

Confederated Tribes of the Colville Reservation

Wetland Program Plan



Office of Environmental Trust

2018-2023

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Definitions

Geodatabase:

A geographic information system data storage framework combining spatial and wetland resource attribute information.

Lacustrine:

Related to lakes or lake/pond margins

Palustrine:

Vegetated wetlands dominated by trees, shrubs, persistent emergent plants, mosses or lichens.

Proper Functioning Condition (PFC):

A methodology for assessing the physical functioning of wetlands through consideration of hydrology, vegetation, and soil/landform attributes. PFC also refers to the actual condition of a wetland and how well the physical processes are working.

QAPP:

A Quality Assurance Project Plan which documents the planning, implementation, and assessment procedures for monitoring.

Riverine:

Wetlands located in floodplains or the riparian areas of flowing waters.

Waters of the U.S.:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands directly adjacent to such tributaries
- The following wetlands may qualify as Waters of the U.S.:
 - Wetlands adjacent to non-navigable tributaries that are not relatively permanent
 - Wetlands adjacent to, but not adjoining, a relatively permanent non-tributary

Introduction

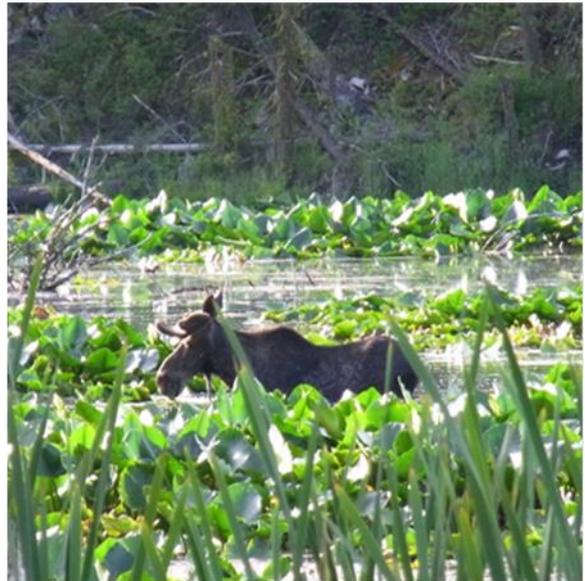
The Colville Indian Reservation includes a total of 1.4 million acres, extending across a large area and possessing a wealth of wetlands. The Reservation is more than twice the size of the state of Delaware, and larger than the state of Rhode Island. In spite of a relatively arid climate, 19,711 acres of wetlands are mapped within the boundaries of the Reservation by the National Wetland Inventory (NWI). Three primary wetland systems are present, including riverine, palustrine, and lacustrine. The NWI separates the Reservation wetland areas into more than 100 different wetland classes, and identifies 6,387 distinct wetland map units.

Wetlands serve important ecological, environmental, and cultural functions and values. Many cultural and uncommon plants grow in wetland environments. Wetlands support fish and shellfish production, providing critical fish and wildlife habitat. Wetland watershed functions include filtering water contaminants, dissipating stream energy, storing and releasing water to regulate flows, storing carbon, and contributing biodiversity through their special flora and fauna. They contribute to public health, safety and welfare by providing flood storage and conveyance, erosion, pollution and sediment control, recreation, water quality protection, water supply, and education and scientific research.

Given these special characteristics and functional relationships, a special program of management is needed to maintain wetland productivity and health, and to prevent loss of wetlands from the landscape.

Different Confederated Tribes of the Colville Reservation (CTCR) and Bureau of Indian Affairs programs (and various landowners) have roles in the management and protection of Reservation wetlands, their water, and habitat. Given the extensive resource and various entities involved, a program is needed to lead and coordinate wetland management. It should be driven by knowledge of the locations, watershed functions, and conditions of Reservation wetlands and Tribal aspirations for them.

Due to the importance of wetlands to fish and wildlife species the Tribal Fish and Wildlife program has designated wetlands as one of the reservation priority habitats. Because of the abundance of cultural resources associated with wetlands, strong Tribal support for wetland restoration and protection exists, and a close working relationship with the History/Archaeology Department is anticipated in the work to achieve wetland restoration and protection goals.



Armstrong Meadows

The Office of Environmental Trust (ETD) began working with EPA on wetland development with an initial Wetland Program Development grant (WPDG- CD-96051701; 8/1/2007-2/28/2009) that allowed development of the wetlands rapid assessment, the creation of the Wetlands Working Group, and revision of the Tribal Hydraulics Practices Code, among other activities. In October 2011, a second WPDG was awarded and placed in a Performance Partnership Grant (PPG- BG-00J42801), supporting development of the Wetland Protection Plan (WPP), which EPA approved in 2012. This also allowed hiring a Wetlands Specialist, developing the strategy and QAPP in 2013-2014, and initiating monitoring. Our current WPDG is in the current PPG (BG-00J42802), for fiscal years 2016 and 2017. This WPP is written in preparation for FY 18 funding opportunities and beyond.

Since beginning to develop the CTCR Wetland Program, ETD's objective has been to ensure that wetland management and planning is integrated with all natural resource management programs on the Reservation, including Forestry, Range, and Fish & Wildlife and History/Archaeology. Integration will continue to be an important part of the Wetlands Program through the CTCR Wetlands Working Group, led by the Wetland Specialist, which guides and prioritizes restoration efforts and objectives on the Reservation.

The Wetlands Working Group (WWG) currently includes representatives from various Tribal programs, including the Office of Environmental Trust (ETD), Fish and Wildlife, History/Archaeology, and the Tribal Conservation District. Also involved are Bureau of Indian Affairs (BIA) staff from Land Operations and BIA Forestry and Fire Management. These staff serve as professional and technical specialists and are involved in NEPA review, restoration, mitigation and other wetlands related activities.

A new Tribal Advisory Group (TAG) is being brought together in FY2017, in preparation for FY 2018-FY 2023 activities. This group will specifically include Elders, practitioners and knowledge keepers, who can help guide sensitive efforts such as designation of "exceptional wetlands of value" and other cultural and traditional matters of concern. With this group, we hope to involve both the Arrow Lakes and Okanagan in British Columbia, Canada, (members of the Confederated Colville Tribes), as well as Tribes affiliated with Upper Columbia United and other interested Tribes in the area. There may be an option to involve the EPA-funded Tribal Working Group (TWIG); several member Tribes have expressed interest in this regard.

CTCR goals coincide to a great degree with national goals for wetlands: maintaining the physical, chemical, and biological integrity of our wetlands, preventing overall loss of wetland area, and managing the Reservation in a way that increase wetland functions and quality.

This plan is divided into five sections, representing EPA's four core elements and also including education, outreach and partnerships:

- Monitoring & Assessment
- Voluntary Restoration & Protection
- Water Quality Standards
- Regulation
- Education, Outreach and Partnerships

Development and revision of this plan has been funded by Wetland Program Development Grants (FY 2012- 2017) received from the US Environmental Protection Agency. Implementation of wetland program development activities through this CTCR Wetland Program Plan will depend on continued award of Wetland Program Development grants funding a dedicated Wetland Specialist position.

Monitoring & Assessment

Goals, Objectives and Benefits

CTCR wetland monitoring and assessment follows the three tier EPA framework.

EPA Level 1, landscape assessment relies on GIS data, recently acquired “1 foot” aerial imagery, and Lidar (“Light Detection and Ranging”, a remote sensing method that uses light in the form of a pulsed laser to measure variable range distances to the Earth), once this is available. These assessments will provide a coarse gauge estimation of wetland condition within a given watershed.

EPA Level 2, rapid assessments utilize relatively simple metrics to assess wetland condition, based on hydrogeomorphic and plant community attributes. Rapid assessments will allow evaluation of wetlands along a gradient of disturbance, and with respect to ecological integrity.

EPA Level 3, intensive assessments provide a more rigorous measure of wetland condition. CTCR intensive assessments will utilize the WA Department of Natural Resources Floristic Quality Assessment protocol (FQA), based primarily on plant community composition.

In general, the principal goal of monitoring and assessment work is to establish a baseline for wetlands extent, condition and function, to detect changes and characterize trends over time. CTCR regulatory programs will come to rely on monitoring, to detect unauthorized actions, evaluate alternatives, determine compliance with Tribal permits and evaluate cumulative impacts. Eventually, such work will evaluate progress toward meeting EPA and Tribal goals of “no net loss” and “overall increase in wetlands extent, function and quality”.

Over the next six years, the CTCR will continue work on the following objectives:

- Refinement of a monitoring and assessment strategy consistent with *Elements of a State Water Monitoring and Assessment Program for Wetlands* (EPA, 2006) supporting wetlands management accomplishing CTCR objectives.
- Implementation of a sustainable monitoring program consistent with the wetlands monitoring strategy.
- Incorporation of monitoring data into Tribal, state and federal agency decision-making.
- Utilization of monitoring results to evaluate effectiveness of wetland regulatory protections and restoration performance.

Monitoring of wetlands water quality is addressed under the core element “Water Quality Standards.” Monitoring for compliance with wetlands regulatory protections is addressed under the core element “Regulation.”

Status

CTCR developed an initial rapid assessment procedure for wetland assessment with support from an EPA Wetland Program Development Grant in 2007. Staff in different programs (Environmental Trust, Fish & Wildlife, Range, Forestry, History/Archaeology, Leasing, etc.) collaborated to develop the procedure and received training to apply it. Approximately 100 wetlands have been assessed utilizing this rapid procedure. Concurrent with development of the rapid assessment, CTCR created a spreadsheet to compile assessment and locational information.



Frosty Meadows riverine wetland

In 2010/2011, another kind of multi-disciplinary approach was utilized to assess wetland, stream channel and floodplain conditions along seven miles of the Little Nespelem River. An interdisciplinary team applied the Proper Functioning Condition (PFC) assessment process to evaluate conditions and formulate management recommendations.

This effort succeeded but realistically will only be available in exceptional circumstances due to staffing time constraints. It is also inadequate to accomplish the intentions of the initial objectives noted above.

Environmental Trust hired a Wetlands Specialist in 2013, and continues to support this 1.0 FTE position through EPA funding for Wetland Development Planning. The Wetland Specialist developed a preliminary wetland monitoring strategy for wetlands of the Reservation, in order to assess wetland hydrology, soil and habitat conditions (2013-2015). A QAPP was concurrently developed and approved by EPA, to assure data quality and standardized procedures for data collection (2013-2014), and an addendum to the QAPP was developed and EPA-approved in 2016.

At the end of FY 2015, a new Wetland Specialist was hired; data collection during the earlier field season was carried out on contract. For FY 2015-2016, data collection has included 67 rapid assessments and 12 preliminary intensive assessments, as the Montana and WDNR methodologies were put into testing.

Additional M&A work during 2016-2017 includes initiating identification of wetlands, shorelines and other features of concern associated with proposed home sites and developments in two specific reservation areas. The Wetland Specialist also carried out a site visit to the off-reservation Trust lands to

assess wetland conditions associated with CTCR's Teck Cominco law suit. In the future, it is anticipated that the monitoring data may support the associated Upper Columbia Site natural resource damage assessment (NRDA) and CERCLA remedial investigation and feasibility study.

Program Development: Monitoring and Assessment Activities 2018-2023

For the future, wetlands development specifically needs an improved approach for identifying "wetlands of exceptional value" and other important traditional and cultural aspects associated with wetlands, tracking changes in wetlands, comparing wetlands to reference standards, prioritizing restoration targets, and interpreting trends. The current rapid and intensive methods were not developed to address issues such as "wetlands of exceptional value", traditional and cultural aspects, and climate change prioritization. The Wetland Specialist will be developing a more comprehensive monitoring strategy to address these specific matters of concern; this work will be fully implemented in the FY 2018-2023 period. These efforts will allow for conducting more rigorous wetland assessments that can also support cultural and traditional utilization, planning processes and restoration targets. An additional goal is to address wetlands data management requirements.

- Identify specific priority parameters to be monitored, including traditional cultural values. Integrate potential climate change effects and trend-related considerations into analyses.
- Identify "wetlands of exceptional value" to the Tribes.
- Identify data gaps that need to be filled in order to protect, enhance, restore and manage wetlands on the reservation and traditional territories.
- Integrate and revise tools to be used for monitoring and assessment (M&A) efforts, taking into account landscape, rapid and intensive monitoring protocols.
- Review and revise the CTCR Wetland Monitoring Strategy accordingly.
- Implement an initial monitoring and assessment season of data collection on a subset of diverse wetlands and vegetative classes across several basins.
- Review results of the initial data collection and apply adaptive measures as needed, to make the tools practical and applicable.
- Apply the monitoring and assessment strategy to a larger sample set of wetlands, including both reservation and traditional territories.

Please see Appendix 1(A) for the detailed Action Plan associated with FY 2018-2023 Monitoring and Assessment activities.

Voluntary Restoration and Protection

Goals, Objectives and Benefits

Protection and restoration of aquatic and riparian habitat is an integral element in the preservation of Tribal sovereignty. For example, within the reservation and throughout the traditional territories, the Colville Tribes serve as managers and co-managers with federal and state agencies, developing wetland protection policies and carrying out restoration projects for water quality and fish and wildlife enhancement; many of these projects aim directly at restoration of high-quality wetland habitats. Within wetlands program development planning, the primary goal of restoration and protection is to identify and begin to restore and protect the most vulnerable of Tribal wetlands.

Objectives include the following:

- Developing a wetland evaluation matrix that integrates a number of typical wetland attributes with traditional cultural values.
- Growing internal and external partnerships to support wetland restoration and protection.
- Actively protecting wetlands from degradation or destruction; restoring wetland acres, high quality condition and function. Initiating a tracking system to assess progress over time; evaluate and document results, and modify practices as appropriate.
- Seeking out funding sources to implement restoration and protection priorities.

Status

Staff and funding resources for wetland management work have been limited, hence little voluntary wetland restoration and protection work has occurred. Beyond the wetland program development focus, there is some effort within the CTCR non-point source pollution control (NPS) and BIA Range programs, working to identify and reduce impacts to wetlands from NPS activities. Great possibilities exist for working with partners to increase wetlands protection and restoration across the Reservation. Potential partners include the CTCR Fish & Wildlife, Transportation, Planning, and History/Archaeology departments, BIA Land Management, Leasing, Forestry, and Fire Management programs, the CTCR Tribal Conservation District, Natural Resources Conservation Service and other federal and state agencies, schools, community centers, landowners, and others.

For 2012-2016, efforts centered on restoration and protection focused on the following areas of concern:

- Establishing restoration and protection goals that are consistent and compatible across programs and departments.

- Developing partnerships and external funding to leverage protection; working to establish long term wetland protection utilizing incentives.

Several potential restoration sites were identified in 2015, with the eventual intent to increase wetland acreage, and to improve function and condition. A template for wetland restoration plans was developed, and three restoration plans for wetlands were written. A simple GIS coverage was created to begin identifying and tracking wetlands across the Reservation.

The CTCR Wetland Working Group (WWG) proved a good means of building partnerships regarding Reservation wetlands. One place better protected with a management plan and restoration work accomplished through the WWG is the former Hinman Ranch property north of Nespelem. In FY 2016, we designed and conducted a community luncheon/learning event that featured this site, and carried out several associated riparian planting days that brought over 50 community members together in the field.

A limited amount of restoration work was carried out using funding from other sources, including EPA Clean Water Act Section 319, National Fish & Wildlife Foundation Five Star Wetlands funding, and Natural Resources Conservation Service Environmental Quality Incentives Program funding. With this coordination, Environmental Trust has also received several engineered plans for restoration, including a design that addresses a portion of the Friedlander Meadows wetland complex.

Program Development: Restoration and Protection Activities 2018-2023

- Working with the Wetland and Tribal Advisory groups, develop an action plan and prioritized map of wetland restoration/enhancement and protection areas for trust lands within the reservation.
- Develop and update GIS materials to include tracking of “restoration opportunities” and protected wetlands within a wetlands geodatabase framework.
- Design and construct signage and other wetland learning materials to identify and describe CTCR waters and wetlands. (see also- Education and Outreach)
- Identify ways to increase Tribal member accessibility to wetlands of traditional, cultural and recreational potential (see also- Education and Outreach).
- Partner with other CTCR programs and departments, to target immediate enhancement and restoration opportunities for reservation wetland and riparian areas which support other natural resource management objectives.

Please see Appendix 1(B) for the detailed Action Plan associated with Voluntary Restoration and Protection activities.

Water Quality Standards

Goals, Objectives and Benefits

- Obtain CWA Section 303 and 401 jurisdictions for the Reservation.
- Update Reservation water quality standards (WQS), including standards for wetlands.
- Utilize wetland monitoring and assessment to provide a rigorous foundation for decisions regarding protection and enhancement of Reservation wetland resources.

Status

A wetlands water quality monitoring strategy was initiated subsequent to the first CTCR WPDG grant received in 2007. The strategy combined a wetland rapid assessment method with field and laboratory water tests similar to those performed across a network of selected sites on the reservation. This approach had the objectives of determining achievement of WQS and understanding of wetland WQ trends. A limited amount of water column (or chemistry) sampling was accomplished due to a number of reasons, including lack of water during the field sampling season in ephemeral and semi-permanent wetlands, wide bands of exposed mud during late summer reducing access to the remaining water, among others. The initial emphasis on water chemistry monitoring was reduced in the 2013 Wetland Monitoring Strategy.



Grazing impacts as seen at Little Owhi Lake

In late 2012, CTCR submitted a draft application to EPA to obtain Treatment as State (TAS) approval for CWA Sections 303 and 401. CTCR has not yet received delegation of TAS authority but anticipates the delegation will occur in 2017. Section 303 TAS approval will provide CTCR jurisdictional authority under the Clean Water Act for water quality standards (WQS) comparable to that of a state. This change will enable updating of the CTCR WQS and sunset of the dated federally promulgated WQS for the Reservation. The process of finalizing the updated WQS will require CTCR staff time, EPA and public review. It may take several more years following TAS delegation.

CTCR's draft update of the WQS includes updated standards for wetland water quality. The proposed wetland WQS follow a narrative format. Beneficial uses associated with wetlands include aquatic life, ceremonial and religious, primary contact recreation, wildlife habitat, and stock watering. The water quality criteria for wetlands will be primarily narrative, that is, measurable changes from natural background conditions will not be allowed for temperature, pH, bacteria, and total dissolved gas; limited

increases to turbidity from background will be allowed. In addition, narrative criteria are included for aesthetic quality, nutrient levels, radioactive substances, aquatic biota, wildlife, instream flow, and maintenance of wetland hydrology, substrate, and hydrophytic vegetation. Criteria for toxic substances and anti-degradation policy will also apply to wetlands.

It is anticipated that wetland assessment and monitoring in the existing and future monitoring strategies, which focus on wetland condition, will support the confirmation of WQS for wetlands.

Program Development: Wetland Water Quality Standards Activities 2018-2023

- Work in coordination with the WQS Monitoring Group in completing new Water Quality Standards.
- Assist in updating the CTCR surface water monitoring strategy to refine wetland water quality monitoring.
- Review and assist in updating the surface water Monitoring Strategy and QAPP as needed, in order to address quality assurance in wetland water quality monitoring.
- Develop methodology and process, as needed, to determine compliance with WQS for wetlands.

Regulation

Goals, Objectives and Benefits

- Coordination and compliance monitoring for administration of Tribal Permits and Codes that require wetland protection.
- Close remaining gaps in wetland protection that can be accomplished through regulatory approaches.

Status

A set of Tribal Codes provide protections for wetlands. These include Title 4 Code 4-6, Mining



Great Western Lake

Practices Water Quality, 4-7, Forest Practices, 4-8, Water Quality Standards, 4-9, Hydraulics Project Permitting, and 4-15, Shoreline Management. Full text for the Title 4 Codes can be reviewed here:

<https://www.cct-cbc.com/current-code/>

Most of the above Codes have been revised and updated in recent years; the Hydraulics Code was revised under previous WDPP funding, and we are currently in the process of updating the Shorelines Management Code, supported under our current WDPP. We continue to work in conjunction with Tribal Planning's Land Use Administrator in this effort, and completed the draft revision of the Wetlands section of that code in the 4th quarter of 2016.

While the set of activities regulated through Tribal Code is extensive, one major activity affecting wetlands on the Reservation, grazing, is not currently addressed through regulations. Based on grazing impacts recorded during wetland assessment, grazing does need to be addressed further, likely through a combination of regulatory and non-regulatory means. ETD has worked with the BIA Land Operations and Leasing programs, and CTCR Fish & Wildlife and History/Archaeology programs to review grazing impacts to a limited number of wetlands and other waterways.

Code administration is carried out by the Environmental Trust and Planning Departments. Grazing permits and leases are administered by the BIA (Land Operations and Leasing programs). These departments conduct permit applications review, distribution of permits to reviewers, manage review and decision deadlines, perform compliance inspections, and carry out any appropriate enforcement.

Program Development: Regulation Activities

- Coordinate with BIA Land Operations, Leasing and other CTCR departments to analyze grazing practices, wetland impacts, and the regulatory basis for improved grazing practices, wetland and riparian protections.

Please see Appendix 1(D) for the detailed Action Plan associated with Regulation activities.

Education, Outreach and Partnerships

Goals, Objectives and Benefits

Education, outreach and partnerships are fundamental to all elements of work within the Office of Environmental Trust. For 2018- 2023, the goal is to develop a strong education and outreach component, to help increase awareness and knowledge of the presence and importance of wetlands among Tribal members and the community at large. New partnerships will be developed to support educational outreach specifically.

Status

Over the last ten years this component has been supported in an informal manner, primarily with occasional working group meetings. We have also supported involvement in the Region 10 Tribal Working Group (TWIG), involvement of summer youth and interns in seasonal field work, and other shared activities. On separate projects, ETD staff had positive outcomes in working with the community to complete riparian planting and other education and outreach activities, which led to including education and outreach activities formally within the current Wetland Program Plan.

Program Development: Education, Outreach and Partnership Activities 2018-2023

- Develop a targeted outreach and education program to increase awareness of the importance of and value of Tribal waters and wetlands. Example activities include developing an archival image collection for important waters and wetlands of the reservation, developing educational brochures and pamphlets on Tribal wetlands and riparian areas, hosting a Tribal Advisory Group to help share information across the reservation, etc.
- Develop an annual schedule of events for in-school education outreach activities, including sharing wetland-related presentations to varying audiences, for example the CTCR Tribal College, Nespelem K-8 students and educators, Lake Roosevelt middle and high school and the Pascal Sherman Indian School.
- Coordinate regular brown bag lunch events to encourage sharing of technical knowledge related to wetlands and restoration among Tribal government and BIA staff.
- Design, construct and install identification and educational signs for Tribal waters and wetlands across the reservation.

Please see Appendix 1(E) for the detailed Action Plan associated with Education, Outreach and Partnership activities.

Program Evaluation

In the final year, the Wetland Program Plan will be evaluated. Program evaluation will include review by the following departments: Fish & Wildlife, History/Archaeology, Environmental Trust, Planning, Transportation, and BIA Forestry, Range, and Leasing programs. Evaluation will assess program effectiveness in achieving goals and milestones, and whether implementation occurred according to schedule. The following questions will be addressed:

- Should goals, milestones, and schedule be revised?
- What is the state of Reservation wetlands? Are conditions or quantity of wetlands changing?
- Are activities occurring that contribute to decline of wetland condition?
- Has any specific wetland restoration occurred? If so, what, where and how much acreage? Was it effective?
- Are wetland regulatory protections effective?
- Has funding been adequate to support accomplishment of program goals? What additional sources of funding should be pursued?

Summary

The Environmental Trust Department is responsible for the development and implementation of this plan, but caring for the wetlands of the Colville Reservation is a responsibility shared by all. Other government agencies, landowners, operators, and Tribal and community members have both challenges and opportunities to work together in monitoring, assessing conditions and addressing effects of past and current management activities, as well as restoring Reservation wetlands. Only a fully functioning system of wetlands will bring about healthy watersheds, provide for clean water, and for all the traditional cultural practices related to wetlands.

Appendices

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Action Table Abbreviations

The following abbreviations are used throughout the Action Tables:

BIA	Bureau of Indian Affairs (federal)
BOR	Bureau of Reclamation (federal)
Ecology	WA Department of Ecology (state)
ETD	Office of Environmental Trust (tribal)
F&W	Fish and Wildlife Department (tribal)
Ecology	WA Department of Ecology (state)
NPS	National Park Service (federal)
TAG	Tribal Advisory Group
RIA/GIS	Resource Inventory and Analysis (tribal)
WDFW	WA Department of Fish and Wildlife (state)
WQMG	Water Quality Monitoring Group (ETD technical staff)
WWG	Wetlands Working Group (tribal, federal and partners)

Monitoring and Assessment Action Table

GOAL: From a watershed perspective, establish a baseline in wetlands extent, condition and function, to detect changes and characterize trends over time.

- **Objective 1:** Refinement of a monitoring and assessment strategy consistent with *Elements of a State Water Monitoring and Assessment Program for Wetlands* (EPA, 2006) supporting wetlands management accomplishing CTCR objectives.
- Note: M&A field work will continue with currently EPA- approved methodology through FY18-FY19.

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
1. Identify specific priority parameters to be monitored, including traditional cultural values. Integrate potential climate change effects and trend-related considerations into analyses	1. Coordinate with all partners; develop a draft list of critical monitoring and assessment parameters.	ETD, F&W, WWG, TAG and other relevant partners.	2018
	2. Coordinate with interdepartmental Climate Change working group to integrate potential effects into parameter definition.	ETD	2018
	3. Synthesize findings, prioritize and report out.	ETD, F&W, WWG, TAG	2018
2. Identify “wetlands of exceptional value” to the Tribes.	1. Utilizing priority parameters (see 1(3) above) as reference topics, conduct literature review on wetlands of exceptional value.	ETD	2018 - 2019
	2. Review and document wetlands encountered in early monitoring that may meet exceptional criteria.	ETD, WWG,	2019
	3. Develop synthesis with other groups involved in wetland restoration and protection; familiarize all with findings.	ETD, F&W, BIA, WWG, TAG	2019

	4. Sponsor a community presentation for outreach and education; document and report out.	ETD	2019
3. Identify data gaps that need to be filled in order to protect, enhance, restore and manage wetlands on the reservation and traditional territories.	1. Utilize 1(3) and 2(4), above, to begin identification of existing data gaps.	ETD	2020
	2. Present and discuss with WWG, TAG; update and finalize, including additional data collection, if needed.	ETD, WWG, TAG	2020
	3. Document for inclusion in Action 4., below.	ETD	2020
4. Integrate and revise tools to be used for monitoring and assessment efforts, taking into account landscape, rapid and intensive monitoring protocols.	1. Draft for review by WWG, TAG; carry out review with public involvement.	ETD, WWG, TAG, public partners	2020
5. Review and revise the September, 2013 CTCR Wetland Monitoring Strategy accordingly.	1. Review and revise for discussion with EPA Technical Advisor.	ETD, EPA	2020
	2. Revise QAPP as needed. Document and report out.	ETD	2020

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
6. Implement an initial round of monitoring and assessment on a subset of diverse wetlands and vegetative classes across several basins.	1. Coordinate with WWG, TAG in designating potential monitoring sites.	ETD, WWG, TAG	2020
7. Review results of the initial round of monitoring and assessment, and apply adaptive measures, to make the tools practical and applicable.	1. Data analysis and adaptive measures applied following one season of field data. Document and report out.	ETD, WWG, TAG	2021
	2. Present to membership at District meetings.	ETD, WWG, TAG	2021
8. Apply the monitoring and assessment strategy to a full set of wetlands, including both reservation and traditional territories.	1. Complete monitoring, analysis and final reporting to review and summarize two years of data.	ETD	2021-2023

Voluntary Restoration and Protection Action Table

GOAL: From a watershed perspective, increase the quantity, condition, and function of wetlands and their ecosystems through voluntary restoration and protection.

Objective 1: Working with the Wetland and Tribal Advisory groups, develop an action plan and prioritized map of wetland restoration/enhancement and protection areas for trust lands within the reservation.

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
1. Establish and develop strong working relationships among Wetland and Tribal Advisory groups and the community	1. Coordinate with partners; work to outline wetland restoration and protection goals, opportunities and timeframes	ETD, F&W, BIA, community and additional relevant partners	2018
	2. Synthesize goals, opportunities and timeframes with existing M&A information on a limited set of wetland locations report out to all partners in the 2 nd quarter.	ETD	2018
2. Track restoration opportunities for wetlands across the reservation	1. Develop and refine a GIS framework to include tracking of “restoration opportunities”, traditional and cultural information, as well as protected wetlands, utilizing 1(1), above.	ETD, RIA/GIS	2019
	2. Share framework and analysis synthesis with other groups involved in restoration and protection.	ETD, F&W, BIA, community, partners	2019
	3. Expand GIS framework to encompass a limited area around two specific geographic areas of concern on two Districts	ETD/RIA/GIS	2020
	4. Evaluate and prioritize for reservation completion in 2023.	ETD	2020

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
3. Design and construct signage and other wetland learning materials to identify and describe CTCR waters and wetlands (see also Education and Outreach)	1. Working with the Wetlands and Tribal Advisory groups, identify priority sites for signage on all Districts. Integrate with findings from M&A 2(4).	ETD, WWG, TAG	2021
	2. Partner with other CTCR programs and departments to target opportunities linked to restoration projects.	ETD, F&W, BIA, others	2021
	3. Coordinate to identify signage funding and support for other learning materials.	ETD, external partners	2020-2021
	4. Develop and present several events to install and display signage, and memorialize wetland learning community-wide.	ETD, WWG, TAG	2020 - 2023
	5. Continue to identify additional ways to increase Tribal member accessibility to wetlands of traditional, cultural and recreational potential. Document and report out for community sharing.	ETD, WWG, TAG	2020-2023
4. Restoration facilitation: liaison with state and federal agencies to provide clear guidance on appropriate restoration techniques and success measures for wetlands of traditional significance	1. Work to define and develop restoration and management guidance specific to wetlands of traditional significance, taking into account specific utilization types (e.g., plant material gathering for fiber, vs. sites for food gathering would have differing management guidance).	ETD, Ecology, WDFW, WDNR, BOR, NPS	2021
	2. Establish measures of restoration success for these wetlands, relying on M&A Action 4., revised tools for M&A (including priority parameters, traditional and cultural values, inclusion of “wetlands of exceptional	ETD, WWG, TAG	2021

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
	value”; additional guidance from Elders and practitioners resulting from Tribal Advisory Group development and increased involvement of WWG. Share and revise with WWG, TAG input.		
	3. Establish clear performance standards, restoration techniques and BMPs; adapt as necessary; share and revise with WWG, TAG input.	ETD, WWG, TAG	2022
	4. Working with the TAG, train restoration partners to use guidance techniques	ETD, TAG	2023

Water Quality Standards Action Table

GOAL: Obtain CWA Section 303 and 401 jurisdictions for the Reservation. Obtain approval of Reservation water quality standards (WQS), including standards for wetlands.

Objectives: Utilize WQS monitoring to provide a rigorous foundation for decisions regarding protection and enhancement of Reservation wetland resources.

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
1. Coordination with WQS Monitoring group in completing new WQS.	1. Coordinate with partners; assist in working through review and processing.	ETD, F&W, BIA, WQMG	2018
2. Assist in updating the CTCR surface water monitoring strategy to refine wetland water quality monitoring, using an approach combining surface water quality measurements with wetland condition assessment.	1. Provide information regarding wetland monitoring and assessment data to be utilized for wetland WQS.	ETD, WQMG	2018
3. Review and assist in updating the CTCR surface water monitoring strategy and QAPP as needed, in order to address quality assurance in wetland water quality monitoring.	1. QAPP revision and reporting.	ETD, WQMG	2019
4. Develop methodology and process as needed to determine compliance with WQS for wetlands. This may simply be included within the CTCR WQS, or be a separate document if additional clarification of the WQS is needed.	1. Review WQ standards and determine if additional conditions are needed for compliance.	ETD, WQMG	2019
	2. Implement with 2020 wetland monitoring. Evaluate results and revise, as needed. Report out at 2023.	ETD, WQMG	2020-2023

Regulation Action Table

GOAL: Coordination and compliance monitoring for administration of Tribal Permits and Codes.

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
<p>1. Work to identify and provide monitoring compliance throughout.</p>	<p>1. Coordination and compliance monitoring for administration of Tribal Permits and Codes that require wetland protection (Chapters 4-6, 4-7, 4-8, 4-9, 4-15).</p>	<p>ETD</p>	<p>2018- 2019</p>
<p>2. Continue to close remaining gaps in wetland protection that can be accomplished through regulatory approaches.</p>	<p>1. Coordinate with BIA Land Operations and other CTCR departments, and with WWG and TAG to identify additional wetland protection that can be accomplished through regulatory approaches.</p> <p>Pay special attention to improved grazing practices, and associated wetland and riparian protection opportunities.</p>	<p>ETD, BIA Land Ops, WWG, TAG.</p>	<p>2020-2023</p>

Education, Outreach and Partnership Action Table

GOAL: to develop a strong education and outreach component, to help increase awareness and knowledge of the presence and importance of wetlands among Tribal members and the community at large.

ACTION	ACTIVITY	LEAD & PARTNERS	TIMEFRAME
1. Develop a targeted outreach and education program to increase awareness of the importance and value of Tribal waters and wetlands.	1. Work with WWG and TAG to develop a framework for wetlands-related educational outreach.	ETD, WWG, TAG	2018
	2. Develop an annual schedule for in-school educational outreach activities, involving the Tribal College, K-8 schools on reservation and others.	ETD	2019
	3. Arrange and conduct a spring wetlands educational event each year.	ETD and partners	2019-2023
	4. Document and report out annually; involve WWG and TAG in evaluation and documenting lessons learned.	ETD, WWG, TAG	2019 – 2023
2. Coordinate regular brown bag lunch events to encourage sharing of technical knowledge related to wetland and restoration among Tribal governments and BIA staff.	1. Involve technical/professional staff in information sharing related specifically to best management practices for wetlands restoration and protection.	ETD and partners	2018 – 2023
3. Design, construct and install identification and educational signs for Tribal waters and wetlands across the Reservation.	1. In tandem with Action 3 (2), under Restoration and Protection	ETD, F&W, BIA, other partners	2021

CTCR Restoration Plan Template:

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