COQUILLE INDIAN TRIBE WETLAND MANAGEMENT PLAN

For

TRIBAL TRUST LANDS 2014-2018



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Development of the Coquille Indian Tribe Wetland Management Plan was made possible with funding from the Environmental Protection Agency (EPA) through the Wetland Program Development Grants. We are deeply appreciative of EPA Region 10 for their long standing grant support for the continued development of strong environmental programs in Indian Country.

Management of aquatic resources falls under the Land Resources and Environmental Services (LRES) Department in the Coquille Indian Tribal Government. With the goal of developing a comprehensive plan, the LRES Department worked with other tribal partners to refine wetland program's objectives and strategies for the Coquille Indian Tribe. People from the following tribal programs and departments contributed to this strategy in a variety of ways: Don Ivy, Cultural Resource Program, Robin Harkins, GIS Coordinator, Jason Robison, Biological and Environmental Services Program and Todd Tripp of the Planning, Community and Real Estate Services.

Introduction

Since 1999, the total acreage for all of the lands held in trust for the Coquille Indian Tribe has grown to approximately 6,482 acres (see maps in Appendix). These properties include the Empire Reservation (Reservation), Tribal Administration Building, The Mill Casino, Heritage Place, Metcalf Tract and Charleston Industrial Park Tract all in the Coos Bay Watershed (HUC 17100304), and 5,400 acres of the Coquille Forest in the Coquille River Watershed (HUC 17100305) transferred from the Bureau of Land Management in September 1998 to the BIA to be held in trust for the Tribe.

The Tribal Reservation trust lands include two separate parcels referred to respectively as the North Parcel and the South Parcel. The North Parcel is approximately 291 acres, and contains First and Second Creek watersheds. The North Parcel is bounded by Wisconsin Ave on the North and the Empire neighborhoods to the west. The South Parcel is approximately 754 acres, and contains Fourth and Tarheel Creek watersheds; including their two respective reservoirs. The South Parcel is bounded by Cape Argo Highway and Wallace Road on the west and Libby Lane on the south and it contains all of the Tribe's current residential and infrastructure development to date. All are second order streams draining directly into the lower Coos Bay estuary.

The Coquille Forest comprises approximately 5,400 acres on 14 separate parcels located southeast of the town of Myrtle Point, Oregon (eastern Coos County). There are no named rivers flowing through the Coquille Forest, but approximately 60 miles of smaller headwater streams and their associated riparian systems. All of these tributaries flow into the East Fork, Middle Fork, and South Fork Coquille River watersheds.

Tribal Wetland Resources

Fishman Environmental Services, LLC (now known as SWCA Consultants) conducted wetland inventories of the North and South Parcels for the Coquille Indian Tribe in 1998. Refinements to the wetland inventory for the North Parcel were completed in 2000. Twenty five wetlands amounting to approximately 12 acres were mapped on the Empire Reservation in 1998, inclusive of all four watersheds. In 2000, FES again visited the North Parcel of the Reservation to field-check the wetland boundaries and to document any changes since the original inventory of 1998. Twenty five wetlands were identified on the North parcel; eight of these were new since the 1998 inventory. Due to anthropocentric changes to the landscape, such as roads and logging, the wetland hydrology of the land has had to adapt, thus generating new wetlands across the landscape. All of these streams on the Reservation have been impacted by various historical activities during the past 150 years, including coal mining, logging, roads, utility corridors, and residential neighborhood development.

Wetland inventories have not been conducted on the Coquille Forest holdings. Preliminary field surveys have identified at least one perched wetland not associated with the streams and riparian areas. This 1.5-acre wetland is currently protected with the Tribe's voluntary 100-foot buffer (as designated on the Mead Creek Timber Sale of 2007). Protection of similar non-riparian wetlands remains a high priority for the Tribe.

Oral histories retained by CIT tribal members, anecdotes of other local residents, and past wetland inventories on the Reservation help illustrate the loss of decreased wetland functionality from a once productive system. The development of this tribal Wetland Management Plan (Plan) shall be an important component of the Tribe's ability to assess and monitor wetland resources that so often hold and support culturally significant flora and fauna. That is, 20 of the 44 culturally significant flora identified in the Tribe's "Cultural Resources Found in the Vicinity of the Coquille Forest" are wetland plants or associated with wetlands. Riparian wetlands are also valued by the Tribe for their importance in protecting rearing habitat for salmonid and lamprey populations -- well documented traditional food sources for the Tribe.

In order to effectively restore and protect wetland resources, the Tribe desires to assess available resources, define the underlying management concern, develop wetland goals and objectives, and draft a long-term monitoring and assessment strategy to manage wetlands on tribal lands. Utilizing the EPA's Core Element Framework as guidance, this Plan intends to increase the quantity and quality of tribal wetlands by expanding tribal programs, which in turn increases the Tribe's ability to identify, manage, and protect wetlands.

The Coquille Indian Tribe is considering future commercial and residential development opportunities for the Reservation. It is important for the tribal staff to have a clear and consistent Plan for wetland management, and to link to existing watershed plans where available; particularly on the North Parcel, ahead of future tribal development plans. Additionally, having a Tribal Council approved Plan in place prior to development

will assist the Tribe in incorporating appropriate wetland protection and potential mitigation into future building on the Reservation. The Plan shall also explore partnerships to effectively protect wetlands on tribal lands, particularly with tribal programs and departments and local agencies such as the U.S. Bureau of Land Management. Such partnerships can assist the Tribe in developing both monitoring and assessment programs and restoration and protection goals.

Little information and no wetland assessment data are available for the Tribe's 5,400 acre Coquille Forest land holdings. A 2007 timber cruise identified a 1.5 acre perched (non-riparian) wetland near Mead Creek in the Coquille Watershed that the Tribe voluntarily protected with a 100-foot no harvest buffer. Additional Coquille Forest non-riparian wetlands are known to exist; however the Tribe needs to implement an assessment and monitoring inventory effort in order to effectively identify and then protect these resources. Although this Plan assists the Tribe in greater stewardship of wetlands throughout the traditional Coquille homelands, initial efforts by this plan will focus on the development of monitoring and assessment strategies on the Empire Reservation lands where a majority of the Tribe's future development actions are planned. Once established, the Tribe will shift focus and implement adequate monitoring and assessment activities to the Coquille Forest in order to determine the extent and quality of wetlands there.

Goals

The goals of this Plan are to provide the core framework for a Coquille Indian Tribe Wetland Program over the next five years. The plan would be geared specifically for the monitoring and assessment of wetland resources on the North and South Parcels of the Reservation; followed by the expansion of efforts to the Coquille Forest trust lands. The U.S. Environmental Protection Agency (EPA) identifies four core elements that comprise and strengthen effective wetlands programs. The core elements are basic program functions that form the foundation of wetlands management and protection in a state or tribe. These include:

- 1. Inventory, Monitoring and Assessment;
- 2. Regulatory activities including 401 certification;
- 3. Voluntary Restoration and Protection;
- 4. Water Quality Standards for wetlands.

The Tribe is interested in achieving all four elements of the EPA's Core Elements Framework (CEF); however, the Tribe recognizes that program initiation and implementation activities will be incremental and achieved by the goals and resources available to the Tribe. Thus, the Tribe would focus the Plan on the achievement of the Inventory, Monitoring and Assessment program, and then shall work toward a Voluntary Restoration and Protection component of the CEF. At the end of the five year period, the Tribe shall reevaluate priorities and resources to address the continued development of the Tribe's Restoration and Protection component once appropriate inventories have been

completed. NOTE: Urban development on Reservation lands is typically slow and methodical; therefore, later implementation of the regulatory and water quality components is not detrimental.

Initial goals of the Tribe's Wetland Program are to establish an in-house inventory, monitoring and assessment capacity within the Tribe's Biological and Environmental Services Program, and in utilizing these skills to identify wetland resources worthy of protection and restoration. Additionally, inventory data will allow the Tribe to identify and prioritize wetland sights for their potential in wetland mitigation banking if so desired by the Tribe.

Program Objectives

The initial objectives of this Wetland Management Plan are to establish the Inventory, Monitoring and Assessment components of a wetland program and to begin work toward establishing a Voluntary Restoration and Protection program that the Tribe can adopt to build an effective wetland program. Secondary objectives are to build the tribal programmatic capacity to identify and prioritize wetland habitat by incorporating wetland monitoring into broader Tribal watershed planning and development/forest management initiatives.

A well designed and executed inventory, wetland monitoring and assessment program is a critical tool for the Tribe to better manage and protect wetland resources. It will allow the Tribe to establish a baseline in wetlands extent, condition and function, to detect change, to assess value, and to characterize trends over time. Inventorying, monitoring and assessment plays a foundational role in the other core elements of wetland programs. Specifically, it informs and guides the decision making process of the Tribe's restoration and protection goals. To develop an inventory, monitoring and assessment program the Tribe shall pursue the following three objectives during the 2014 to 2018 timeframe:

- 1. Develop an inventory, monitoring and assessment strategy consistent with Tribal values and *Elements of a State Water Monitoring and Assessment Program for Wetlands* (EPA, 2006) to identify and map wetlands.
- 2. Implement a monitoring program that provides time-based feedback (observations) to inform future wetland protection and management;
- 3. Utilize monitoring data for tribal decision making to balance Tribal needs and appropriate wetland protection, restoration and mitigation (when needed).

Voluntary restoration and protection efforts help stem the loss and create a gain in natural wetlands and their associated functions. Wetlands provide critical habitat for fish and wildlife, provide important watershed functions to control flooding and limit erosion, and wetlands also hold culturally significant plant species for tribal traditions and first foods. Accurate and up-to-date wetland inventory data is crucial to the success of a wetland restoration and protection program. As such, the Tribe shall initiate development

of a wetland Restoration and Protection program after the Tribe's Inventory, Assessment and Monitoring component is complete. To develop a comprehensive restoration and protection program the Tribe shall pursue the following objectives during the 2017 to 2018 timeframe:

- 1. Clearly and consistently define restoration and protection goals throughout tribal territories;
- 2. Integrate wetland management goals into tribal and local partnerships.
- 3. Revisit and revise the tribal wetland plan to expand restoration and protection efforts beyond the scope of this plan.

After the initial five year implementation of a tribal wetland program, the Tribe shall revisit and expand this plan to further develop the restoration and protection component and to include the other CEF components of Regulatory Activities and Water Quality Standards for wetlands.

Management Plan

Core Element: Monitoring and Assessment

Goal: To establish a tribal inventory, monitoring and assessment program that facilitates sustainable management and conservation of tribal wetlands.

Objective: Develop an inventory, monitoring and assessment program consistent with Tribal values and *Elements of a State Water Monitoring and Assessment Program for Wetlands* (EPA, 2006) to manage wetlands.

Action (a): Develop and maintain an integrated wetland inventory monitoring and assessment framework for tribal trust lands					trust
Activity	2014	2015	2016	2017	2018
Collaborate with tribal wetland resource partners to identify mutual data needs and uses, shared goals and objectives, and program decisions and environmental outcomes resulting from a wetland monitoring and assessment program	X	X			
Generate inventory, monitoring standards, methods, protocols that best serves the monitoring objectives of the tribe and wetland resources.	X				
Create definitions and guiding principles to differentiate between unique wetlands (bogs, estuaries, riparian), high value wetlands (near pristine), moderate (partially degraded) value wetlands, and low value (highly degraded) wetlands.	X				
Develop a four-year inventory, monitoring and assessment strategy and schedule for the Empire Reservation. Establish protocols to determine appropriate mapping intensity for wetlands in urban areas versus forested areas.	X	X			
Survey and identify wetland resources on Tribal Trust Lands; map location and prioritize need for further monitoring and assessment.	X	X	X		
From identified wetlands, initiate wetland monitoring efforts and integrate with other tribal aquatic monitoring efforts; Conduct wetland monitoring with tribal Clean Water Act 106, and 319 water quality monitoring programs.		X	X	X	X

Establish a data management approach for coordinated data standards, storage,			
management, and reporting of monitoring and assessment data		X	X

Action (b): Build the capacity and sustainability of the Tribe's Wetland Monitoring and Assessment Program					
Activity	2014	2015	2016	2017	2018
Seek and apply for funding opportunities to implement and sustain a tribal wetland	X	X	X	X	X
inventory, monitoring and assessment program	Λ	Λ	Λ	Λ	Λ
Identify and train in-house tribal staff in the identification, inventory and assessment					
of wetland resources as per federal and Tribal standards. Where outside consultants	X	X	v		
are utilized, clearly define appropriate qualifications and experience to conduct		Λ	Λ		
identification, delineation and assessment work.					
Refine monitoring strategy by conducting a sufficient number of pilot inventory					
assessment projects on the Empire Reservation; identify indicators and establish		X			
reference conditions (gradient from unimpaired to impaired).					
Ensure the scientific validity of monitoring activities, draft peer review quality		v	X		
management plan, and coordinate with the Tribe's Quality Assurance Project Plan		X	Λ		
Inventory and assess tribal wetland resources as specified in the tribal wetland		X	X	X	v
monitoring and assessment strategy.		Λ	Λ	Λ	Λ

Action (c): Continue wetland mapping efforts and development of assessments and tools					
Activity	2014	2015	2016	2017	2018
Evaluate and revise where appropriate tribal wetland management efforts for monitoring and mapping (inventory) tribal wetland resources		X	X	X	X
Develop tribal baseline data on wetland condition, which utilizes existing data, identifies data gaps, determines indicators, and prioritizes with a scoring protocol			X	X	X
Formulate a GIS strategy or protocol to prioritize wetland conservation, protection, and restoration needs for urban and non-urban areas.				X	

Develop spatial assessment and analysis tools that can be used to: rank wetlands based on their suitability for conservation, restoration, and mitigation needs; determine conservation/restoration priority areas; identify high quality wetlands; evaluate surrounding land use effects; identify cases and sources of degradation; identify potential threats; and determine cumulative effects of impacts	X	X	X	X
Analyze baseline condition and changes in wetland extent or condition relative to reference conditions; regularly report wetland status and trends		X	X	X

Core Element: Voluntary Restoration and Protection

Goal: Maintain, improve, and increase healthy wetland ecosystems through conservation, protection and restoration.

Objective: Develop wetland management protection and restoration goals, establish partnerships with other tribal programs and departments and begin to expand wetland protection goals into other tribal watershed plans.

Action (a): Begin developing a tribal wetland restoration and protection framework for tribal trust lands; build and maintain partnerships with tribal departments, local state and federal agencies, and adjacent landowners for wetland restoration and conservation

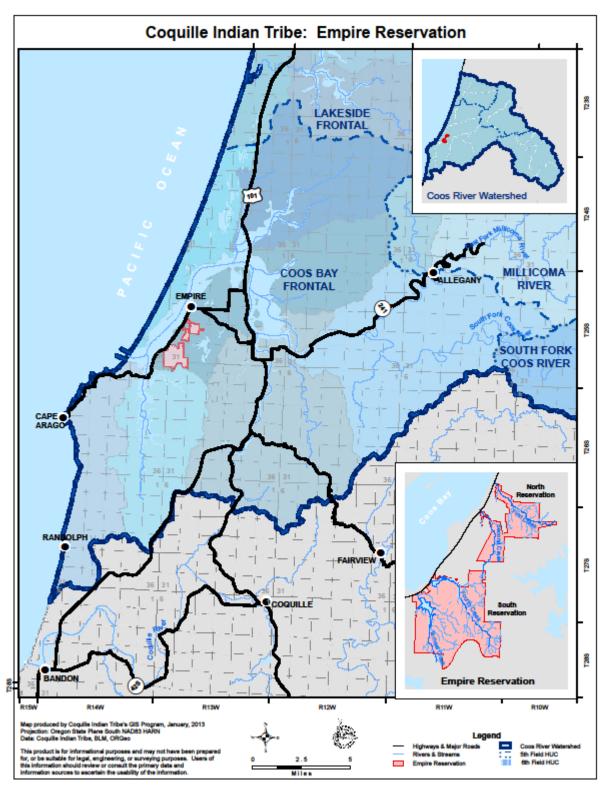
Activity	2014	2015	2016	2017	2018
Utilizing information acquired from the Tribe's inventory, monitoring and					
assessment efforts develop restoration and management goals for the Empire			X	X	X
Reservation specific to wetland type and location.					
Establish and develop strategic partnerships with the tribal forestry and planning					
programs, define wetland management goals; develop tools that utilize monitoring		X	X	X	X
and assessment knowledge to achieve healthy watershed and community outcomes.					
Reach out to local natural resource agencies and adjacent landowners where					
appropriate to establish common goals and combine efforts toward wetland				X	X
protection and restoration goals.					

Action (b): Consider watershed planning and expand wetland planning to other Tribal Departments.					
Activity	2014	2015	2016	2017	2018
Establish tribal conservation, restoration and protection goals that are consistent and compatible across relevant tribal departments			X	X	X
Develop a wetland notification protocol for use by other tribal departments and entities to alert the LRES Department for possible wetland identification and monitoring needs on tribal projects. Develop similar protocols for pre-harvest timber management activities within tribal trust lands.				X	X
Collaborate with tribal departments to identify potential wetland protection and mitigation sites, prioritize inventoried wetland protection sites, and integrate into existing project planning documents.			X	X	X
Integrate wetland conservation, restoration/protection efforts into master planning on the Empire Reservation, drafting project guidelines for land managers to protect existing wetlands, and incorporate exceptions and mitigation requirements for specific activities.			X	X	X

Action (C): Expand the Tribe's wetland voluntary restoration and protection coordinated framework to other tribal trust lands.					
Activity	2014	2015	2016	2017	2018
Revise or draft a new wetland management plan with a timeline beyond 2018 that includes the development of specific projects or actions to protect and restore wetland resources on the Tribe's trust lands.					X
Revise and expand the established wetland management goals to cover land management activities of the Coquille Forest. Consider future partnerships toward wetland mitigation banking.					X

Appendix:

A. Empire Reservation Watershed Map:



B. Coquille Forest Trust Lands Watershed Map:

