

Tulalip Tribes

Wetland Program Plan

2013 -2019



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Prepared by

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Tulalip Wetland Program Plan Qualification

This Wetland Program Plan provides a menu of activities that are necessary to protect, enhance, restore, and manage Tulalip wetlands. These activities coincide with three Wetland Program Development Grant (WPDG) funding periods (six years) and are modeled after the Core Elements Framework developed by the US Environmental Protection Agency. Some of the activities listed are sequential in nature and must occur prior to initiation of additional activities. Some activities can occur concurrently or independently of others, or are ongoing and long-term. Many of the proposed Wetland Program Plan actions and activities identified in this report are not currently funded. Completion of these activities will depend upon securing the necessary financial support.

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TULALIP TRIBES MISSION

dx̣dig̣id

We make available training, teaching and advice, both spiritual and practical

TULALIP TRIBES VISION

ti?i?l ?əsq̣u? ?al dx̣lilalp g̣ə?l ču? ?aciḷtalbi?̣.
dx̣ḍi?̣q̣scut.

łulčil čə?l dx̣?al ti?i?l ?i?ha?l stalx̣il ?ə ti bəḲ g̣at.

We gathered at Tulalip are one people.

We govern ourselves.

We will arrive at a time when each and every person has become most capable.

TULALIP NATURAL RESOURCES DEPARTMENT MISSION

Preserve, protect, and restore Treaty-reserved natural resources within the Tribes “Usual and Accustomed” area.

TULALIP NATURAL RESOURCES DEPARTMENT VISION

Protect and sustain treaty reserved resources for cultural, subsistence, and economic purposes for the benefit of the Tulalip Tribes membership now and for future generations.

TULALIP WETLAND PROGRAM MISSION

To preserve, protect, enhance, restore, and manage wetlands and their associated ecological services both on the Tulalip Reservation and within the larger traditional use areas, for the benefit of the Tulalip Tribes now and into the future.

OVERVIEW OF THE CURRENT TULALIP WETLAND PROGRAM

GOALS IDENTIFIED IN THE 1996 TULALIP WATERSHED MANAGEMENT PLAN:

Given the Tribes' historic reliance on fishing and their treaty reserved harvest and habitat rights, the goals of the Watershed Management Plan are clear:

(a) To protect the quality of surface water resources on the Tulalip Reservation.

(b) To ensure that in the short term there is no net loss of wetlands function and acreage, and that in the long term there is a measurable net gain of wetlands function and acreage.

(c) To institute development alternatives that minimize economic hardship on private property owners and the Tulalip Tribes while providing adequate protection measures for wetlands and other valuable environmental and cultural resources.

TULALIP WETLAND PROGRAM ACTION AREA

- Within the Tulalip Reservation boundaries
- Within the Tulalip Tribes' usual and accustomed places

WETLAND PROGRAM RESOURCE FOCUS

- Wetlands, associated streams, buffers/riparian corridors
- Wetland and riparian habitat communities
- Wetland water quality and quantity (surface/groundwater; estuarine/freshwater)
- Wetland and riparian soils (suitable to sustain wetland plants; habitat restoration/altered landscape enhancements)
- Fish and wildlife associated with, and dependent upon wetland communities
- Overall watershed health (sustainable landscape processes; highest potential ecosystem services; healthy physical, chemical, and biological condition)



Henderson's Checker Mallow and Cattail

BACKGROUND

The Tulalip Tribes are successors in interest to the Snohomish, Snoqualmie, Skykomish and other allied tribes and bands signatory to the 1855 Treaty of Point Elliott. The tribal population is about 4,500 members and growing. The Tulalip Reservation is located at the mouth of the Snohomish River Watershed (WRIA 7), north of Everett and west of Marysville, WA.

Tulalip waters flow to the coastal waters of the Snohomish River Estuary, Possession Sound, and Port Susan via stream outlets, dispersed overland flow, and groundwater seeps (Figure 1). The Reservation consists of approximately 22,500 acres and is characterized by two geomorphic landforms; the Marysville trough which occupies the eastern quarter of the Reservation, and the Tulalip Plateau which dominates the remaining Tulalip landscape. The Marysville trough is a low-lying valley dominated by deep sandy soils and high groundwater table. The Tulalip Plateau rises approximately 300 to 500 feet above the valley floor and is characterized by complex hills, ravines, bluffs, and stream valleys. The predominantly forested character of the Reservation was once common in the coastal Puget lowlands, but now contiguous tracts of forest land are uncommon and the Reservation serves as a remnant oasis of what once was. The Reservation is currently surrounded by agricultural, rural residential, suburban, and urban communities with ever-increasing pressure for development and encroachment from non-native invasive plant and animal species.

The Tulalip Wetland Program (Program) began in the early 1990's through funding provided by an EPA Water Quality 104(b) grant and was expanded in 2008 - 2010 (EPA WPDG – BG-96008901) to provide better predictability for tribal project planning and development; document baseline wetland location and habitat conditions (EPA Level 1 monitoring and assessment); and to establish the framework necessary to implement watershed-based wetland planning, protection, mitigation, restoration, and long-term monitoring and assessment. Recent work included a detailed assessment of the existing policies and regulations for streams, wetlands, and their protective buffers (ESA Adolfson, 2010); development of a wetland geodatabase to document baseline conditions and to track changes to tribal wetlands; refinement of the original wetland inventory (inland and Quilceda/Snohomish estuarine wetlands); regulatory, vegetative, and landform classification of wetlands; a cursory assessment of wetland and adjacent upland habitat cover conditions; and identification of potential future wetland water quality monitoring stations.

The wetland inventory update (Boyer and Weatherly, 2011) identified a total of 415 wetland complexes totaling approximately 4,297 wetland acres across 14 basins. Approximately 3,268 acres (15%) of the inland Tulalip landscape are occupied by wetlands. The remaining wetland acreage occurs within the

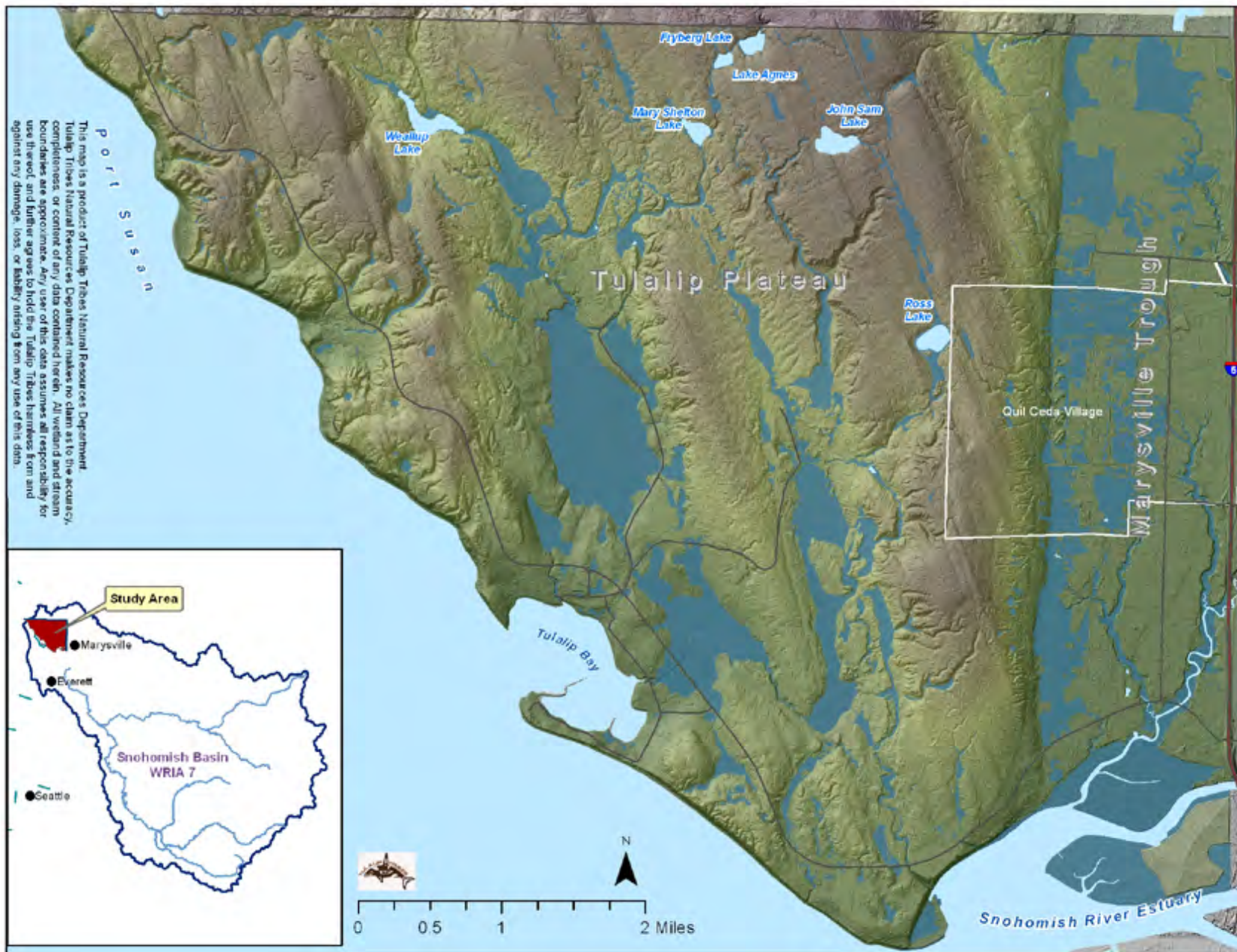


Figure 1. Tulalip Reservation.

Quilceda and Snohomish estuaries. The majority of wetland acreage (88%) consists of wetland complexes greater than 10 acres in size. Nearly 2,900 wetland acres (67%) meet the highest Tulalip classification “Critical Value Wetlands” and offer high ecological and cultural importance. Approximately 56% of the wetland acres are forested. Non-forested areas offer potential wetland and buffer enhancement and/or restoration opportunities.

CORE ELEMENT ACTIONS AND ACTIVITIES

The following goals, objectives, and activities provide the best estimate of priority needs for the Tulalip Wetland Program over the next six years. The activities identified below are meant to be used as guidance and are subject to revision and/or redirection depending on tribal needs and available funding. A projected timeline for initiation and/or completion of the identified objectives for each of the Core Elements is provided in Appendix A.

1. MONITORING AND ASSESSMENT

Goal: An affordable, efficient, and effective monitoring and assessment strategy plan for the Tulalip Reservation wetlands

Objective 1: Update the Tulalip Watershed Management Plan to provide the newest available resource information to guide development of the monitoring and assessment strategy.

Objective 2: Develop an attainable wetland monitoring and assessment strategy.

Objective 3: Begin implementation of the monitoring and assessment strategy.



Wildlife signs at estuary edge

CURRENT STATUS OF MONITORING AND ASSESSMENT

The Tribes began data collection and resource planning measures for development of a Watershed Management Plan and a wetland inventory in the early to mid-1990s. At that time wetland locations were coarsely mapped and a Tulalip regulatory classification was assigned.

An intertidal mapping project was conducted in 2003 using EPA 106 funds (Zackey et. al, 2005) to identify nearshore habitat within the Reservation. The intertidal assessment was not specifically

targeted to identify wetlands however it provides the best estimate of intertidal eelgrass and salt marsh habitat occurring west of the mouth of the Snohomish Estuary.

In 2004 the Tulalip Natural Resources Department obtained EPA WPDG funds to conduct baseline wetland bioassessment monitoring at four wetland locations (Sevigny, 2006). Two locations were relatively undisturbed and two locations were moderately disturbed by human activities. The purpose of the study was to establish baseline data for amphibian diversity and to compare water quality, habitat characteristics, and amphibian assemblages to identify correlations between biotic and abiotic factors. Amphibian use was determined by aquatic funnel trapping and amphibian egg mass counts. The intent of this monitoring project was for it to be repeated in the future to establish trend data.

Additional Program work completed in 2008-2010 included development of the wetland geodatabase to document baseline conditions and to track changes to tribal wetlands; refinement of the wetland inventory; regulatory, vegetative, and landform classification of wetlands; a rapid remote assessment of wetland and adjacent upland habitat cover conditions; and identification of potential future wetland water quality monitoring stations.

The improved wetland inventory found that approximately 96% (4,122 acres) of the wetlands on the Reservation have surface water connections to other tribal waters (streams, lakes, coastal shoreline). Wetlands were associated (named) according to their drainage basin to allow for future assessment and monitoring of physical, biological, and chemical influence/support/impairments to tribal streams and coastal waters.



Vegetation Monitoring, Quilceda

The Tulalip wetland geo-database was developed to establish a digital repository for long term storage of and access to wetland information. The new database currently stores baseline information for wetland, upland, and stream field data as well as information about watershed association; surface water connections; wetland classes (Tulalip, Cowardin, and HGM); individual wetland mapping confidence; soil, water, and vegetative information; location of culturally significant plant communities; and photo records.

Most recently, the Tulalip Tribes implemented a wetland functional assessment tool (EPA Level 2 monitoring and assessment) to help identify ecological services provided by wetlands within the Lower Quilceda Neighborhood Smart Growth planning area in the southeast corner of the Reservation. Approximately 50 wetlands characterized by varying hydrogeomorphic and Cowardin classes were analyzed within the 2,700 acre project area using the Wetland Evaluation Services Protocol for the United States (Adamus, 2011). The results of these assessments are currently being prepared by a consultant and should help inform future wetland functional assessment efforts.

PROGRAM DEVELOPMENT MONITORING AND ASSESSMENT ACTIVITIES FOR WETLANDS (2013 – 2019)

Watershed Management Plan

- Update the Watershed Management Plan and implementation priorities based on actions, studies, and assessments completed over the past 14 years including water quality, stream, and wetland information gathered since 1996.
- Re-assess and prioritize the individual basin recommendations provided in the Plan. Incorporate these into the monitoring and assessment strategy plan.

Monitoring and Assessment Strategy Plan

- Conduct a literature search of proven and effective monitoring and assessment tools and identify data gaps that need to be filled in order to protect, enhance, restore, and manage Tulalip wetlands.
- Identify priority parameters to be monitored and select or develop the tool(s) to be used for monitoring and assessment (EPA Levels 1-3 monitoring and assessment).
- Obtain staff training and equipment needed to properly implement selected monitoring and assessment strategy.
- Incorporate water quality standards into the monitoring and assessment program.
- Implement a pilot monitoring and assessment strategy to a subset of diverse wetland hydrogeomorphic and vegetative classes across several basins.
- Review results of pilot monitoring assessment strategy and apply adaptive measures as needed to make the tool practical to apply.
- Apply the monitoring and assessment strategy to the larger sample set of wetlands in the reservation.

2. REGULATION

Goal: A comprehensive regulatory framework that ensures no net loss of wetland acres and protects and enhances ecological processes and services associated with wetlands within the Reservation

Objective 1: Provide technical support to tribal staff and membership regarding Tulalip wetland regulations, mapping, delineation, permit review, etc.

Objective 2: Support Tulalip Community Development Department with revision and interpretation of tribal codes related to wetlands.

Objective 3: Encourage innovative land use and development practices that minimize disturbance to native soils, vegetation, and waters while allowing for sustainable economic growth for the Tribes and its individual members.

CURRENT STATUS OF WETLAND REGULATION

The Tribes have been actively involved in guiding the development of wetland policies and regulations in Washington State for over 20 years, contributing to numerous federal, state, and local initiatives and updates, and requesting that these aquatic resources along with the functions and services that they provide, be protected and preserved. The Tribes conducted a cursory wetland inventory and developed guiding protective policies and regulations in the early to mid-1990's. A preliminary wetland inventory (1992-1994), a watershed plan (1996), and the first Tulalip wetland regulations were established at that time. The 2009 Tulalip Comprehensive Plan identifies a goal to "ensure "no net loss" of wetlands function and acreage, and promote a measurable gain of wetlands function and acreage" (Policy EN 1-3). Wetlands are recognized as sensitive areas that warrant special management policies and guidelines.

A detailed assessment of the current policies and regulations for streams, wetlands, and their protective



Skunk Cabbage in bloom

buffers was completed during the 2008 Program improvement to assess current protective measures and to provide better predictability for tribal project planning and development (ESA Adolfson, 2010).

The majority of Tulalip wetlands (61%) are under tribal ownership, however, the remaining 1/3 of the Reservation including large portions of

Table 1: Summary of policies, ordinances, plans and resource tools that support the Tulalip Wetland Program

EPA Core Elements	Ordinances/Policies/Plans That Guide Activities in Wetlands and Their Buffers	Supporting Documents and Resource Tools
<p>1. Regulation</p>	<ul style="list-style-type: none"> • Title 7 – Land Use (Ordinance 80 - Tulalip Zoning Ordinance) • Title 8 – Natural Resources (Ordinance 95 - Environmental Infractions) • Draft Tulalip Tribes Shoreline Management Plan (2010) • Tulalip Tribes Comprehensive Land Use Management Plan (2009) • Quilceda Village In-Lieu-Fee (in progress) 	<ul style="list-style-type: none"> • Tulalip Watershed Management Plan (1996) • Water Resources of the Tulalip Indian Reservation (USDA & USGS, 2004) • Tulalip Tribes Vision Plan II (2010) • Draft Tulalip Bay Watershed Management Plan (2010) • Tulalip Wetlands Report (2011) • Tulalip Tribes Assessment of Aquatic Resource Guidance, Regulation, and Protection Report (2010) •
<p>2. Water Quality Standards for Wetlands</p>	<ul style="list-style-type: none"> • 401 Certification • NPDES Permit (EPA) • Tulalip Stormwater Program (in development) 	<ul style="list-style-type: none"> • Tulalip Tribes Final Water Quality Standards (1996) • Tulalip Reservation Shoreline Water Quality Assessment and Mapping (2005) • Phase 1 Report Tulalip Bay Water Quality Investigation (Draft, 2006) • Detection of F+ RNA Coliphage and Bacteroides 16s rRNA Gene in Tulalip Bay (2008) • Tulalip Tribes Water Quality Monitoring Strategy 2010-2015 (2010) • EPA Guidance on Water Quality Standards for Wetlands
<p>3. Monitoring and Assessment</p>		<ul style="list-style-type: none"> • Tulalip Wetlands Bioassessment Monitoring Program Final Report (2006) • Quilceda Estuary Vegetation Characterization & Monitoring (2007) • 2010 Draft Shoreline Characterization Report • Draft Tulalip Bay Watershed Management Plan (2010) • Water Resources of the Tulalip Indian Reservation and Adjacent Area (2004) • Lower Quilceda Neighborhood Project Wetland Functional Assessment (unpublished)
<p>4. Voluntary Restoration and Protection</p>		<ul style="list-style-type: none"> • Coho Creek Habitat Enhancement Project • Qwuloolt Estuary Restoration Project

important wetland habitat are currently in non-Indian ownership. Ongoing disagreements between the Tribes and Snohomish County regarding jurisdictional authority for non-Indian fee-simple parcels within the Reservation leaves management and protection of tribal waters on these parcels in question.

Under the current Tulalip zoning classification approximately 2,224 acres (52%) of wetland are located within areas zoned for residential, industrial, commercial, and/or agricultural uses and are therefore “at risk” of potential development impact. Tulalip Title 7 (Ordinance 80), Tulalip Title 8 (Ordinance 95), and comprehensive goals and policies provide guidance that reduce these risks. Table 1 provides a summary of policies, ordinances, plans, and resource tools that protect and guide activities in and near Tulalip wetlands.

Quil Ceda Village is currently developing an in-lieu-fee wetland mitigation program for future development within Quil Ceda Village. The in-lieu-fee program will provide a planned comprehensive, ecologically sound, watershed-based mitigation approach as an alternative to more traditional individual piece meal permittee responsible mitigation. Title 7 (Ordinance 80) will need to be revised to allow use of the in lieu-fee program.

PROGRAM DEVELOPMENT - REGULATION ACTIVITIES FOR WETLANDS (2013 – 2019)

- Use the Tulalip Tribes Assessment of Aquatic Resource Guidance, Regulation, and Protection report (ESA Adolfson, 2010) to update new regulatory guidance and rules to protect tribal waters (including wetlands).
- Develop mitigation guidance that establishes a “no net loss” and/or a “net functional lift” standard for Tulalip wetlands.
- Use the information provided by the new inventory and geodatabase to guide code updates.
- Specify protection measures for important source wetlands (springs and seeps).
- Revise Title 7 to allow use of the in-lieu-fee program in Quil Ceda Village.
- Conduct additional land suitability analysis using the information gathered from the 2009 ArcHydro stream maps, the 2010 wetland inventory, the 2010 QuickBird satellite imagery, and other existing land suitability information (steep slopes, aquifer recharge areas, etc.) to better inform the update of Title 7 (Ordinance 80) and development of the future land use zoning map.
- Encourage non-sprawling mixed-use communities with reduced impervious areas; reduced loss of native vegetation (species diversity and structural complexity); efficient transportation networks; improved soils; low impact stormwater detention and infiltration areas; and low



ATV impacts in Battle Creek wetland

maintenance landscapes to minimize impacts to streams and wetlands that flow to coastal waters and influence the health of tribal tidelands. Implement options such as neighborhood-level developments; “smart growth” communities; development of innovative codes; incentive programs; etc. under new code updates.

- Consider special management measures such as retention and enhancement of native vegetation, restoration/enhancement of native soils, control of invasive species, reduced use of fertilizers and chemicals, stormwater dispersion measures, etc. that could be applied to riparian areas to aid in protecting and improving the functions that they provide in protecting tribal waters, and
- Review and incorporate the Tulalip Wetland Report (Boyer and Weatherly, 2011) recommendations and the new Watershed Management Plan recommendations (not currently funded).

3. VOLUNTARY RESTORATION AND PROTECTION

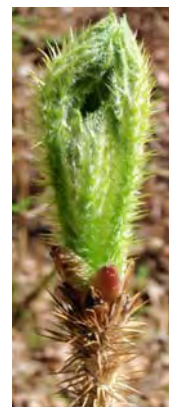
Goal: Identify and begin to restore and protect the most vulnerable Tulalip wetlands.

Objective 1: Prioritize wetland restoration and protection areas and actions.

Objective 2: Pursue options to secure high priority wetland restoration and protection sites.

Objective 3: Acquire high priority wetlands and implement high priority wetland restoration projects.

Objective 4: Enhance native vegetation species diversity and structural complexity in Tulalip wetlands and riparian corridors with an emphasis on increasing culturally significant and wildlife food and habitat species.



Emerging Devil's club

CURRENT STATUS OF VOLUNTARY RESTORATION AND PROTECTION

Protection and restoration of aquatic and riparian habitat is an integral element for preservation of tribal Treaty Rights. The Tulalip Tribes are co-managers of salmon fisheries in their usual and accustomed area and have been active participants in planning, evaluation, construction, and monitoring of mitigation and restoration activities in the Snohomish and Stillaguamish Basins. Currently the Tribes serve as the lead project proponent for the 400-acre Qwuloolt Estuary Restoration Project, along the northern edge of Ebey Slough, within the City of Marysville.

Within the Reservation the Tribes manage the Coho Creek habitat enhancement project to restore salmonid rearing and spawning habitat. The project is ongoing and is comprised of two primary tasks;

(A) improving the quality and quantity of rearing and spawning habitat in a spring fed tributary to Coho Creek (Tributary 5), and (B) augmenting spawning gravel at specified locations within Coho Creek. This creek supports coho as well as chum salmon rearing and spawning habitat.

Heavy workloads and shortage of staff have limited the investigation and scope of wetland restoration opportunities within the Reservation. However, assessment of restoration opportunities along the coast of the Reservation (Herrera, 2010) and non-forested wetland and buffer areas identified during the 2008 – 2010 Program activities offer a preliminary punch list of potential wetland and buffer enhancement and/or restoration opportunities.

PROGRAM DEVELOPMENT - VOLUNTARY RESTORATION AND PROTECTION ACTIVITIES FOR WETLANDS (2013 – 2019)



- Prioritize wetland restoration/enhancement/protection areas and actions within the Reservation.
 - Develop a wetland restoration/enhancement/protection action plan for the Reservation.
 - Partner with the Tulalip Restoration Ecologist to identify and rank potential watershed-based wetland restoration/enhancement/protection sites; track opportunities in the "restoration opportunities" data feature class of the wetland geo-database.
 - Begin to implement the updated Watershed Implementation Priorities (unfunded Tulalip Watershed Plan) related to wetlands.
- Design and construct signs to identify and describe Tulalip waters (see Outreach and Education)
 - Explore restoration and protection incentives
 - Partner with the Hibulb Rediscovery Program to target immediate enhancement and restoration opportunities that will support Tulalip cultural activities into the seventh generation.
 - Identify ways to increase tribal member accessibility to wetlands with high cultural, spiritual, and recreational potential.
 - Partner with the Natural Resources Wildlife Section to target immediate enhancement and restoration opportunities that will support Tulalip wildlife that are dependent upon Tulalip wetland and riparian areas.
 - Identify acquisition funding opportunities and strategies.
 - Implement pollution source abatement (coordinate removal of garbage, appliances, tires, and other debris from tribal waters) and nonpoint source reduction activities.

4. WATER QUALITY STANDARDS FOR WETLANDS



A lake-fringe wetland in the Tulalip Creek Basin

Goal: Clear, concise, and practical wetland water quality standards to protect fish and wildlife species and tribal practices that are dependent upon Tulalip wetlands.

Objective 1: Develop water quality and monitoring standards for Tulalip wetlands. Build on the 2010-2015 Tulalip Water Quality Monitoring Strategy (Zackey, 2010).

Objective 2: Implement the new water quality and monitoring strategies.

CURRENT STATUS OF WETLAND WATER QUALITY STANDARDS

The 2004 baseline wetland bioassessment monitoring (Sevigny, 2006) included a comparison of water quality within four sample wetlands. Water quality parameters measured included: dissolved oxygen, temperature, pH, turbidity, total suspended solids (TSS), ortho-phosphates, nitrates, and fecal coliform bacteria. The intent was to continue monitoring the four wetland sites in the future to establish trend data.

In 2009, several wetland monitoring sites were established to monitor wetland water quality conditions and trends. The current sites were selected prior to the completion of the wetland inventory and classification and will need refinement to capture a representative sample of the different wetland types and uses on the Reservation. Long-term habitat and biological monitoring sites need to be established and efforts are underway with the Cultural Resources Department to identify wetlands of cultural significance that need to be monitored (Zackey, 2010).

The inventory and classification of the Reservation's wetlands was completed in 2010. Wetlands were classified according to the Tulalip Tribes environmental ordinances, and both Cowardin, and hydrogeomorphic classification systems. Preliminary data was collected for occurrences of culturally significant plant species associated with wetlands. This information will be used to refine the designated uses for targeted wetlands.

During the 2008-2010 assessment of potential water quality monitoring stations, 48 proposed sampling locations were identified in 14 basins (and sub-basins) across a range of hydrogeomorphic and vegetative classes. Monitoring of these 48 stations is not currently funded or practical. The Tribes are

hopeful that a wetland monitoring program can be established to prioritize monitoring and assessment needs, to begin documenting baseline conditions in a subset of these locations, and to resample the previous monitoring sites in order to guide and protect tribal uses. Training is needed to help the wetland biologist better understand and implement water quality standards and to integrate water quality standards into the monitoring and assessment strategy.

Geospatial Water Quality Data Management

The Tulalip Natural Resources Department has combined a detailed water drainage layer and the wetlands inventory layer into one geospatial relational database (Tulalip Hydro) on the Tribes' server. This geodatabase provides the framework for conducting and tracking data (support for EPA Level 1-3 monitoring and assessment). The resolution of the current data layers is 1:12,000 and exists for all the watersheds on the Reservation.



West Fork Battle Creek riparian wetland



A forested swamp on East Fork Sturgeon Creek

PROGRAM DEVELOPMENT - WATER QUALITY STANDARDS ACTIVITIES FOR WETLANDS (2013 – 2019)

- Incorporate the definition of a wetland into the Tulalip water quality standards.
- Obtain staff training and equipment needed to properly design and implement water quality monitoring.
- Collaborate with the Tribes' existing water quality monitoring program to identify shared goals and activities.
- Identify and adopt "use classifications" that protect the structure and function of wetlands and sustain cultural/spiritual uses.
- Locate on a map where designated uses apply.
- Identify and adopt narrative criteria and appropriate numeric criteria in the standards to protect the designated uses. Place emphasis on preservation of cultural resources and cultural identity.

- Identify and adopt narrative biological criteria in the standards; and incorporate the antidegradation policy and implementation methods.
- Define Tulalip anti-degradation policies for wetlands.
- Establish/Reassess baseline water quality conditions and designations and refine water quality criteria.
- Implement updated wetland water quality sampling.

PUBLIC EDUCATION AND OUTREACH

Education and outreach is integral to all elements of the Tulalip Wetland Program. Between 2006-2012 the Program coordinated brown bag lunches to encourage the sharing of technical knowledge between tribal staff; has presented numerous wetland PowerPoint presentations to varying tribal audiences including tribal government staff, the Northwest Indian College, the NW Tribal GIS Users Group, and the Region 10 Intertribal Wetland Working Group; has held two wetland classes for Tulalip students (Tulalip Elementary School and Tulalip Heritage School); has published over a dozen articles in the tribal newspaper (See-Yaht-Sub); participated in four Tulalip GIS Day activities to help increase awareness and knowledge of the presence and importance of wetlands; mapped and photographed garbage dumping threats to tribal waters which resulted in a targeted cleanup of several streams and wetlands; and has hosted high school and college interns to learn about wetland functional assessment and wetland mapping efforts on the Reservation.



The Tribes recognize the need to continue purposeful outreach and education efforts to ensure valued interest and tribal ownership of less notable Tulalip waters. For example, many inland tribal waters such as scrub-shrub and forested wetlands, and intermittent streams located adjacent to major roads are not readily recognized as tribal waters. Similarly, many landowners (both tribal and nontribal) are not aware that they have these types of habitats on their property. Over the next six years the Tribes would like to target activities that would increase awareness of Tulalip waters and to begin to document unique Tulalip wetland communities with high cultural value.

PROGRAM DEVELOPMENT PUBLIC OUTREACH AND EDUCATION ACTIVITIES FOR WETLANDS (2013 – 2019)

- Develop a Tulalip Stream and Wetland Atlas to assist tribal members that visit the Community Development Department or the Administration Building welcome center.

- Design, construct, and install identification and educational signs for Tulalip waters along primary roads and in public areas using tribal students, artists, and skilled labor. Possible partners include Tulalip Data Services, Hibulb Rediscovery Program, Lushootseed Language Department, Tulalip Public Works, Quil Ceda Village, Northwest Indian College, Tulalip Adult Education, Snohomish County, and local businesses.
- Provide training for tribal staff (ex. increase knowledge and skill in using the new wetland inventory and wetland geodatabase, identify best management practices most suited to working in the vicinity of tribal waters and riparian areas, review construction and maintenance practices and collaborate with supervisors to improve methods, provide cross-training opportunities, etc.)
- Develop a targeted outreach and education program to increase awareness of the importance and value of, and stewardship of inland and coastal tribal waters. Example activities include:
 1. Initiate a video archive of select Tulalip wetlands through partnership with Tulalip Communications Department and the Hibulb Rediscovery Program.
 2. Develop educational brochures/pamphlets about Tulalip waters (wetlands and streams)
 3. Partner with Tulalip schools
 4. Publish news articles in the tribal newspaper (See-Yaht-Sub).

ANTICIPATED WETLAND PROGRAM NEEDS

- GIS support
- Field technician
- Outreach/education support
- Professional consultant support
- Office supplies
- Tulalip Hydro geo-database maintenance
- Computer equipment and updated software
- Field supplies and equipment (boots, raingear, wildlife motion detection cameras, Munsell soil chart, waterproof field notebooks, soil augers, groundwater monitoring wells, water quality sampling equipment, waterproof field camera, video camera, flagging, GPS unit, field vest, etc.)
- Source of transportation

ANTICIPATED WETLAND PROGRAM STAFF DEVELOPMENT NEEDS

- Participate in the R10 Intertribal Wetland Working Group whose priority is to build capacity of Tribal Wetland Programs through coordination, training and strategic planning efforts.
- Attend training to build skills in wetland monitoring and assessment, developing wetland water quality standards, ethnobotany, GIS.
- Attend professional conferences and/or seminars
- Obtain professional wetland scientist certification



Driftwood

PROGRAM EVALUATION

This Wetland Program Plan should be evaluated in approximately 3 years (midway) to ensure that the plan is on track for achieving identified actions and activities. Program evaluation should specifically include comment from colleagues in the Natural Resources Environmental, Fish & Wildlife, and Forestry Sections, and the Hibulb Rediscovery Program.

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APPENDIX A

APPROXIMATE TIMELINE OF WETLAND PROGRAM ACTIVITIES

2013-2019

Proposed Timeline for Tulalip Wetland Program Activities Between 2013 – 2019 (schedule is approximate and is dependent on funding)

CORE ELEMENTS AND OBJECTIVES	2013	2014	2015	2016	2017	2018	2019
MONITORING AND ASSESSMENT							
Objective 1: Update the Tulalip Watershed Management Plan.	X	X					
Objective 2: Develop an attainable wetland monitoring and assessment strategy		X	X				
Objective 3: Begin implementation of the monitoring and assessment strategy.			X	X	X	X	X
REGULATION							
Objective 1: Provide technical support to tribal staff and membership	X	X	X	X	X	X	X
Objective 2: Support Tulalip Community Development Department with revision and interpretation of tribal codes.	X	X	X	X	X	X	X
Objective 3: Encourage innovative land use and development practices	X	X	X	X	X	X	X
VOLUNTARY RESTORATION AND PROTECTION							
Objective 1: Prioritize wetland restoration and protection areas and actions.		X	X				
Objective 2: Pursue options to secure high priority wetland restoration and protection sites.		X	X	X	X	X	X
Objective 3: Acquire high priority wetlands and implement high priority wetland restoration projects.			X	X	X	X	X
Objective 4: Enhance native plant community species diversity and structural complexity in Tulalip wetlands and riparian corridors (culturally significant and wildlife food and habitat.	X	X	X	X	X	X	X
WATER QUALITY STANDARDS FOR WETLANDS							
Objective 1: Develop water quality and monitoring standards for Tulalip wetlands. Build on the 2010-2015 Tulalip Water Quality Monitoring Strategy.	X	X	X				
Objective 2: Implement the new water quality and monitoring strategies.			X	X	X	X	X
PUBLIC EDUCATION AND OUTREACH (Sample of activities that will span all four Core Elements above)							
Develop a Tulalip Stream and Wetland Atlas.	X	X					
Design, construct, and install identification and educational signs for Tulalip waters.		X	X				
Provide training for tribal staff	X	X					
Develop a targeted outreach and education program to increase awareness of the importance and value of, and stewardship of inland and coastal tribal waters.		X					
Implement outreach and education activities		X	X	X	X	X	X