the mid-Ohop Valley.

In 2006, the Land Trust expanded its work into the upper watershed, focusing on protecting timberlands, endangered-species habitat, recre-

*The Land Trust's Lower Ohop Creek Restoration Project, completed in partnership with the Nisqually Tribe, is one of the largest stream-restoration projects in the state. The project replaced a mile of ditched creek with 2.4 miles of meandering, salmon-friendly streambed.*



Restored creek

Old ditch

Restored creek



*Nisqually Tribe Native Plant Restoration Crew, Nisqually River, Nisqually Land Trust Thurston Ridge property: The Tribe's crew and the Land Trust work closely together to help restore salmon habitat on Land Trust properties.*

ation lands, and scenic vistas near Mount Rainier National Park. In 2012, the Land Trust completed its Mount Rainier Gateway Reserve, a 2,500-acre wildlife corridor connecting federal, state, and county lands in the upper watershed, near the Park's main entrance.

That same year, in cooperation with the Nisqually Tribe, the National Park Service and a 26-member advisory group from throughout the watershed, the Land Trust launched the Nisqually Community Forest Project, to explore the potential to create a landscape-scale working forest managed specifically to provide sustainable economic, environmental, and cultural benefits to the people of the Nisqually Watershed. In 2014, the Nisqually Community Forest was incorporated as a subsidiary of the Land Trust. (For more information, see "Nisqually Environmental Plan Special Initiative #3: Nisqually Community Forest.")

**I**n 2016, at the request of the Nisqually Tribe, the Land Trust expanded its work into the marine environment of Puget Sound to acquire and protect shoreline habitat in support of the Nisqually Aquatic Reserve and the Billy Frank Jr. Nisqually National Wildlife Refuge.



*At the Tribe's request, the Land Trust expanded its mission to include protection of marine shoreline habitat along the Nisqually Aquatic Reserve.*

# Key Partner: Billy Frank Jr. Nisqually National Wildlife Refuge



*The Nisqually Tribe and the U.S. Fish and Wildlife Service are partners in the expansion and restoration of the Billy Frank Jr. Nisqually National Wildlife Refuge.*

**T**he Nisqually National Wildlife Refuge was established in 1974 at the mouth of the Nisqually River. The estuary had been diked and farmed for over a century when the Brown Farm Dike was removed in October 2009 to restore tidal marshes and wetlands.

As part of the project, dikes and levees were removed, historic sloughs reconnected, and native plants and habitat restored. Project partners include the U.S. Fish and Wildlife Service (USFWS), Nisqually Tribe, Ducks Unlimited, and the U.S. Geological Survey. The estuary provides critical habitat for juvenile salmon and other species.

In 2000 the Tribe purchased 410 acres adjoining the Refuge east of the Nisqually River. As part of the arrangements for federal funding to purchase the land, the Tribe and USFWS agreed that the Tribe's ownership west of the railroad tracks

would be added to the Refuge and managed by the Refuge, with the Tribe retaining the right to restore habitat on the property.

**T**he Tribe, the Refuge and other partners are conducting ongoing studies at and near the Refuge. These include the apparent lack of sufficient sediment to maintain the estuarine saltmarsh in the face of tidal erosion and the ongoing risk to Interstate 5 from river meandering, flooding and increased elevation of extreme high tides. In 2023 the Washington Department of Transportation announced its intention to replace the I-5 fill material with a bridge or causeway, with a final design decision to be made in 2024.

The Refuge was renamed as the Billy Frank Jr. Nisqually National Wildlife Refuge in 2016 through the Billy Frank Jr. Tell Your Story Act, P.L 114-101, which also established the Medicine Creek Treaty National Memorial within the Refuge.



# Key Partner: Nisqually River Foundation

**T**he Nisqually River Foundation (NRF) is a non-profit organization that provides staffing and funding for the Nisqually River Council and supports implementation of the Nisqually Watershed Stewardship Plan. NRF has its offices at the Nisqually Tribe's Department of Natural Resources.

In addition to its support for the River Council, NRF works closely with the Tribe on several programs:

*The Nisqually River Education Project* works with local school districts to get teachers and students out into the Nisqually Watershed and engaged in nature through hands-on field experiences like planting trees, testing water quality, and tossing salmon carcasses into streams to restore nutrients to habitat.

*Nisqually Stream Stewards* is a free six-week course offered by the Nisqually Indian Tribe and the Nisqually River Council and open to anyone interested in learning about the Nisqually Watershed. It offers conservation stewardship training, hands-on field experiences, and the opportunity to meet with natural-resources professionals from Mount Rainier National Park to the Billy Frank Jr. Nisqually National Wildlife Refuge – and everywhere in between!

*The Nisqually Watershed Festival*, started in 1989, is held every September at the Billy Frank Jr. Nisqually National Wildlife Refuge. It provides a lively opportunity for the Nisqually community and its many friends to celebrate the rich history, culture, and environment that make Nisqually such a unique and beautiful place, with food, games, music, and activities for all ages. And all with a Nisqually theme.

*Canoe Family performing at the Nisqually Watershed Festival.*





*Stream Stewards graduation. This six-week course is open to all.*



*Counting crabs for a crab survey: The Nisqually River Education Project works with local school districts to engage students in hands-on environmental service-learning.*



*The Foundation helps coordinate an annual Nisqually River Cleanup day.*



*In 2023 the Education Project sponsored a winter snow-play trip to Mount Rainier National Park for students from Wa-He-Lut Indian School.*

All photos courtesy Nisqually River Foundation.

## **ACKNOWLEDGEMENTS**

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All photos courtesy of Nisqually Indian Tribe unless otherwise noted.