

# **Prairie Band Potawatomi Nation**

## **Wetland Program Plan**

**2025- 2029**

**Prairie Band Potawatomi Nation**

**Division of Planning and Environmental Protection**

**US Environmental Protection Agency- Region VII**

**Wetland Program Development Grant**

## Introduction

Over 120 acres of wetlands and nearly 2000 acres of potential wetland restoration areas exist within the exterior boundary of the Prairie Band Potawatomi Reservation. The wetland areas are linked to the Soldier Creek watershed. The largest wetland on the Reservation is approximately 18-acres in size, and is surrounded by a potential wetland area approximately 396 acres in size. Species inventoried included those of cultural and medicinal significance to the Prairie Band Potawatomi Nation.

The Soldier Creek watershed consists of three of the four streams draining the reservation, commonly referred to as Big Soldier Creek, Little Soldier Creek, Elm Creek and South Cedar Creeks. The watershed is an important tribal resource valued for the subsistence, cultural, and recreational attributes. A watershed-based approach is an essential factor to wetland program development, and the Prairie Band Potawatomi Nation will work to establish shared goals within all water programs. Enhancing partnerships with various entities and stakeholders on the Reservation, will also be a key component towards achieving voluntary compliance with the general best management practices for watershed protection.

The **Prairie Band Potawatomi Nation (PBPN) Wetland Program Management Plan** details activities that are necessary to protect, enhance, restore, and manage Prairie Band Potawatomi Nation wetlands. These activities coincide with the Wetland Program Development Grant (WPDG) and are modeled after the Core Elements Framework developed by the US Environmental Protection Agency. The core elements that the PBPN will address with the implementation of this Wetland Program Plan are:

1. Monitoring and Assessment
2. Wetland Restoration and Protection
3. Wetland Water Quality Standards
4. Wetland Regulatory

## **Past activities**

In 1996, the Prairie Band Potawatomi Nation Division of Planning and Environmental Protection developed a Wetlands Conservation Plan. The plan was prepared to assess the quantity and quality of wetlands on the Reservation, identify actions to be taken to acquire, restore, and enhance wetland resources, and determine regulatory or non-regulatory approaches needed to protect identified wetlands on the Reservation. The assessment/inventory portion for the Wetlands Conservation Plan was conducted by the Kansas Biological Survey (KBS) during the year of 1997, with a final report dated September 30, 1997 by Kelly Kindscher, et. all. Five jurisdictional wetlands were identified on the Potawatomi Reservation according to the KBS study. Also identified, were numerous potential wetland sites. The majority of historical wetlands on the Potawatomi Indian Reservation would have been prairie marshes (dominated by wetland grasses and sedges) in outlying areas along the floodplains of large creeks—Kindscher. The inventory was performed using the watershed format that has been consistently used in other projects that have been on-going for the Reservation.

More recently, the PBPN retained Norman Ecological Consulting, LLC to perform wetland delineations and wetland mapping assessments on Prairie Band land. In 2019, Norman Ecological delineated wetlands at a 31.8-acre site of herbaceous, shrubby, and forested wetlands, weedy land, and shrubby and forested uplands. A total of 12.3 acres of wetlands and a 0.21-mile long stream were found on-site. In 2020, Norman Ecological conducted a wetland delineation on a 260-acre floodplain forest located along Little Soldier Creek. All told, 19 forested, shrubby, and herbaceous wetlands covering 1.95 acres were found along with 2.3 miles of 26 ephemeral, intermittent, and perennial streams. And finally in 2023, Norman Ecological mapped wetlands on PBPN land, finding a total of 1,980 acres of potential wetlands (6,424 parcels), with a mean size of 0.3 acre, minimum size of 0.01 acre, and maximum size of 23.1 acres (non-riverine). Follow up mapping work may include additional field work to assess accuracy and utility of mapping results, refine mapped wetland boundaries to results of field work, and prioritize wetlands for conservation projects consistent with the PBPN wetland program's goals.

The Prairie Band Potawatomi Nation has since taken a holistic, watershed-based approach in the protection of water resources by establishing Clean Water Act programs (CWA 106, CWA 319). Through all water resource programs, it is the intent of the PBPB, to enhance and revitalize capacity for wetlands protection and program management. The Prairie Band Potawatomi Nation's goals are in line with EPA's goals to protect and restore wetland resources for the benefit of human health and the environment. This can be accomplished by the following:

- No net loss in wetland
- Overall increase in wetland extent and functions
- Additional goals: habitat, water quality, flood storage, watershed planning and restoration.

### **Core Element: Monitoring and Assessment**

**Overall Objective:** Develop a monitoring and assessment strategy consistent with EPA's National Wetland Condition Assessment-2016 that an applicant can use to manage wetlands according to their objectives.

- PBPB-PEP's Quality Assurance Project Plan for Wetland Condition Assessment was approved by EPA October 5, 2018. QAPP updates/revisions due every five years.

**Goal 1-** Gain a greater understanding of the functionality and condition of wetland systems within the Reservation boundary by way of monitoring and wetland condition assessment.

**Goal 2-** Maintain a comprehensive inventory of wetlands.

Action	Activities	2025	2026	2027	2028	2029	Possible Partners	Potential Funding
<b>Identify program decisions and long-term environmental outcome(s) that will benefit from a wetlands monitoring and assessment program</b>	<ul style="list-style-type: none"> <li>Collaborate with water quality programs in a state/tribe/local government</li> <li>Identify how wetland data can be used to implement watershed planning</li> <li>Document program's long-term environmental goals</li> <li>Identify programs that will ultimately use monitoring data to track trends, restoration, 401 certification and permitting</li> </ul>	x	x	x	x	x	EPA, NRCS, WRAPS, COE, BIA, KDHE, KBS, KDWPT	EPA
<b>Define wetlands monitoring objectives and strategies</b>	<ul style="list-style-type: none"> <li>Coordinate with most relevant partners, for example: federal, state, tribal, and local agencies, universities, regional and national work groups</li> <li>Examine other sources for monitoring information within the state/tribe/local government</li> <li>Identify monitoring objectives</li> <li>Define data needs and uses</li> </ul>	x	x	x	x	x	EPA, NRCS, WRAPS, COE, BIA, KDHE, KBS, KDWPT	EPA

	<ul style="list-style-type: none"> <li>• Coordinate with your Water Quality Monitoring Program to identify shared goals and activities</li> <li>• Examine how to integrate wetlands monitoring strategy into existing water quality monitoring efforts as feasible</li> <li>• Document wetlands monitoring strategy</li> </ul>							
<b>Develop monitoring design, or an approach and rationale for site selection that best serves monitoring objectives</b>	<ul style="list-style-type: none"> <li>• National Wetland Condition Assessment methodology with approved Quality Assurance Program Plan</li> </ul>	x	x	x	x	x		EPA
<b>Select a core set of indicators to represent wetland condition or a suite of functions</b>	<ul style="list-style-type: none"> <li>• Identify indicators that are relevant for established monitoring objectives</li> <li>• Confirm indicators are scientifically defensible</li> <li>• Develop/select field method(s)</li> <li>• Add supplemental indicators if needs dictate and as resources allow</li> </ul>	x	x	x	x	x		EPA
<b>Ensure the scientific validity of monitoring and laboratory activities</b>	<ul style="list-style-type: none"> <li>• Develop and draft peer review Quality Assurance Project Plan</li> <li>• Develop and draft peer review Field Operations Manual</li> </ul>	x	x	x	x	x	EPA	EPA

<b>Monitor wetland resources by the development of the monitoring tools and specific wetland studies as specified in strategy</b>	<ul style="list-style-type: none"> <li>• Identify and train staff to monitor for each indicator</li> <li>• Develop a schedule for monitoring wetland resources</li> <li>• Develop a method to track sites that are monitored</li> </ul>	x	x	x	x	x	EPA, KBS	EPA
<b>Track monitoring data in a system that is accessible, updated on a timely basis, and integrated with other water quality data</b>	<ul style="list-style-type: none"> <li>• Design a data management system that supports program objectives</li> <li>• Refine a data system so that it can be used for analysis</li> <li>• Make data system compatible with and regularly update Water Quality Standards</li> <li>• Integrate with other water quality data systems (e.g., watershed planning databases)</li> <li>• Georeference data as it is gathered for reporting</li> <li>• Identify sites to sample repeatedly for a trend network</li> </ul>	x	x	x	x	x		EPA
<b>Analyze monitoring data to evaluate wetlands extent and condition/function or to inform decision-making</b>	<ul style="list-style-type: none"> <li>• Determine baseline wetland condition Analyze changes in wetland extent or condition relative to reference conditions</li> </ul>	x	x	x	x	x		

	<ul style="list-style-type: none"> <li>Analyze changes in wetland extent or condition in response to climate change</li> </ul>							
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<b>Identify, monitor and evaluate wetlands as specified in PBPN monitoring strategy</b>		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Possible Partners</b>	<b>Potential Funding</b>
	Track selected monitoring sites	x	x	x	x	x		EPA
	Update wetland inventory to monitor acreage and condition		x		x		KBS, COE, NRCS, HINU	EPA
	Evaluate wetland function for BMP recommendations	x	x	x	x	x	NRCS, HINU	EPA
	Evaluate monitoring and assessment strategies to ensure they meet long term wetland resource goals	x		x				EPA
	Ensure scientific validity of monitoring and laboratory activities through approved quality assurance mechanisms	x	x	x	x	x	EPA	EPA



<b>Establish a baseline quantity and quality of Tribal Wetlands</b>	Develop appropriate collection/storage process for collected wetland data	x	x	x	x	x		EPA
	Compare any past data with current monitoring to identify trends and patterns in wetland losses/gains and condition	x	x	x	x	x	BIA, NRCS	EPA

## Core Element: Voluntary Restoration

Wetland **restoration** is the manipulation of a former or degraded wetland’s physical, chemical, or biological characteristics to return its natural functions. Restoration practices include:

- **Re-establishment**, the rebuilding of a former wetland; and
- **Rehabilitation**, repairing the functions of a degraded wetland (US EPA, 2007a).

Wetlands **protection** is defined as removing a threat or preventing the decline of wetland conditions (US EPA, 2007a).

**Overall Objective:** Develop a clear and consistent strategy for restoration and protection and link to existing watershed plans (both quantity and quality focused) and critical environmental area plans when available.

**Goal 3-** Promote public awareness and wetlands through education and information distribution.

**Goal 4-** Improve wetland condition and functionality through coordinating resources and collaborating with landowners and partners.

Action	Activities	2019	2020	2021	2022	2023	Possible Partners	Potential Funding
<b>Coordinate technical assistance for the Tribe and private landowners in the Reservation boundaries</b>	Utilize tribal and other agency resources to provide technical assistance	x	x	x	x	x	EPA, NRCS, WRAPS, COE, BIA, KDHE, KBS, KDWPT	EPA, NRCS, WRAPS, BIA,
<b>Establish goals that are consistent or compatible across relevant agencies</b>	Coordinate with relevant agencies that outline restoration/protection goals and strategies and timeframes	x	x	x	x	x	EPA, NRCS, WRAPS, COE, BIA,	

	<p>Develop multi-agency body to coordinate restoration/ protection efforts</p> <p>Gather information on wetland location, class and condition/functions by carrying out specific wetland surveys and studies</p> <p>Set restoration goals based on agency objectives and available information</p>						KDHE, KBS, KDWPT	
<p><b>Consider watershed planning, wildlife habitat, and other objectives when developing your selection process restoration/ protection sites</b></p>	<p>Apply tools (GIS, color-infrared photography, mapping, modeling, field inspection of soil, vegetation, and hydrologic conditions) to develop methodology to identify and prioritize restorable wetlands</p> <p>Share priorities with other organizations involved in wetland protection and restoration, e.g., wildlife bureaus, agriculture/conservation agencies, land trusts, mitigation banks</p>	x	x	x	x	x	EPA, NRCS, WRAPS, COE, BIA, KDHE, KBS, KDWPT	EPA, NRCS, WRAPS, BIA,
<p><b>Provide clear guidance on appropriate restoration and</b></p>	<p>Develop restoration and management guidance specific to wetland types and location (e.g. urban vs. rural)</p>	x	x	x	x	x	EPA, NRCS, WRAPS, COE, BIA,	EPA, NRCS, WRAPS, BIA,

<b>management techniques and success measures</b>	Develop a process to verify restoration techniques with site visits and adapt as necessary						KDHE, KBS, KDWPT	
<b>Coordinate financial assistance for the Tribe and private landowners within the reservation boundaries</b>	Identify funding sources to assist landowners in wetland restoration and rehabilitation activities	x	x	x	x	x	EPA, EQIP, DU, PF, WRP, NRCS, WRAPS, CD, KAWS, KDWPT	
<b>Maintain a no net loss of remaining wetlands regarding acreage, condition, and function</b>	<ul style="list-style-type: none"> <li>• Use a watershed approach to protect and restore wetlands by integrating the tribes CWA 319, 106 and other water resource goals with wetland goals</li> <li>• Coordinate funding and implementation of recommended BMPs</li> </ul>	x	x	x	x	x	PBPN, WRAPS, KWO	PBPN, NRCS, WRAPS
<b>Increase wetland acreage through restoration (re-establishment, rehabilitation or protection)</b>	<p>Develop restoration and management plans for re-established wetlands consistent with restoration guidance</p> <p>Develop a system to track:</p> <ul style="list-style-type: none"> <li>• Acres of wetlands re-established</li> </ul>	x	x	x	x	x	PBPN, NRCS, WRAPS	PBPN, NRCS, WRAPS

	<ul style="list-style-type: none"> <li>Restoration sites using techniques that comply with guidance</li> <li>Level of function/condition based on indicators</li> </ul> <p>Provide technical assistance to re-establishment projects as needed</p>							
<b>Maintain an up to date knowledge of wetland topics regarding BMP, funding sources, and other wetland topics</b>	Attend trainings, workshops, webinars, etc. to remain up to date on wetland topics	x	x	x	x	x	ASWM, WTI, EPA, Local Agency workshops	EPA
<b>Increase information sharing with involved agencies and Public</b>	<ul style="list-style-type: none"> <li>Compile information on assessment and projects into a GIS system</li> <li>Distribute brochures, flyers etc. at community events</li> <li>Present at local schools or community events on the importance and functions of wetlands</li> <li>Utilize the PBPN website to share information on wetlands and projects</li> </ul>	x	x	x	x	x	KWO	

## Core Element: Wetland Water Quality Standards

**Goals 3-** Maintain a comprehensive inventory of wetlands to assist with potential development of wetland water quality standards.

Action	Activities	2025	2026	2027	2028	2029	Possible Partners	Potential Funding
<b>Compile wetland data to use as reference should the Tribe decide to develop wetland specific water quality standards</b>								
	Continually search for additional sites that can be used to gather more wetland water quality data	x	x	x	x	x	PBPN	
	Continue to sample selected tribal wetlands	x	x	x	x	X	PBPN	EPA
	Create appropriate wetland water quality standards to better manage the Tribe's wetland resources					X	PBPN, KWO, KDHE	

## **Core Element: Wetland Regulatory**

A regulatory program allows states and tribes to manage aquatic resources protection and require restoration of acreage and function/condition to address their goals including an increase in the number of acres and quality of wetlands. States and tribes can incorporate other land use regulations, goals and policies into their regulatory program and more effectively manage the resources on a watershed scale.

**Goal 5-** Develop and enforce wetland definitions, regulations to further protect the land and water resources

Action	Activities	2025	2026	2027	2028	2029	Possible Partners	Potential Funding
<b>Develop definitions and jurisdictional scope in case the Tribe decides to develop wetland specific regulatory program</b>								
	Develop a working definition of what the Tribe considers a wetland				x		KDHE, KWO	
	Develop definitions involving Tribal waters				x		PBPN	
	PBPN will work with USDA-NRCS Agricultural Conservation Easement Program- Wetland Reserve Easement. PBPN and NRCS will develop a Wetland Management Plan and the Wetland Restoration Plan of Operations. Application No 54 6215 17 01M66 will include stipulations for 30 year contract. (beginning year of 2018 to 2048)	x	x	x	x	x	NRCS	NRCS

## Reference

*Prairie Band of Potawatomi Wetlands Conservation Plan*. 1996. Potawatomi Planning Department – J. Zoellner, V. King and Kansas Biological Survey – K. Kindscher, L. Kahn, A. Fraser

### List of Acronyms

ASWM	Association of State Wetland Managers
BIA	Bureau of Indian Affairs
CD	Conservation Districts
COE	Corps of Engineers
DU	Ducks Unlimited
EPA	Environmental Protection Agency
EQIP	Environmental Quality Incentive Program
HINU	Haskell Indian Nation's University
KAWS	Kansas Alliance for Wetlands & Streams
KBS	Kansas Biological Survey
KDHE	Kansas Department of Health and Environment
KDWPT	Kansas Wildlife, Parks, and Tourism
KFS	Kansas Forest Service



KWO	Kansas Water Office
NRCS	Natural Resource Conservation Service
PF	Pheasants Forever
PBPN	Prairie Band Potawatomi Nation
WTI	Wetland Training Institute Inc.
WRAPS	Watershed Restoration and Protection Strategy