A People of Vision

Fiscal Year 2021-2025
CSKT Wetland Program Plan (WPP)

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Overall goal statement and time frame for Plan:

The Confederated Salish and Kootenai Tribes (CSKT) *Wetlands Conservation Plan for the Flathead Indian Reservation, Montana* (1999) was the basis for developing the Wetland Conservation Program (the Program). The 1999 plan provides direction to Tribal Programs for the protection and restoration of wetlands and riparian areas on the Flathead Indian Reservation and guided program development over the next five years as presented in this Wetland Program Plan (WPP 2021-2025). Combined, the Wetland Conservation Plan and the current WPP provide the framework for linking and coordinating Tribal programs with wetland or wetland related duties so all function together as a comprehensive wetland protection and restoration program. In addition, the wetland program will continue to develop its monitoring efforts and other elements of its work, as reflected in this document.

CSKT's *Wetlands Conservation Plan* sets both an interim goal and a long-term goal for the wetland and riparian resources of the Flathead Indian Reservation (Figure 1).

> The **interim goal** is to halt the loss ("no net loss") of the remaining wetlands and riparian areas and halt the decline in wetland and riparian quality.
>
> The **long term goal** is to increase the acreage of wetlands and riparian areas and improve the quality of the resources.

These goals will be accomplished by implementing EPA's Core Elements Framework:

1. Monitoring and Assessment
2. Regulatory Activities Including 401 Certification, if required
3. Voluntary Restoration and Protection
4. Water Quality Standards for Wetlands

The interim and long term goals are a synthesis of Tribal goals for wetlands and riparian lands articulated in prior plans, strategies, ordinances, consent decrees, environmental standards, and best management practices (BMP) as stated in the *Wetlands Conservation Plan for the Flathead Indian Reservation, Montana* (1999).

The wetland program will use this information to:

- improve understanding of baseline wetland condition
- continue to develop benchmarks for wetlands restoration or protection
- inform development of wetland-specific water quality standards
- inform best methods to implement wetland-specific water quality standards
- continue to build core elements of the Tribes' WLCP
- prioritize wetland restoration and protection activities

The CSKT plans to continue to reach for these goals by monitoring and assessing Flathead Indian Reservation aquatic resources over the next five years.

CSKT is currently using the MDT Montana Wetland Assessment Method to collect data (Berglund and McEldowney 2008). A future consideration to improve and enhance documentation is customizing the method to include additional comment sections. CSKT may consider adding components documenting cultural use and significance; however, this important cultural component is solely dependent upon the prior approval of the Salish Pend d 'Oreille Cultural Committee (SPCC), the Kootenai Cultural Committee (KCC), and the CSKT Tribal Preservation Department (TPD).

HISTORICAL ACCOMPLISHMENTS

One of the priorities of the Wetland Conservation Program, as outlined in the *Wetlands Conservation Plan for the Flathead Indian Reservation, Montana* (1999)**,** and the CSKT Wetland Conservation Strategy, is the mitigation of impacts to wetlands from development. For example, CSKT Natural Resources Department has worked with the Montana Department of Transportation (MDT) and US Army Corps of Engineers to mitigate impacts from highway construction on the reservation. The CSKT developed and managed a wetland ecosystem restoration preserve called Finley Flats to mitigate for unavoidable impacts to wetlands resulting from the reconstruction of Highway 93. CSKT and MDT have also worked together to identify project sites for MDT-managed mitigation properties, in which CSKT plays a vital role in project design and oversight. The Tribes continue to hold not only MDT, but all developers, accountable for unavoidable impacts to wetlands.

In 2004, the CSKT Wetland Conservation Program (WLCP) began monitoring and assessing a representative subsample of wetlands within the seven watersheds of the Flathead Indian Reservation. The monitoring and assessment of wetland conditions and functions is ongoing.

The following is a list of the CSKT Watershed Wetland Assessments completed to date.

1. 2004 Mission Creek 20 sites
2. 2005 Little Bitterroot River 20 sites
3. 2006 Crow Creek 21 sites
4. 2007 Flathead Lake 13 sites
5. 2008 Jocko River 20 sites
6. 2009 Lower Flathead River 19 sites
7. 2010 Camas 18 sites
8. 2012 Mission Watershed 20 sites
9. 2013 Little Bitterroot Watershed 20 sites
10. 2016 Reservation-wide assessments 35 sites*
11. 2017 Crow Watershed 20 sites
12. 2018 Flathead Lake Watershed 20 sites
13. 2020 Jocko Watershed-pending 20 sites expected

*Note: no wetland funding in 2011, 2014, 2015 so no wetland monitoring occurred. In 2016, CSKT did not receive funding, but completed a Reservation-wide Wetland Assessment, assessing 5 sites from each watershed through the Water Quality Program.

Past CSKT Wetland Conservation Program products include:

- Watershed-based wetland monitoring and assessment reports
- GIS-linked project tracking tools to share with other stakeholders
- An assessment of National Wetlands Inventory (NWI) and hydrologic connectivity characteristics
- Invasive species mapping
- Land-use and land-cover change analyses and mapping
- Continuing work on Aquatic Invasive Species, climate change, and other broad issues that impact wetland resources
- Continued work on education materials for use in outreach activities

All products and outputs/deliverables are submitted digitally to the EPA and available in print upon request.

The Confederated Salish and Kootenai Tribes have two ordinances that legally protect wetland resources on the reservation. The Shoreline Protection Program is responsible for administering the Shoreline Protection Ordinance 64A (revised) and the Aquatic Lands Conservation Ordinance 87A. Those ordinances can be found at here: http://csktnrd.org/ep/shoreline-protection. The purpose of the Shoreline Protection Ordinance is to "conserve and protect Flathead Lake and all navigable waters within the Flathead Reservation." The purpose of the Aquatic Lands Conservation Ordinance is to "prevent the degradation of Reservation waters and aquatic lands by regulating construction or installation of projects upon aquatic lands whenever such projects may cause erosion, sedimentation, or other disturbances adversely affecting the quality of Reservation waters and aquatic lands."

The CSKT are approved for treatment in a manner similar to a state (TAS) to manage their CWA Section 303 Water Quality Standards Program and CWA Section 401 Water Quality Certification Program under Tribal Water Quality Management Ordinance (89a). Water quality criteria, designated uses, and an anti-degradation policy are all included in the Confederated Tribes' water quality standards. The CSKT's water quality standards were challenged by the State of Montana, the Supreme Court ruled in favor of EPA, holding that the CSKT's TAS was appropriately determined.

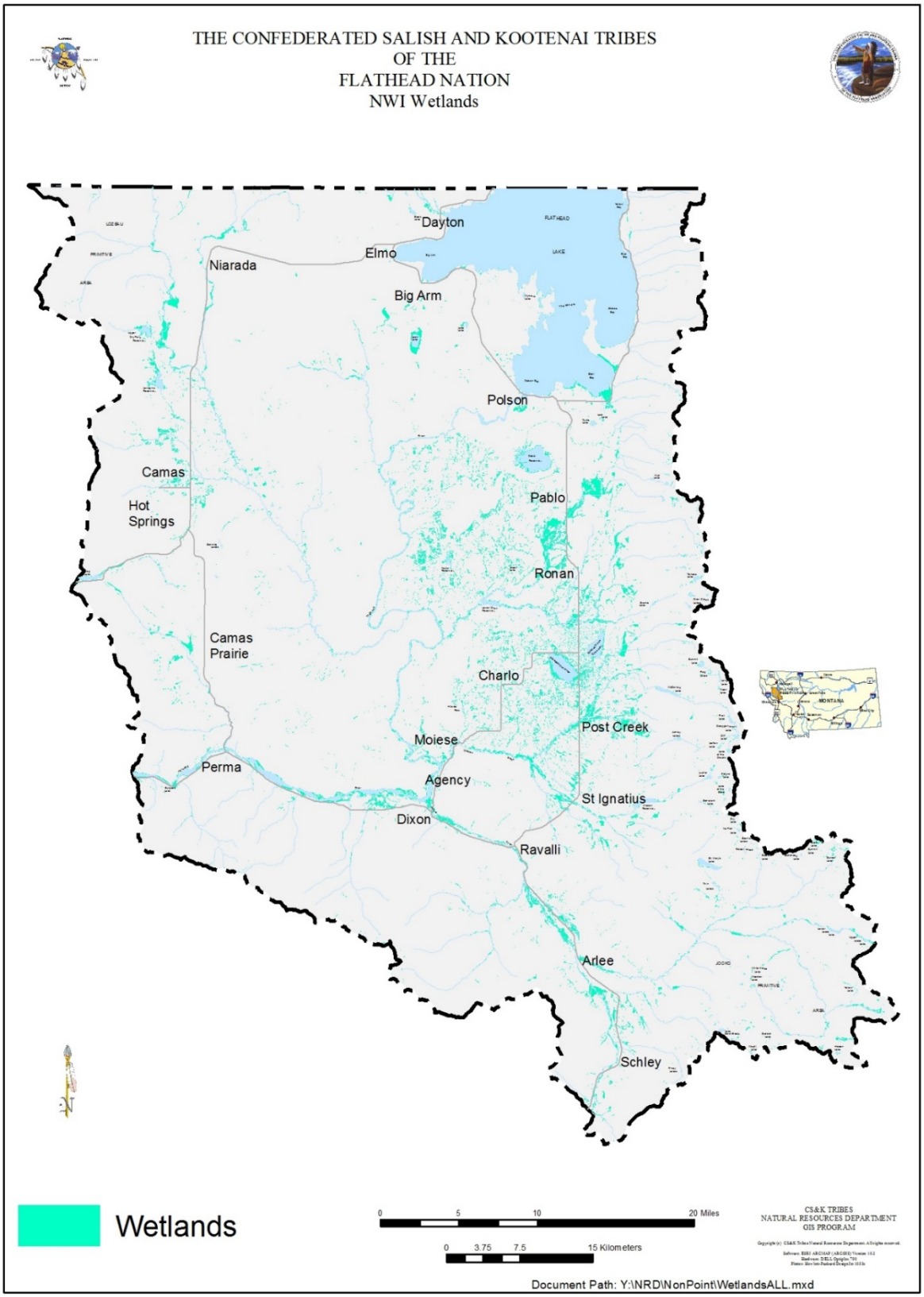

Figure 1. Map of Flathead Indian Reservation Wetlands

CSKT Wetland Program Plan timeline (2021-2025)

		Primary Program Activities					Special Projects		
		Monitoring & Assessment	WQS for Wetlands	Weed mapping	Education & Outreach	Mapping	Misc.	Watershed Planning	
Tribal WPDG grant period	2021	Jocko Watershed: Analyze and report; Lower Flathead Watershed: Assess and Monitor	Review EPA Wetland WQS Template; Draft strategy for developing WQS for wetlands	Plant ID training; data collection; mapping	Annual activities ongoing. See text.	Present completed Jocko land cover change maps; Analyze and map land cover change in LFHR Watershed	Complete CSKT herbarium	Create GIS-based survey and long-form interview questions about aquatic resources, risks, and needs of each watershed	Regional WPDG grant period
	2022	Lower Flathead River: Analyze and report	Review other Tribes' WQS for Wetlands	Data collection and mapping	Annual activities ongoing	Present completed LFHR maps	Create a Wetland story map	Survey CSKT resource professionals and interview key experts	
Tribal WPDG grant period	2023	Camas Watershed: Assess and Monitor	Assess CSKT data gaps for WQS for wetlands	Data collection and mapping	Annual activities ongoing	Analyze and map land cover change in Camas Watershed	Present Wetland story map	Compile report outlining resources, risk and needs of each watershed	
	2024	Camas Watershed: Analyze and report	Draft WQS for wetlands for legal review	Data collection, mapping, and planning	Annual activities ongoing	Present completed Camas maps	Update NWI	Create a CSKT Aquatic Resources Story Map and present to CSKT decision-makers	Regional WPDG grant period
Tribal WPDG grant period	2025	Mission Watershed: Assess and Monitor		Data collection, mapping, and planning	Annual activities ongoing	Analyze and map land cover change in Mission Watershed	Update NWI	Make CSKT story map available to resource professionals as an educational tool	
	2026								

CSKT Wetland Program Plan (WPP 2021-2025)

Action and activities supporting overall goal:

YEAR ONE (2021)

*all actions and activities dependent upon grant funding

Primary Program Action: **Wetland Monitoring and Assessment**

- Jocko River Watershed (last year of a two-year project)

Activities:

  - Plant species tabulation and verification
  - Raw data conversion into tables and graphs
  - Compilation of collected data
  - Writing of individual wetland site assessments
  - Editing, formatting and compilation into final report
  - Final Jocko River Watershed Wetland Monitoring and Assessment Report and Electronic Data Deliverable (EDD) provided to CSKT and EPA

- Lower Flathead River Watershed (first year of project)

Activities:

  - Assess 15 new wetlands and monitor 5 recurring wetlands within watershed
  - Quantification, classification and functional assessment of all selected wetlands, a representative sub-sample of the watershed

Primary Program Action: Research Water Quality Standards (WQS) for wetlands

Activities:

  - Review EPA Wetland WQS Template
  - Draft a strategy for developing CSKT WQS for wetlands

Primary Program Action: Identify and map noxious wetland weeds

Activities:

  - Natural Resource personnel trained in noxious weed identification and use of Collector for ArcGIS, a mobile data collection, app as needed. QAPP protocols will be in place before data collection begins.
  - Natural Resource personnel document noxious weeds using the Collector app
  - Data from Collector app added as an accessible GIS layer to Tribal maps annually
  - Tribal weeds working group convenes

Primary Program Action: Promote sound wetland conservation activities through effective wetland and riparian education and outreach activities

Activities:

  - River Honoring presentations to grades 4-5
  - Presentations at reservation schools or to local non-profits, as requested

- Assist with local conservation events, such as Lake Honoring, Earth Day, and the Mussel Walk, as requested

Primary Program Action: Mapping

Activities (Jocko): Land cover change analyses and mapping

- Present completed Jocko River Watershed land-cover change maps to local organizations, schools, and programs as requested

Activities (LFHR): Land cover change analyses and mapping

- Analyze and compare current and previous aerial imagery of the Lower Flathead River watershed
- Prepare a map and an acreage change table depicting land-cover changes over time in a subsample of the watershed
- Present completed land-cover change maps to local organizations, schools, and programs as requested

Primary Program Action: Program Management

Activities:

- Continue to integrate wetlands monitoring strategy into existing water quality and non-point source monitoring efforts
- Develop QAPPs, SOPs and any monitoring plans necessary to evaluate the quality and quantity of Reservation wetlands
- Project-specific reviews of regulated activities involving wetlands, i.e. ALCO, U.S. Army Corps of Engineers (USACE). The Wetland Conservation Program Coordinator will work with the Water Quality Regularity specialist on wetland projects and to seek ways to improve 401 certifications involving wetland projects.
- Purchase, maintain, and upgrade necessary equipment
- Implement the Tribes' Wetlands Conservation Plan
- Include the CSKT Climate Change Strategic Plan and CSKT Aquatic Invasive Species (AIS) Plan into wetland activities on the Reservation

Action (Special Projects): Complete tribal herbarium project to document and preserve local plant specimens (2nd year of project)

Activities:

- Hire an intern to file CSKT plant specimens in the herbarium and create a database with all the plants
- Share database with Salish and Kootenai College
- Make database and herbarium available to CSKT staff as reference materials

Action (Special Projects): Watershed Strategic Planning

Activities:

- Create a GIS-based survey to collect data from CSKT resource professionals about aquatic resources, risk factors, and needs in each of the seven watersheds on the reservation

- Create a list of questions to ask key informants (long-term resource experts) about aquatic resources, risk factors, and needs in each of the seven watersheds on the reservation

YEAR TWO (2022)

*all actions and activities dependent upon grant funding

Primary Program Action: **Wetland Monitoring and Assessment**

- Lower Flathead River Watershed (second year of project)

Activities:

- Plant species tabulation and verification
- Raw data conversion into tables and graphs
- Compilation of collected data
- Writing of individual WL site assessment reports
- Editing, formatting and compilation into final report
- Final Lower Flathead River Watershed Wetland Monitoring and Assessment Report and Electronic Data Deliverable (EDD) provided to CSKT and EPA

Primary Program Action: Research Water Quality Standards (WQS) for wetlands

Activities:

- Review other Tribes' Wetland Water Quality Standards

Primary Program Action: Identify and map noxious wetland weeds

Activities:

- Natural Resource personnel trained in noxious weed identification and use of Collector app as needed
- Natural Resource personnel document noxious weeds using the Collector app throughout the reservation
- Data from Collector app added as an accessible GIS layer to Tribal maps annually
- Tribal weeds working group convenes

Primary Program Action: Promote sound wetland conservation activities through effective wetland and riparian education and outreach activities

Activities:

- River Honoring presentations to grades 4-5
- Presentations at reservation schools or to local non-profits, as requested
- Assist with local conservation events, such as Lake Honoring, Earth Day, and the Mussel Walk, as requested

Primary Program Action: Mapping

Activities: Land cover change analyses and mapping

- Present completed Lower Flathead River Watershed land-cover change maps to local organizations, schools, and programs as requested

Primary Program Action: Program Management

Activities:

- Annual review of CSKT Wetland Program Plan (WPP) and provide revisions as needed
- Continue to integrate wetlands monitoring strategy into existing water quality and non-point source monitoring efforts
- Develop QAPPs, SOPs and any monitoring plans necessary to evaluate the quality and quantity of Reservation wetlands
- Project-specific reviews of regulated activities involving wetlands, i.e. ALCO, U.S. Army Corps of Engineers (USACE)
- Purchase, maintain, and upgrade necessary equipment
- Implement the Tribes' Wetlands Conservation Plan
- Include the CSKT Climate Change Strategic Plan and CSKT Aquatic Invasive Species (AIS) Plan into wetland activities on the Reservation

Action (Special Projects): Watershed Strategic Planning

Activities:

- Distribute a GIS-based survey to CSKT resource professionals about aquatic resources, risk factors, and needs in each of the seven watersheds on the reservation
- Conduct and record interviews with key informants (long-term resource experts) about aquatic resources, risk factors, and needs in each of the seven watersheds on the reservation

Action (Special Projects): CSKT Wetlands Conservation story map

Activities:

- Utilizing ArcGIS and CSKT data, create a conservation success story map relating to wetland resources throughout the reservation

YEAR THREE (2023)

*all actions and activities dependent upon grant funding

Primary Program Action: **Wetland Monitoring and Assessment**

- Camas Watershed (first year of project)

Activities:

- Assess 15 new wetlands and monitor 5 recurring wetlands within watershed.
- Quantification, classification and functional assessment of all selected wetlands, a representative sub-sample of the watershed.

Primary Program Action: Research Water Quality Standards (WQS) for wetlands

Activities:

- Assess CSKT data gaps for WQS for Wetlands

Primary Program Action: Identify and map noxious wetland weeds

Activities:

- Natural Resource personnel trained in noxious weed identification and use of Collector app as needed

- Natural Resource personnel document noxious weeds using the Collector app throughout the reservation
- Data from Collector app added as an accessible GIS layer to Tribal maps annually
- Tribal weeds working group convenes

Primary Program Action: Promote sound wetland conservation activities through effective wetland and riparian education and outreach activities

Activities:

- River Honoring presentations to grades 4-5
- Presentations at reservation schools or to local non-profits, as requested
- Assist with local conservation events, such as Lake Honoring, Earth Day, and the Mussel Walk, as requested

Primary Program Action: Mapping

Activities: Land cover change analyses and mapping

- Analyze and compare current and previous aerial imagery of the Camas watershed
- Prepare a map and an acreage change table depicting land-cover changes over time in a subsample of the watershed
- Present completed land-cover change maps to local organizations, schools, and programs as requested

Primary Program Action: Program Management

Activities:

- Annual review of CSKT Wetland Program Plan (WPP) and provide revisions as needed
- Continue to integrate wetlands monitoring strategy into existing water quality and non-point source monitoring efforts
- Develop QAPPs, SOPs and any monitoring plans necessary to evaluate the quality and quantity of Reservation wetlands
- Project-specific reviews of regulated activities involving wetlands, i.e. ALCO, U.S. Army Corps of Engineers (USACE)
- Purchase, maintain, and upgrade necessary equipment
- Implement the Tribes' Wetlands Conservation Plan
- Include the CSKT Climate Change Strategic Plan and CSKT Aquatic Invasive Species (AIS) Plan into wetland activities on the Reservation

Action (Special Projects): Watershed Strategic Planning

Activities:

- Compile data from the GIS-based survey and key informant interviews about aquatic resources, risk factors, and needs in each of the seven watersheds on the reservation
- Produce a report that will be made available to all CSKT resource experts as an aid in planning, decision-making, and restoration efforts

Action (Special Projects): CSKT Wetlands Conservation story map

Activities:

- Present the conservation success story map relating to wetland resources throughout the reservation to the public as an educational tool

YEAR FOUR (2024): all actions and activities dependent upon grant funding

Primary Program Action: **Wetland Monitoring and Assessment**

- Camas Watershed (second year of project)

Activities:

- Plant species tabulation and verification
- Raw data conversion into tables and graphs
- Compilation of collected data
- Writing of individual WL site assessment reports
- Editing, formatting and compilation into final report
- Final Lower Flathead River Watershed Wetland Monitoring and Assessment Report and Electronic Data Deliverable (EDD) provided to CSKT and EPA

Primary Program Action: Research Water Quality Standards (WQS) for wetlands

Activities:

- Draft WQS for wetlands for legal review

Primary Program Action: Identify and map noxious wetland weeds

Activities:

- Natural Resource personnel trained in noxious weed identification and use of Collector app as needed
- Natural Resource personnel document noxious weeds using the Collector app throughout the reservation
- Data from Collector app added as an accessible GIS layer to Tribal maps annually
- Tribal weeds working group convenes to plan for invasive species control

Primary Program Action: Promote sound wetland conservation activities through effective wetland and riparian education and outreach activities

Activities:

- River Honoring presentations to grades 4-5
- Presentations at reservation schools or to local non-profits, as requested
- Assist with local conservation events, such as Lake Honoring, Earth Day, and the Mussel Walk, as requested

Primary Program Action: Mapping

Activities: Land cover change analyses and mapping

- Present completed land-cover change maps to local organizations, schools, and programs as requested

Primary Program Action: Program Management

Activities:

- Annual review of CSKT Wetland Program Plan (WPP) and provide revisions as needed
- Continue to integrate wetlands monitoring strategy into existing water quality and non-point source monitoring efforts
- Develop QAPPs, SOPs and any monitoring plans necessary to evaluate the quality and quantity of Reservation wetlands
- Project-specific reviews of regulated activities involving wetlands, i.e. ALCO, U.S. Army Corps of Engineers (USACE). The Wetland Conservation Program Coordinator will work with the Water Quality Regularity specialist on wetland projects and to seek ways to improve 401 certifications involving wetland projects
- Purchase, maintain, and upgrade necessary equipment
- Implement the Tribes' Wetlands Conservation Plan
- Include the CSKT Climate Change Strategic Plan and CSKT Aquatic Invasive Species (AIS) Plan into wetland activities on the Reservation

Action (Special Projects):

Activities: Create a CSKT Aquatic Resources Story Map

- Based on data collected from the strategic watershed planning process, create a story of restoration or conservation successes as well as future needs of each watershed
- Present story map to CSKT natural resources professionals, Tribal Council, and other decision-makers

Action (Special Projects): Update NWI

Activities: Update NWI for the Flathead Indian Reservation

- Acquire imagery of the Flathead Indian Reservation (FIR) that is compliant with the Federal Geographic Data Committee (FGDC), Wetland Mapping Standards.
- Contact the Fish and Wildlife Service (FWS) Wetlands Mapping Team to insure proper NWI Geodatabase (gdb) setup and procedures.
- Build a mxd with 2005 NWI, Hydric Soils, aerial imagery and other ancillary data layers.
- Create a gdb that will include wetland and riparian areas as polygonal or linier features and set topological rules.
- Edit the NWI on a quad by quad basis, including areas beyond the FIR boundary to include entire quads.
- Validate topology while editing.
- Ground truth questionable areas as the mapping progresses.

YEAR FIVE (2025)

*all actions and activities dependent upon grant funding

Primary Program Action: **Wetland Monitoring and Assessment**

- Mission Watershed (first year of project)

Activities:

- Assess 15 new wetlands and monitor 5 recurring wetlands within watershed.

- Quantification, classification and functional assessment of all selected wetlands, a representative sub-sample of the watershed.

Primary Program Action: Water Quality Standards (WQS) for wetlands

Activities:

- Dependent on legal review and guidance of Tribal Council

Primary Program Action: Identify and map noxious wetland weeds

Activities:

- Natural Resource personnel trained in noxious weed identification and use of Collector app as needed
- Natural Resource personnel document noxious weeds using the Collector app throughout the reservation
- Data from Collector app added as an accessible GIS layer to Tribal maps annually
- Tribal weeds working group convenes to plan for invasive species control

Primary Program Action: Promote sound wetland conservation activities through effective wetland and riparian education and outreach activities

Activities:

- River Honoring presentations to grades 4-5
- Presentations at reservation schools or to local non-profits, as requested
- Make CSKT Natural Resources Story map available to Tribal staff for presenting to the public

Primary Program Action: Mapping

Activities: Land cover change analyses and mapping

- Analyze and compare current and previous aerial imagery of the Mission watershed
- Prepare a map and an acreage change table depicting land-cover changes over time in a subsample of the watershed
- Present completed land-cover change maps to local organizations, schools, and programs as requested

Primary Program Action: Program Management

Activities:

- Annual review of CSKT Wetland Program Plan (WPP) and provide revisions as needed
- Continue to integrate wetlands monitoring strategy into existing water quality and non-point source monitoring efforts
- Develop QAPPs, SOPs and any monitoring plans necessary to evaluate the quality and quantity of Reservation wetlands
- Project-specific reviews of regulated activities involving wetlands, i.e. ALCO, U.S. Army Corps of Engineers (USACE). The Wetland Conservation Program Coordinator will work with the Water Quality Regularity specialist on wetland projects and to seek ways to improve 401 certifications involving wetland projects
- Purchase, maintain, and upgrade necessary equipment

- Implement the Tribes' Wetlands Conservation Plan
- Include the CSKT Climate Change Strategic Plan and CSKT Aquatic Invasive Species (AIS) Plan into wetland activities on the Reservation

Action (Special Projects): Update NWI

Activities: Update NWI for the Flathead Indian Reservation, year 2 of project

- Conduct QA/QC activities and run FWS Wetlands Data Verification tools on each quad.
- Make corrections and check ties between quad boundaries.
- Find an outside party such as Montana Natural Heritage Program (MNHP) or the National Wetlands Research Center to review and QC the wetland mapping.
- Make final corrections
- Apply LLWW attributes
- Complete layer metadata explaining the product and procedures.
- Submit final NWI product to the CSKT GIS Program, FWS and the MNHP for their databases.

References:

Berglund, J. and R. McEldowney. 2008. MDT Montana wetland assessment method. Prepared for the Montana Department of Transportation.

Confederated Salish & Kootenai Tribes (CSKT) Website. Page: Cultural Preservation. Available at: http://csktribes.org/history-and-culture/cultural-preservation

Confederated Salish & Kootenai Tribes (CSKT) Website. Page: Kootenai Culture Committee. Available at: http://csktribes.org/history-and-culture/kootenai-culture-committee

Confederated Salish & Kootenai Tribes (CSKT) Website Salish-Pend d' Oreille website. Page: Salish Culture Committee. Available at: http://csktribes.org/history-and-culture/salish-culture-committee

Corp of Engineers Wetlands Delineation Manual Wetlands Research Program Technical Report Y087-1 (on-line edition) by Environmental Laboratory, January 1987. Available at: http://el.erdc.usace.army.mil/elpubs/pdf/wlman87.pdf

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service, Office of Biological Services. Washington, D.C. Publ. No. FWS/OBS-79/31.

Wetlands Conservation Plan for the Flathead Indian Reservation, Montana. 1999. Prepared by Mary. P. Price, CSKT Natural Resource Department. Prepared for Environmental Protection Agency, Region 8. In partial fulfillment of assistance agreement no. CD998256-02.