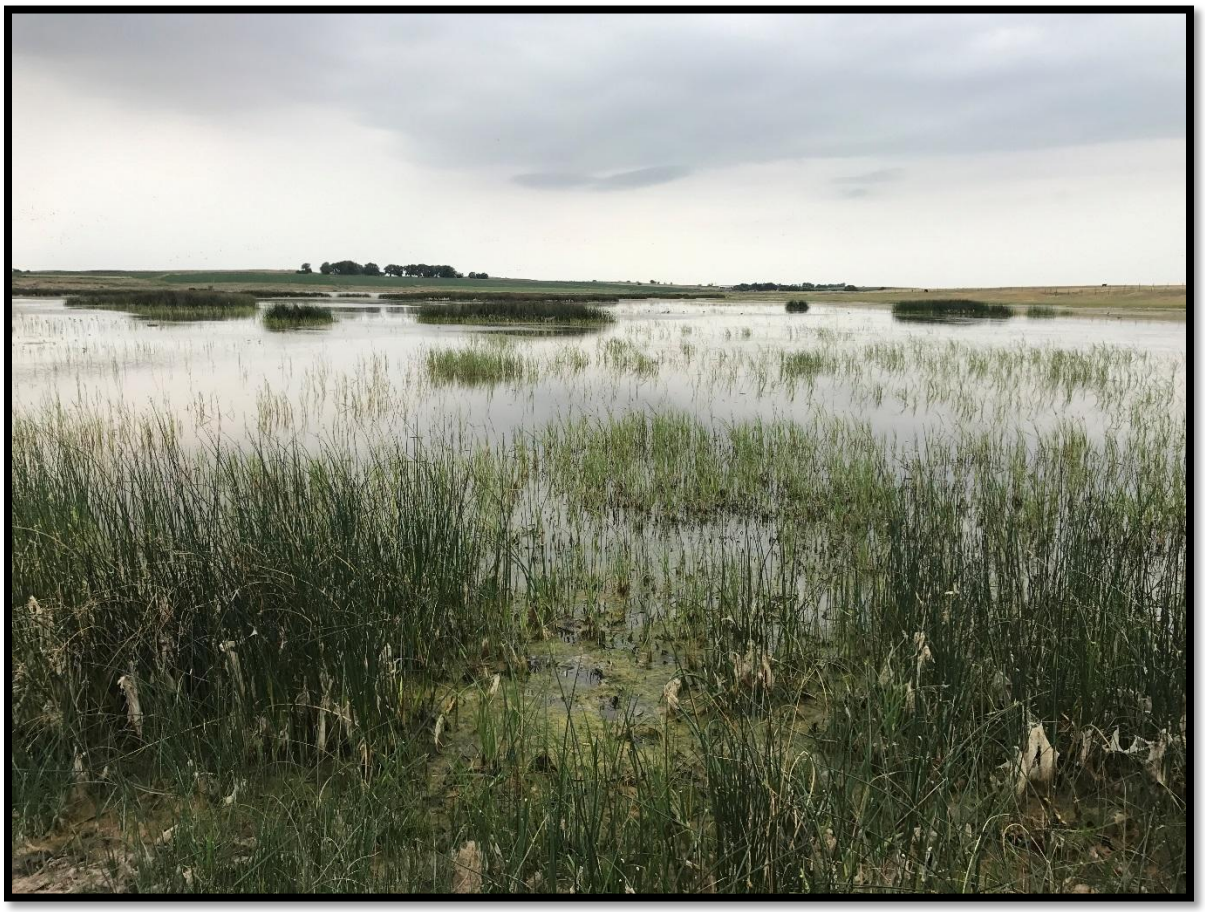
Wyoming Wetland Program Plan

2018-2023

1st Edition, January 26, 2018



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Acknowledgements

This Wetland Program Plan was developed by Wyoming Game and Fish Department and Ducks Unlimited with funding from the Environmental Protection Agency (EPA) through the Wetland Program Development Grant (No. CD-96852801-0) from EPA Region 8. We would like to thank Wyoming Natural Diversity Database for their contributions and numerous members of the Wyoming Bird Habitat Conservation Partnership for their input during the development of this document.

Introduction

Wetlands and riparian systems serve an exceptionally important role within the arid landscapes of Wyoming. These habitats enable many wildlife species to persist in environments that would otherwise support much lower density and diversity of wildlife. Wetlands in Wyoming provide critical habitat, breeding grounds, and sources of food for fish, birds, amphibians, and other organisms (US EPA, 2007b, 50-51). Riparian corridors also provide migration and dispersal routes across arid landscapes. More than one third of the threatened and endangered species in the U.S. live exclusively in wetlands and nearly half use wetlands at some point in their life cycle. Threatened and endangered (T&E) species that are wetland obligates in Wyoming include Kendall Warm Springs Dace, Wyoming Toad, Preble's Meadow Jumping Mouse, Colorado Butterfly Plant, Ute Lady's Tresses (plant), and Penland's eutrema (plant). Additional T&E wetland obligates that have been observed in Wyoming include whooping crane, piping plover and least tern.

Across the state, wetlands perform beneficial functions including stream flow stabilization, groundwater recharge, and water quality improvement. As natural sponges, many wetlands contribute to the resiliency of aquatic systems in times of both drought and flood, and provide ecosystem services to society and the natural world. A diversity of wetland types is found in Wyoming, and riparian corridors line stream courses throughout the state. Natural wetlands predominantly include playa depressions in lower elevation basins, riverine oxbows, beaver ponds, and glacially formed kettle lakes in mountainous regions. Created wetlands include livestock ponds, abandoned mine and quarry workings, borrow pits, irrigation induced wetlands, mitigation wetlands, and wetland creation projects on private, federal, and state lands. Irrigation-influenced wetlands (both natural and created) are fairly common features on rangelands and agricultural lands throughout the state. Collectively, these wetlands number around 280,591 and cover approximately 918,634 acres (Copeland et al. 2010). All contribute to the array of recreational opportunities, landscape diversity, and abundant wildlife in Wyoming. Unfortunately, the total area of wetlands in Wyoming has been reduced approximately 38% since European settlement (Dahl 1990). Partnerships with landowners, agencies, conservation organizations, and others are essential to strategically restore and protect wetlands on Wyoming's working landscape.

Wetland Restoration and Protection in Wyoming

"Restoration" and "Protection" refer to actions that restore a wetland's natural functions, remove threats, or prevent the decline of wetland condition (US EPA 2007a). Voluntary restoration and protection actions can range from conservation easements to restoration of wetland hydrology and native plant communities. Many organizations are involved in managing, conserving, and studying the state's wetlands. They offer conservation solutions that are compatible with, even complementary to, traditional use of working lands. These organizations range from federal, state, and local government bodies to conservation organizations, academic institutions, and private individuals. The Wyoming Bird Habitat Conservation Partnership (WBHCP), comprised of representatives from the above sectors, has been working to facilitate wetland and riparian conservation planning and project implementation across Wyoming since 2002.

Agencies and organizations involved in voluntary restoration and protection of wetlands include the USFWS Partners for Fish and Wildlife (PFW) program, Natural Resource Conservation Service (NRCS), The Nature Conservancy (TNC), Wyoming Association of Conservation Districts (WACD), Ducks Unlimited (DU), Jackson Hole Land Trust (JHLT), Wyoming Stock Growers Agricultural Land Trust (WSGALT), Intermountain West Joint Venture (IWJV), U.S. Forest Service (USFS), Bureau of Land Management (BLM), United States Fish and Wildlife Service (USFWS), and Wyoming Game and Fish Department (WGFD). USFS, BLM, USFWS, and WGFD are the primary agencies engaged in conserving and managing wetlands on public lands. Funding sources for voluntary protection and restoration include the North American Wetlands Conservation Act (NAWCA), various Farm Bill programs, Section 319 of the Clean Water Act, the Wyoming Wildlife and Natural Resources Trust Fund (WWNRT), WSGALT, WGFD Habitat Trust Fund, and several additional agency, NGO, and private sources.

Statewide and regional assessments led by TNC and Wyoming Natural Diversity Database (WYNDD) were completed in recent years to support conservation planning and prioritization. These include a geospatial assessment of Wyoming's wetland complexes (Copeland et al. 2010), which identified the nine priority wetland complexes recognized by the WBHCP. Level II profile and condition assessments of five priority wetland complexes were also completed, including Goshen (Tibbets et al. 2016a), Laramie Plains (Tibbets et al. 2016b), Upper Green (Tibbets et al. 2015), Little Snake River (publication in process), and Great Divide Basin (publication in process). The Wyoming Wetlands Conservation Strategy (WBHCP 2010) and associated regional step-down plans (WBHCP 2014a-f, 2015, 2017, 2018a-b) identify statewide and region-specific factors affecting wetland condition and provide strategies for conserving wetland resources. The Wyoming Wetland Conservation Strategy (WBHCP 2010) also provides additional detail about wetland conservation efforts, threats to wetland resources, and partners working to conserve wetlands in the state.

Regulatory protection and water quality programs are complementary to voluntary conservation and contribute to wetland restoration and protection in Wyoming. Activities impacting jurisdictional wetlands, including voluntary restoration, are regulated under federal statutes and guidelines, notably Sections 401 and 404 of the Clean Water Act of 1972 (CWA) and the Highly Erodible Land Conservation and Wetland Conservation Compliance (aka "Swampbuster") Provision of the Food Security Act of 1985. Section 401 certification, issued by Wyoming Department of Environmental Quality (WDEQ), is

required for federal licenses or permits, including Section 404 Dredge and Fill Permits, which could result in discharge of materials into waters of the United States. The US Army Corps of Engineers (US ACE) Wyoming Regulatory Office administers the Section 404 Program. WDEQ oversees the Section 319 Nonpoint Source Management Program, established by amendments to the CWA in 1987. Section 319 provides grant money to states to support implementation of nonpoint source projects, including watershed and wetland restoration. The Swampbuster Provision is administered by the NRCS and Farm Service Agency (FSA) of the U.S. Dept. of Agriculture (USDA). Swampbuster pertains to limited areas within agricultural lands that meet the definition of a wetland at 16 U.S.C. Section 3801(a)(27). Under this provision, producers who convert a wetland area to cropland lose eligibility for several federal farm program benefits.

At the state level, additional policies have an impact on voluntary and regulated wetland conservation activities. The Wyoming Wetlands Act [W.S. §§ 35-11-308 through 35-11-311], passed in 1991 and amended in 1994, established a statewide wetland mitigation bank to facilitate mitigation of impacts to wetlands. Administration of the mitigation bank falls under the purview of WDEQ. The State Engineer's Office administers and regulates use of water resources in Wyoming. The right to use water for domestic, municipal, agricultural, industrial, construction, or environmental purposes is based on a system of designated beneficial uses. Beneficial uses recognized to sustain and protect natural resources include wetlands, wildlife, environmental, and instream flow (WSEO *Undated*). The latter use was established by the 1986 Instream Flow law [W.S. 41-3-1001], which provides for the appropriation and protection of instream flows to sustain fisheries (Jacobs et al. 2003). Wetlands associated with irrigation are also directly affected by Wyoming water law.

More comprehensive information about partners involved in wetland conservation and management in Wyoming, and a summary of regulatory and voluntary conservation programs, are provided in the Wyoming Wetland Conservation Strategy (WBHCP 2010) and on the WDEQ, WGFD, and EPA websites.

About This Plan

EPA has identified four Core Elements– (1) monitoring and assessment, (2) regulation, (3) voluntary restoration and protection, and (4) water quality standards – that comprise the foundations around which Wetland Program Plans can be developed. This plan will focus on Voluntary Restoration and Protection. Based on partner feedback and capacity in the state, a next step in wetland program development will include the addition of a Monitoring and Assessment component to a future plan revision.

The purpose of this Wetland Program Plan is to develop a framework for coordinating, tracking, and prioritizing actions that further the conservation of wetlands in Wyoming. Improvements in wetland condition and function, and increases in wetland acreage, can be realized by better organizing and mobilizing available resources. A bibliography outlining wetland-related plans and programs relevant to Wyoming is included as an appendix to this document. We believe improved coordination among partners and integration of voluntary restoration and protection options into existing natural resource conservation efforts will promote greater progress. The development of a state Wetland Program can

provide additional organization and direction to this collaborative effort by establishing goals, improving communication and information exchange between partners, and increasing capacity to restore wetlands on public and private lands.

This plan builds on the Wyoming Wetlands Conservation Strategy (WBHCP 2010) and Regional Step-down plans (WBHCP 2014a-f, 2015, 2017, 2018a-b) by identifying more specific activities or directions for wetland conservation in Wyoming (Table 1). The overarching objective of this document is to increase effectiveness of ongoing wetland conservation work and bring greater focus to future efforts. The plan is voluntary and implementation of stated objectives, actions, and activities is dependent upon available funding and resources.

Table 1. Voluntary Restoration and Protection

Goal: Support activities leading to an overall increase in wetland and riparian restoration, protection, and enhancement in Wyoming through a more coordinated approach to voluntary restoration and protection.

OID	Objective	AID	Action	VID	Activity	Timeline	Lead	Potential Funding
1	Clearly and consistently define restoration and protection goals throughout state.	1.1	Establish goals that are consistent or compatible across relevant agencies.	1.1.1	Coordinate with relevant organizations to share restoration/protection goals, strategies and timeframes; Identify commonalities and partnership opportunities in priority complexes.	2018-2019	WBHCP	
				1.1.2	Continue profile and condition assessments of priority complexes.	2019-2023	WYNDD	WPDG
		1.2	Consider watershed planning, wildlife habitat, and other objectives when selecting restoration/ protection sites.	1.2.1	Coordinate with partners to update NWI mapping (LLWW and functional attributes) by identifying priority locations and leveraging resources.	2018-2023	WBHCP	WBHCP, WPDG
		1.3	Provide guidance on appropriate restoration and management techniques and success measures.	1.3.1	Share information with WDEQ, WWDO and CDs on wetland functions and conservation priorities during the development of Watershed-Based Plans and Watershed Studies; Provide technical assistance and facilitate information exchange.	2018-2023	WGFD, WBHCP	WPDG
				1.3.2	Establish indicators of restoration success and adopt or develop methods for assessment of projects.	2019-2022	WYNDD	WPDG
				1.3.3	Develop a strategy to addresses the predicted impacts of a changing climate on wetlands and associated water resources in Wyoming.	2019-2020	WGFD	WPDG

				1.3.4	Support research on climate change that informs wetland restoration and protection priorities.	2019-2023	WGFD/ WBHCP	
				1.3.5	Develop and promote novel restoration and management techniques (e.g., reconnecting floodplains, beaver mimicry); Offer training and disseminate results to WY partners.	2019-2021	DU, WGFD	WPDG, NAWCA, WWNRT
				1.3.6	Develop management guidance for wetland impoundments based on type and location.	2019-2021	DU, WGFD	WPDG, NAWCA, WWNRT
				1.3.7	Increase understanding of the impacts of irrigation methods on wetlands and water resources.	2021-2023	WHBCP	WPDG
2	Protect and Restore wetlands.	2.1	Restore wetland acres, condition, and function.	2.1.1	Develop restoration and management plans for WGFD managed lands; Continue restoring wetlands on WHMAs.	2018-2023	WGFD/ DU	DU, WGFD, NAWCA, WWNRT
		2.2	Protect wetlands from degradation and destruction.	2.2.1	Develop recommendations to communicate WGFD priorities to industry and department staff involved in development near wetlands on WGFD owned and managed lands.	2020	WGFD	WGFD
3	Track and monitor restoration and protection progress over time, document, and modify practices as appropriate.	3.1	Track Restoration and protection projects.	3.1.1	Develop a statewide tracking database for restoration and protection projects; Update yearly with project data from partners.	2019-2020	WGFD	WPDG
		3.2	Monitor project sites to ensure restoration/ protection practices are implemented correctly and sites are properly managed.	3.2.1	Monitor a sample of restoration sites to inform development of management and restoration efforts.	2022-2023	WGFD/ WYNDD	WPDG, WGFD
				3.2.2	Monitor restoration projects on WGFD managed lands and apply an adaptive management framework to achieve and sustain productive wetland conditions.	2019-2022	WGFD	WGFD

4 Improve communication about wetland resouces and conservation needs.	4.1 Continue to build partnerships that facilitate strategic restoration and protection.	4.1.1 Improve access to funding resources to support restoration and protection by enhancing use of new and existing wetland conservation and funding programs.	2018-2023	WBHCP	NAWCA, WWNRT, WPDG
		4.1.2 Identify challenges or obstacles that inhibit attainment of restoration and protection objectives and seek collaborative solutions (e.g., solutions to engineering, permitting, regulatory bottlenecks).	2018-2024	WBHCP	
		4.1.3 Develop systems for sharing information between partners to increase collaboration and consistency; Address the need to communicate time sensitive updates and access to relevant data, methods, and funding opportunities.	2020-2021	WBHCP	
	4.2 Support outreach that improves public knowledge of wetlands and their values in Wyoming.	4.2.1 Identify landowner and public information gaps pertaining to wetlands and wetland conservation.	2018-2019	WBHCP/ WGFD	WPDG, WGFD
		4.2.2 Collaborate with Conservation Districts and other natural resource oranizations to provide information and clarity about wetland conservation opportunites.	2020-2021	WBHCP/ WGFD	NFWF, IWJV
		4.2.3 Maintain and update the Wyoming Wetlands Website.	2018-2023	WGFD	WGFD

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