



g^wədzadad

Teaching of Our Ancestors

TRIBAL HABITAT STRATEGY
(Revised February 2019)

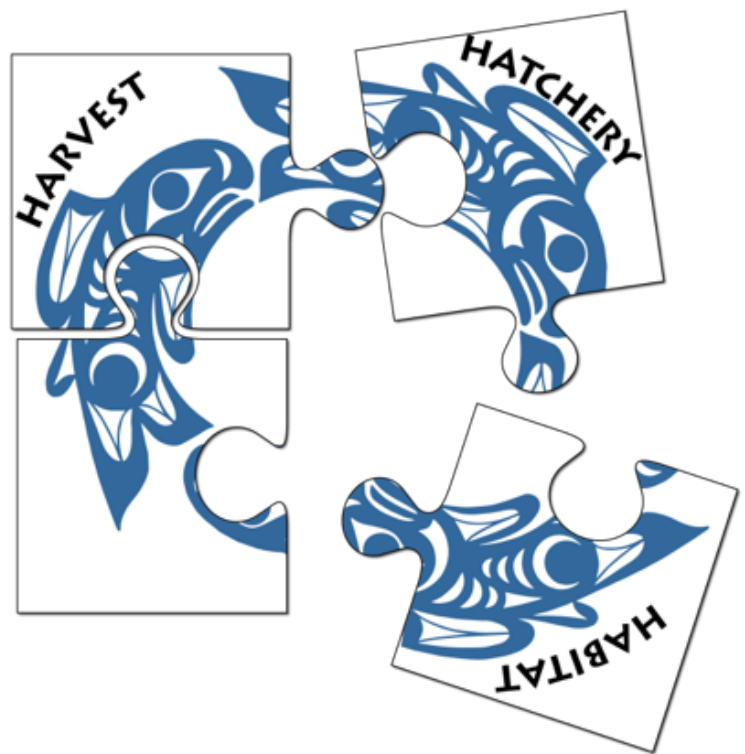
gʷəḏʷadad is a unified tribal habitat strategy designed to organize and focus work around common landscape-based objectives for protecting tribal treaty rights and resources. It is based on preserving and restoring the processes and functions of riverine, marine, and terrestrial ecosystems. The work will require coordination and accountability across agencies, including regulatory and enforcement authorities. It also will require transparent accounting of habitat conditions, resource allocations and how we are managing habitat for salmon and other treaty-protected resources. It includes a data management platform and mapping system. The platform allows us to quantify current conditions and to draw lines of protection around the physical attributes that support function and connectivity in the landscape. A science-based quantification system will measure the difference between “what is” and “what is necessary” to highlight the work that needs to be accomplished and to make the connection between habitat loss and the declining productivity of fish, shellfish, plants and wildlife.

This effort is based on what is needed for optimal ecosystem health, not just what we think is possible to achieve, given current conditions. *gʷəḏʷadad* is not a call for a return to the past, but a vision for a recovered, resilient future. This future is one in which the landscape and resources are abundant, healthy and support sustainable tribal harvest. We will be successful if these landscape objectives are embraced by all of us throughout the region. Sharing a long-term, multi-generational view will help us realize a vision of economic and cultural wealth and prosperity.

We seek to build resiliency in our natural resources against a backdrop of climate change and population growth. We must begin today to address the habitat loss and damage that these changes bring.

Our place-based ways of life are the foundation of the *gʷəḏʷadad* strategy. Since time immemorial, the tribes have lived together with this place and managed our ancestral homelands in accordance with tribal values and teachings. Rights to access certain harvesting and gathering sites are part of our responsibility to steward these resources for present and future generations.

When tribes reserved our rights to fish, hunt and gather in treaties with the federal government in the mid-1850s, we understood these rights to be bound to our ongoing duties to sustain the resources. *U.S. v. Washington* (the Boldt decision) and related cases affirmed the tribes’ roles as co-managers of the



treaty-protected resources. These cases also affirmed that both parties to the treaties and their descendants have obligations not to degrade the treaty resource.

gʷəḏʷadad is designed to be flexible to account for variable landscape and management objectives. Individual tribes focus on local priorities to reach the full productivity potential of their watersheds.

The Northwest Indian Fisheries Commission (NWIFC) is a support services organization for the 20 treaty Indian tribes in western Washington. It will work to facilitate communication; provide analysis on crosscutting issues; provide technical and policy expertise; and coordinate map development, data management and analysis.

gʷəḏʷadad builds from two tribal initiatives implemented in the past decade. The Treaty Rights at Risk Initiative calls for the federal government to meet its obligation to ensure salmon recovery and treaty rights through better coordination of agencies and programs. The State of Our Watersheds is a comprehensive documentation of the ongoing and increasing loss of habitat for salmon and other treaty-protected resources. The regularly updated reports confirm that we continue to lose habitat faster than it can be restored. *gʷəḏʷadad* outlines the response strategy.



Nisqually Tribe natural resources technicians inspect an engineered logjam on the Mashel River. *Emmett O'Connell*

OVERARCHING TASKS:

Land-Use Management

- Develop a case-area permit tracking and accountability system to cover programs such as Hydraulic Project Approval (HPA), Shoreline Management Act (SMA), U.S. Army Corps of Engineers (USACE) Nationwide Permits and stormwater discharge permits.
- Revise habitat standards for the Growth Management Act (GMA) and other resource protections from one of No Net Loss (NNL) to one of Net Gain (NG), understanding that status quo conditions do not support recovery objectives and treaty rights.
- Advocate that state and federal policies include climate change impacts, such as the SMA, GMA Comprehensive Plans and Flood Hazard Reduction Plans.

Coordinated Land Acquisition for Ecosystem Health

- Form a work group to investigate the formation of a tribal land acquisition network to achieve habitat protection objectives.

Local Government Engagement

- Network and coordinate with local boards and commissions regarding habitat protection objectives and priorities.
- Increase attention on Critical Areas Ordinance (CAO) implementation, review and guideline development.

Elevate Tribal Science

- Improve coordination with other government and non-governmental organization (NGO) research partners.
- Form and staff a Tribal Research Consortium to support, expand and advance tribal science.

Outreach and Coalition Development

- Develop a unified, regional message and communication strategy with partners.
- Engage in the Billy Frank Jr. Pacific Salmon Summit's Call to Action by convening a series of work sessions.
- Continue to engage Washington governor's office regarding the Habitat Short List request.
- Continue to engage with federal regional leadership from the National Oceanic and Atmospheric Administration (NOAA), U.S. Environmental Protection Agency (EPA), USACE, Natural Resources Conservation Service (NRCS), and U.S. Coast Guard (USCG) by elevating Treaty Rights at Risk (TRAR) requests and other tribal priorities as necessary.

***g^wə́dʰadad* KEY TARGETS:**

g^wə́dʰadad is organized around five habitat Key Target areas that are critical to tribal treaty rights and resources:

KEY TARGETS:	PACIFIC OCEAN (<i>ʃ^wə́lč</i>)	NEARSHORE (SALISH SEA) (<i>ʔilg^wíʔ</i>)	FLOODPLAINS (<i>q^wə́lúʔt</i>)	RIPARIAN (<i>q^wə́lúʔt</i>)	WATER (<i>q^wuʔ</i>)
GOALS:	Maintain, restore and improve ocean conditions essential to treaty-reserved resources and interests.	Restore and/or maintain ecological connectivity and geomorphic function of the nearshore, from 200 feet on the landward side to 100 feet below mean lower low water.	Protect, restore and enhance hydrological and geomorphic connectivity between rivers and their floodplains and deltas.	Protect and restore riparian corridors (extending 300 feet on both sides of the stream) to conditions that sustain and support salmon and shellfish populations and productivity.	Ensure that our waters provide a fit home for salmon, shellfish and all of tribes' treaty-reserved resources by meeting all applicable standards and ecologically based instream flows
INDICATORS:	<ul style="list-style-type: none"> • Harmful algal blooms (HABs) • Temperature • Dissolved oxygen • Ocean acidification • Essential fish habitat 	<ul style="list-style-type: none"> • Shoreline armor and overwater structures • Tidal hydrology barriers • Impervious surfaces, fill or agriculture in nearshore 	<ul style="list-style-type: none"> • Frequency of flooding • Channel migration zones • Floodplain surface roughness • Habitat diversity • Presence of plant and animal species traditionally important to tribes 	Percent of riparian corridors: <ul style="list-style-type: none"> • Dominated by perennial woody vegetation (short-term goal) • Dominated by large, mature trees (long-term goal) • With impervious surface present 	<ul style="list-style-type: none"> • Toxic contaminants and other attributes • Condition parameters, e.g., temperature, dissolved oxygen (DO), at levels harmful to treaty resources or tribal consumption and use • Streams, rivers and waters supporting ecological flows
INITIATING TASKS:	<ul style="list-style-type: none"> • Protect habitat from gear and time/area restrictions • Coordinate habitat research and monitoring • Continue building the Habitat Framework • Advance collaborative research and analysis • Develop and share briefings and information products on ocean conditions with fisheries managers 	<ul style="list-style-type: none"> • Create permit tracking tool to monitor and assess impacts of permits • Coordinate with NOAA on Shoreline Programmatic ESA Consultation to streamline and incentivize softer shoreline protection approaches for landowners • Address food web concerns, increase protection of forage fish spawning areas for orca recovery • Identify and address regulatory inadequacies in nearshore protection 	<ul style="list-style-type: none"> • Prevent development in floodplains, e.g., levees, bank armor, fill, infrastructure, and impervious surfaces • Restore and permanently protect floodplains through land acquisition • Research best practices for using floodplain function to reduce the impacts of climate change, integrating traditional knowledge 	<ul style="list-style-type: none"> • Compare current riparian conditions against the land-use laws, regulations, etc. that guide land management • Document the effectiveness of riparian programs in protection and restoration on a landscape scale • Improve and/or develop laws, regulations and BMPs that protect and restore habitat • Uniformly protect riparian areas with buffers based on 1 site potential tree height (SPTH) 	<ul style="list-style-type: none"> • Maintain and implement more protective water quality standards (WQS) • Defend against efforts to deregulate protection requirements • Advance science documenting stormwater impact on treaty resources • Map and evaluate impacts to ecological flows



Quileute Tribe Hereditary Chief David Hudson pulls a canoe on the Pacific Ocean.
Debbie Preston

Maintain, restore and improve, as necessary, ocean conditions essential to treaty-reserved resources and interests.

RECOMMENDED ACTIONS:

Research and monitor important species and the ocean ecosystem

- Coordinate with or participate in collaborative programs for monitoring of changing ocean conditions and develop baseline data on regional scale, e.g., West Coast Ocean Acidification and Hypoxia Science Panel (WCOAHSP), Northwest Association of Networked Ocean Observing Systems (NANOOS), etc.
- Facilitate collaboration in developing research goals, data collection and analysis with partners e.g., National Marine Fisheries Service (NMFS) Science Centers, Washington Ocean Acidification (WAOA) Center, Marine Resources Advisory Council (MRAC), WCOAHSP, West Coast Ocean Partnership (WCOP), NOAA Ocean Acidification (OA) Program, Olympic Coast National Marine Sanctuary (OCNMS), National Marine Sanctuary (NMS) OA Sentinel Site, and other partners.
- Monitor for changes in temperature, dissolved oxygen, extent and duration of hypoxic events, pCO₂, kelp/seagrass cover, harmful algal blooms (HABs), etc.
- Work to develop stable funding for long-term program, research, monitoring and adaptation support.
- Conduct intertidal and marine species surveys.
- Conduct collaborative research and analysis with partners, e.g., NMFS Science Centers, WAOA Center, MRAC, WCOAHSP, WCOP, NOAA OA Program, OCNMS, NMS OA Sentinel Site.
- Continue building the Habitat Framework.

Conduct comprehensive habitat assessments and restoration objectives

- Reduce nutrient input
- Control invasive species
- Oil spill response and Natural Resource Damage Assessment (NRDA)
- Protect and restore kelp/eelgrass

Coordinate with adjacent or overlapping government authorities/ jurisdictions

- National Marine Sanctuary Intergovernmental Policy Council (IPC)
- Pacific Marine Fisheries Council (PFMC)

Restore and maintain ecological connectivity and geomorphic function throughout all zones of the nearshore.

RECOMMENDED ACTIONS:

Address regulatory inadequacies that fail to protect nearshore ecology and function

- Identify, map and develop plans that identify places most at risk for development, and prioritize their protection.
- Work to restore critical shorelines into tribal and/or public ownership by identifying and creating incentives for willing sellers.
- Improve permitting process for installation of shoreline armor to be more protective of nearshore function.
- Through Shoreline Management Act (SMA) and Shoreline Master Programs (SMP) compliance processes, require improved review and permitting of repair and replacement armoring that requires demonstration of continuing need for armor and compensatory mitigation for extending the lifespan of the original impacts.
- Improve guidance on the NNL policy regarding local jurisdiction implementation requirements, including the development of best management practices (BMPs), through permit requirement, implementation and adaptive management to move toward a net gain in shoreline habitat.

Address issues and cumulative effects of Nationwide Permits (USACE)

- Continue to request that the Washington Department of Ecology (DOE) use §401 of the Clean Water Act (CWA) and §307 of the Coastal Zone Management Act to certify that federal permits are consistent with state laws and state water quality standards.

Highest Astronomical Tide (NOAA NMFS, EPA, and USACE)

- Continue to request that EPA use its existing authority to require USACE to fully use the geographic jurisdiction available to it under §404 of the CWA. Using the Highest Astronomical Tide (HAT) as the USACE jurisdiction boundary will maximize the protection of water quality and treaty resources within Puget Sound and along the Washington coast.

Improved oversight for permit data collection by federal, state and local government

- Work with federal, state and local jurisdictions to develop a unified system to track permits and permit-related data in order to evaluate effectiveness in protecting nearshore ecological function.
- Engage in federal/tribal analysis, research and policy development regarding cumulative impacts of permitted actions.
- Apply cumulative impacts analysis when permitting the repair and/or replacement of shoreline modification and overwater structures.
- Work with DOE to encourage development of direct and prescriptive guidance for local jurisdictions on application of NNL for individual permits, and how and when to adaptively manage SMPs at the jurisdictional/ programmatic scale to move toward net gain in habitat.
- Conduct forage fish spawning surveys and improve use of this data in permitting decisions.
- Participate in outreach and coordination with landowners and local governments.



The Swinomish Tribe removed dredge spoils to restore an estuarine corridor connecting Padilla Bay to Skagit Bay.
Kari Neumeyer



The Quileute Tribe is working to restore the natural river and floodplain processes that create high-quality salmon habitat in the Quillayute River. *Debbie Preston*

Protect, restore and enhance hydrological and geomorphic connectivity between rivers and their floodplains and deltas.

RECOMMENDED ACTIONS:

Restore and permanently protect floodplains through land acquisition

- Develop and support tribal programs to protect and restore floodplains through land acquisition.
- Promote federal and local programs that buy out properties in chronic flooding and channel migration zones.
- Focus restoration, levee removal and levee setback projects on maximizing floodplain hydrological and geomorphic function.

Prevent installation of levees, bank armor, infrastructure, fill and impervious surfaces.

- Improve accountability of and compliance with existing federal, state, county and municipal regulations that protect floodplains (CWA, ESA, HPA, GMA, etc.).
- Work with municipal, county and state agencies to reduce floodplain degradation due to regulatory exemptions and variances.
- Require that Federal Emergency Management Administration (FEMA) policies such as the National Flood Insurance Program (NFIP) prevent further degradation of floodplain habitat.
- Require that USACE programs comply with existing laws that protect habitat, such as CWA, ESA, and the NMFS Biological Opinion.
- Require that USACE policies streamline permitting for levee removal and setback projects.
- Create regulatory incentives for green infrastructure and low impact development in floodplains.

Data Collection and Analysis

- Compile and maintain data on floodplain extent and condition, including updated topography, hydraulic and inundation models.
- Identify how much existing floodplain regulations and policies have allowed habitat loss.
- Advance the science and practice of effective climate change adaptation in floodplains.

Protect and restore riparian corridors in western Washington to conditions that sustain and support salmon and shellfish populations and productivity.

RECOMMENDED ACTIONS:

Evaluate the effectiveness of riparian protection programs

- Map and quantify current riparian conditions in the case area
- Compare current riparian conditions against the jurisdiction and land-use laws, regulations, etc., that guide management in those riparian areas.
- Describe desired riparian conditions and the BMPs that support robust salmon and shellfish productivity.
- Continue working to accomplish consistent riparian standards across the landscape.

Improve and/or develop new regulations, laws and BMPs that work to protect habitat

- Improve oversight and accountability of various land-use permits (HPA, GMA, CWA, etc.) to ensure avoidance and/or mitigation of impacts to riparian areas.
- Work with state and local governments to make riparian restoration a priority in zoning and land-use laws.
- Advocate for establishment and maintenance of riparian buffers based on 1 site potential tree height (SPTH).

Restore and permanently protect riparian areas through land acquisition

- Restore riparian areas to public, land trust or tribal ownership.
- Identify primary riparian sites for acquisition at the local scale.

Adaptive Management

- Advance the science and best practices of effective climate change adaptation in riparian areas.
- Develop a unified local, state, federal and tribal information and outreach curriculum that provides accurate, scientifically sound information to the public about sustainable riparian land management.



Nisqually tribal staff Rene Bracero (top) and Walker Duval survey Yelm Creek for chum salmon. *Emmett O'Connell*



Seth Book, Skokomish Tribe Environmental Protection Agency coordinator, takes a water quality sample from Hood Canal. *Tiffany Royal*

Ensure clean, cool, plentiful water to support abundant treaty-reserved resources such as salmon and shellfish.

RECOMMENDED ACTIONS:

Maintain instream flows to support abundant salmon production and adherence to the prior appropriations doctrine

- Establish instream flow requirements that meet tribally approved minimum standards.

Control nonpoint source pollution

- Ensure that all waters in the case area meet water quality standards and contribute to productive fish runs and shellfish harvests.
- Appeal land-use permits that authorize harmful water quality impacts.
- Draft comments on programmatic permits, NWP and legislation affecting HPAs.

Enhance oversight of National Pollution Discharge Elimination System (NPDES) permits

- Review and comment on rules and regulations that govern NPDES implementation and programmatic and general permits, e.g., concentrated animal feeding operation, municipal, etc.
- Review and comment on NPDES permits in individual watersheds.
- Support permit tracking and review through data management and/or GIS analysis tools.
- Review and comment on re-issuance of NPDES municipal permits.
- Seek enhanced inclusion of treatment methods in stormwater manual.
- Evaluate stormwater monitoring consortium data to determine effectiveness of existing permits.

Evaluate conditions

- Evaluate current flow rates and conduct basin and sub-basin analysis.
- Conduct comprehensive surface and groundwater monitoring.

“I have to believe we can do this. I have to believe or I wouldn’t be sitting here working on it. I have to believe our future will include fishing.”

*– Lorraine Loomis, Chair
Northwest Indian Fisheries Commission*



Swinomish tribal member Johnnie Grossglass presents the remains of a chinook salmon to the four directions before returning it to the water during the tribe’s Blessing of the Fleet. *Kari Neumeyer*

RELATED REFERENCES and RESOURCES:

- *gʷəḏʷadad* Story Map
nwifc.org/tribalhabitatstrategy
- State of Our Watersheds Report
nwifc.org/sow
- Treaty Rights at Risk: Ongoing Habitat Loss, the Decline of the Salmon Resource, and Recommendations for Change
treatyrightsatrisk.org
- Billy Frank Jr. Pacific Salmon Summit Call to Action and coalition development
salmondefense.org/projects/educate/pss
- Chinook Bold Actions
go.nwifc.org/chinookboldactions
- Climate Change and Our Natural Resources
nwtreatytribes.org/climatechange



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