

Nebraska State Wetland Program Summary



Sandhill Wetland; Photo Credit: US Fish and Wildlife

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Section A. Quick View

Description of State’s Wetlands

Nebraska’s wetlands consist primarily of palustrine (85 percent), lacustrine (13 percent), and riverine (2 percent) wetlands. Nebraska has three wetland complexes recognized as being of international importance as migrational and breeding habitat for waterfowl and nongame birds: the Rainwater Basin wetlands in south-central and southeastern Nebraska, the Big Bend reach of the Platte River (directly north of the Rainwater Basin), and the Sandhills wetlands in north-central and northwestern Nebraska.

State Definition of Wetlands

The state’s definition is consistent with the federal definition and is included in Nebraska’s Surface Water Quality Standards (<http://www.deq.state.ne.us/RuleAndR.nsf/pages/117-TOC>): In these standards, “wetland” is defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

Historic Wetland Loss/Gain

Original Wetland Acreage	Remaining Wetland Acreage	Acreage Lost	% Lost
2,910,500	1,905,500	1,005,000	35%

Source: US Fish and Wildlife Service (Dahl, 1989)

Additional information about wetland loss and gains is available at: www.nebraskawetands.com

Primary State Wetlands Webpage

Nebraska State Wetland Webpage
[Http://www.nebraskawetands.com](http://www.nebraskawetands.com)

State Wetland Program Plan

Wetland Program Plan for Nebraska

http://water.epa.gov/type/wetlands/upload/ne_wetland_program_plan_2010.pdf

No Net Loss/Net Gain Goal

No explicit official goal; however, antidegradation language of Surface Water Quality Standards implies “no net loss” and thus mitigation is required as part of Section 401 certification.

State Resources for Wetland Work

State Name	Core element #1: Regulation	Core Element #2: Monitoring and Assessment	Core Element #3: Wetland Water Quality Standards	Core Element #4: Voluntary Wetland Restoration*
Agency	NE DEQ			
Source(s)	Federal, 604(b), and 319 funding			Nebraska Environmental Trust (lottery)
Amount				
Staffing	0.5 FTE			2 FTE

**Please note that District Staff does most of the restoration work*

State Permitting Fees

State Permitting Fee	State Name
Yes/No	NO
Amount (range)	N/A
Agency	N/A

Innovative Features

Nebraska has a voluntary regulation program, sending a letter if it is a non-404 Waters of the State impact, saying that the state cannot issue a permit, but that an activity might violate water quality standards. They offer to work with them to avoid a violation of state water quality standards.

Models and Templates

None.

Section B. Regulation

How are Wetlands Regulated in Nebraska?

The state does not have any wetland-specific regulatory statutes or administrative rules. However, the State regulates floodway areas (Neb. Rev. Stat. ## 2-1506 to 2-1507). Regulation of wetlands in the Nebraska includes: Section 401 certification, State Programmatic General or Regional Permits,

Nebraska statute Title 117, and the state’s Nongame and Endangered Species Act. Two primary state agencies are involved in wetland protection:

- 1) The **Nebraska Department of Environmental Quality (NDEQ)** authorized to administer all provisions of the Federal Clean Water Act (CWA) by the Nebraska Environmental Protection Act (Section 81-1501 to 81-1533). NDEQ is the primary aquatic resource regulatory agency in the state and is responsible for issuing §401 water quality certifications. Staff activities include issuance of §401 certifications, technical support, and administration of state-based funds.
- 2) The **Nebraska Game and Parks Commission (NGPC)** conducts various non-regulatory wetland activities within the state, including outreach, research, conservation, management, and restoration. Staff may also provide comment on §401 certifications issued by NDEQ.

The state does not have a wetland permitting program. However, uniquely, Nebraska does have a **state *voluntary* regulatory program**. If a water is a non-404 water, the state sends a “letter of opinion” to the applicant saying that the state cannot issue a permit, but an activity might violate state water quality standards and the state will work with the applicant to avoid violation of these standards. The state refers to this approach as “resource advocacy through regulatory efforts.”

Additional Information: Nebraska’s statewide program focuses on partnership development and coordination. It has a private lands program with rangers, farmers and other land owners, as well as a public lands component, focused on agency lands and wildlife management (which often included wetlands management and restoration).

Wetland Delineation

Delineation Guidance	Yes	No	Detail
Use State’s Own Method		X	
Use Corps’ 87 Manual and Regional Supplement	X		
Other (Please describe)		X	

Evaluation Methodology

- HGM methodology is being used to develop a draft HGM Model for the Rainwater Basin. Data collection is completed and the draft Model is in development.
- Extremely preliminary fieldwork (one one-day data collecting foray for reference sites in northeast Nebraska) was conducted for a Riparian HGM Model; that activity has stalled in recent years.
- Wetlands outside the Rainwater Basin are evaluated using the Cowardin Classification System, both impact sites and mitigation/mitigation banking sites.

Exempted Activities

Upland soil and water conservation practices or normal farming practices involving tilling, seeding, cultivation, harvesting, and grazing for the production of food, fiber, and forest products (similar to the Corps’ Ag. Exemption) are exempt from our Water Quality Standards to the extent that they shall not be considered to cause significant degradation of biological integrity in wetlands.

Special Provisions for Agriculture and Forestry

Same as above

Penalties and Enforcement

DEQ relies on the Corps for enforcement of 404 permits; however DEQ conducts the National Pollutant Discharge Elimination System program. The main enforcement tool for violations to water quality standards in Nebraska is the issuance of a civil penalty (up to \$10,000 per day of violation). The court shall consider the size of the operation and the degree and extent of pollution in assessing the penalty. There are no enforcement measures specific to wetlands; past violations have been resolved through voluntary compliance. More typically, wetland-related compliance/enforcement issues fall to the U.S. Army Corps of Engineers (for violations to CWA §404), with minor assistance provided by NDEQ.

Permit Tracking

DEQ has a database called SW401 into which the basic data from each §404 permit is entered. The data is stored on the State Mainframe computer.

State General Permit (statewide vs. regional coverage)

Permit Coverage	Yes	No	Detail (Type of Permit)
Regional General Permit	X		Some regional permits with multiple states include Nebraska
Statewide General Permit	X		

Description: The state has five general permits regulating activities within the boundaries of Nebraska.

Assumption of 404 Powers

Assumption Status	Yes	No	Detail
Assumed		X	
Working Toward Assumption		X	
Explored Assumption	X		Assumption was explored in 1982 and in 2001; assumption was rejected (in part) due to cost.

Joint permitting

Section 404 permitting is under the authority of the Corps; however, close coordination exists between Corps, DEQ, Nebraska Game & Parks Commission (NGPC), U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (FWS), and USDA Natural Resources Conservation Service (NRCS).

Special Area Management Plans and Advanced Identification Plans

An interagency comprehensive planning effort continues in the Lincoln metropolitan area and has protected wetlands from development. A Special Area Management Plan-like project was conducted previously for the Eastern Saline Wetlands of Lancaster and Saunders Counties. Products included a Resource Characterization of Nebraska's Eastern Saline Wetlands with associated digitized maps (1994) and Mitigation Guidelines for Nebraska's Eastern Saline Wetlands (1997).

Buffer Protections

Nebraska's wetland regulatory program has no requirements for buffer protections. However, there are requirements for buffer footages in antidegradation requirements. Mitigation sites are required to have buffers and buffers are usually considered during restoration planning and implementation.

Mitigation Policy

The Corps handles most issues related to wetland mitigation; however, both NDEQ and NGPC participate on the state's Mitigation Banking Review Team (MBRT). State statutes give the Nebraska Department of Roads authority to replace and mitigate its impacts to wetlands and establish mitigation banks. DOR has both the biggest impacts on wetlands and conduct the most mitigation projects. Re-creation of wetlands, on site and off site mitigation, and habitat enhancement are required pursuant to Section §401 certification.

Mitigation Database

NDEQ maintains a §401/404 permit-tracking database, but does not track wetland mitigation.

Section C. Monitoring and Assessment

Agency Responsible for Wetland Monitoring and Assessment

Nebraska has not developed a monitoring and assessment program specific to wetlands; however, the state (through NDEQ) does conduct general surface water quality monitoring. The state did participate in a one-time wetland monitoring effort in 2011 through a National Wetland Condition Assessment State Intensification Study. The state is specifically interested in conducting research and inventory work to determine wetland quality and what is driving their health.

Mapping/Inventory

Nebraska relies on federal mapping efforts. The most complete wetland inventory for Nebraska was conducted by the National Wetlands Inventory (NWI) of the U.S. Fish and Wildlife Service. The maps were produced from aerial photographs taken in the early 1980s, so some inaccuracies are present in the mapping. All of Nebraska, except sixty-four 7.5' quadrangles (the southwest corner of the state), has been mapped by the National Wetlands Inventory. Most of these mapped quadrangles are available digitally in Arc Export format. Other localized wetland maps have been prepared by the NGPC and the Universities of Nebraska at Lincoln and Omaha.

Nebraska did conduct an update of state landcover maps. Mapping efforts are prioritized by local wetland complexes. Mapping has been completed for Rainwater Basin and parts of the Platt. The state is working with partners to secure funding to map the Sand Hills area. Additionally, Nebraska is getting most of the state flown with LiDAR and NRCS soil survey maps are uniform across state units.

Statewide Wetland Monitoring Plan

None.

Wetland Classification and Assessment

Wetlands are classified in Nebraska’s Water Quality Standards as either surface-water overflow wetlands (exhibiting a surface water connection to an adjacent stream or lake on a regular or periodic basis) or isolated wetlands.

Overall Wetland Gain and Loss Tracking System

None

Wetland Monitoring and Assessment Characteristics

Level	None	Level 1	Level 2	Level 3
<i>Nebraska</i>		X (Soils, Landcover, LiDAR)	X (Statewide rapid assessment tool is under development)	X (Only for the 2011 NWCA intensification study and targeted research projects)

Type	None	IBI	Condition	Functional
<i>Nebraska</i>		NO	YES	YES

Frequency	None	Project Specific	Ongoing
<i>Nebraska</i>		YES	NO

Participation in National Wetland Condition Assessment

NWCA Study Type	Yes	No
National Study	X	
State Intensification Study	X	

Detail: For its state intensification study, Nebraska added 110 additional sampling sites, in addition to the national study sites. The intensification study represents the most significant work on wetland monitoring and assessment in the state in recent years.

Section D. Water Quality Standards

Wetland and Water Quality Standards

Type	None	Use Existing WQ Standards	In Process	Adopted	Future Direction
Wetland-specific Designated Uses		X			
Narrative criteria in the standards to protect designated wetland uses		X			
Numeric criteria in the standards based on wetland type and location to protect the designated uses		X			
Anti-degradation policy includes wetlands		X (State adopted specific inclusion of wetlands in existing surface water regulations)		<i>(Please note adoption of wetlands in Surface Water Regulations)</i>	

Description: The State of Nebraska considers wetlands, including geographically isolated wetlands, to be waters of the state. State Water Quality Standards apply to all natural wetlands and all artificial wetlands (except for wetlands constructed for the purpose of wastewater treatment, wastewater retention, or irrigation reuse): <http://www.deq.state.ne.us/RuleAndR.nsf/pages/117-TOC>. Standards are not separate for wetlands, but the state formally adopted the specific inclusion of wetlands in these standards. The state maintains a place holder in state regulations where wetland-specific wetland standards could be added in the future.

Nebraska’s WQS are based on narrative criteria which call out natural criteria determined on a case-by-case basis, numeric criteria, and “free from” chemical and biological criteria, and relate these to a variety of wetland functions, including flood control, sediment trapping, fish and wildlife habitat, and water quality/pollution control. The state has adopted and applies an antidegradation policy to wetlands. Designated uses include aquatic life, wildlife, agricultural water supply, and aesthetics. Numeric criteria which rely on water in order to be measured are not applicable during periods when water is not present.

Section E. Voluntary Wetland Restoration

The Nebraska Game and Parks Commission has a **wetland acquisition program** that is focused on additions to existing areas (roundouts), adding new large blocks of habitat that are easier to manage, and/or protecting the highest quality remaining wetlands. NGPC also operates the WILD Nebraska program, which partners with landowners, nongovernmental organizations, joint ventures, and local and state entities to protect and restore wildlife habitat on private lands, including wetlands. NGPC also coordinates with NRCS and FWS in helping to implement the USDA's Wetlands Reserve Program. The state contributes funds derived from the sale of habitat stamps and hunting and fishing licenses. State wetland restoration goals, often regionally-specific, revolve around jointly developed USDA program goals. Wild Nebraska has no specific wetland acreage goal.

The following priorities are established in the program plan operational manual:

PRIORITY 1 - Wetland Restoration:

1a) Full Hydrologic Restoration- Activities that restore hydrology to an area that historically was a wetland but has been drained to the extent that none of the area is currently a wetland.

1b) Partial Hydrologic Restoration- Activities that restore hydrology to an area that historically was a wetland but has been partially drained to extent that only some of the area is currently a wetland.

1c) Vegetative Restoration- Activities that restore natural plant communities on areas not hydrologically modified, but where the natural vegetation has been substantially altered.

PRIORITY 2 - Wetland Vegetation Management and Maintenance:

Activities intended to improve or maintain existing desirable vegetation.

PRIORITY 3 - Wetland Enhancement:

Activities that alter the physical characteristics of an existing wetland to achieve specific social benefits without restoring the natural ecological functions (e.g., island construction, altering a seasonal wetland to make it a semi-permanent wetland).

PRIORITY 4 - Wetland Creation:

Activities that establish a wetland where one did not previously exist.

All private lands are potentially eligible. The program structure recognizes that wetland restoration and management projects are often complex and require expertise in biology, engineering, hydrology, and soils. Because of this, it is recommended that wetland projects be designed by an interdisciplinary team with the required expertise. Wild Nebraska funds cannot be used to assist with wetland mitigation or other activities required by law. A spreadsheet is maintained that tracks the location, date, landowner, cost, and acres enrolled.

Types of Wetland Restoration Work Funded by the State:

Type of Work	YES	NO	Description
Fund Wetland Restoration (may include easement agreements)	X		
Private Land Restoration	X		
Public Land Restoration	X		On own state lands
Technical Assistance	X		
Tax Incentives		X	
Other	Unknown		Offset may be possible – indirect benefit

Voluntary Wetland Restoration Program Components

Wetland Restoration Efforts	Nothing in the Works	Planning	In Progress	Mature/ Complete
Program has a set of restoration goals				X
Coordinate with relevant agencies that outline restoration/protection goals and strategies and timeframes				X
Developed multi-agency body to coordinate restoration/ protection efforts				X (regional partnerships)
Set restoration goals based on agency objectives and available information				X

Goals for Restoration Projects

Nebraska considers watershed planning, wildlife habitat, and other objectives when selecting restoration/ protection sites.

Goal	Yes	No	Description
No Net Loss	X		
Reverse Loss/Net Gain			Regulatory has a no net loss goal (hold the line); but voluntary restoration has a net gain goal
Nonpoint Source Pollution (NPS)/WQ	X		319 funded projects
Total Maximum Daily Load (TMDLs)		X	
Habitat	X		
Coastal Protection		X	
Floodwater Protection	X		Talk about floodplain ecosystem services; have

			partnered with floodplain restoration projects
Groundwater	X		
Other - Watershed Planning	X		

Landowner Guides and Handbooks to Assist with Voluntary Wetland Restoration Efforts

NGPC has published a *Guide to Nebraska’s Wetlands and Their Conservation Needs*. The guide includes information on wetlands, wetland conservation programs, and Nebraska’s regional wetland complexes. The state also provides other, more specific, guidance resources.

Section F. Innovative and/or Highly Effective Education and Outreach

Contact Nebraska DW&F for more information. There is also some education and outreach associated with 319 projects that may include wetlands. Nebraska DW&F has had success with their “See You Out There” outreach campaign: <https://www.youtube.com/watch?v=gKjAdgvpvCI>. The state is specifically interested in helping landowners understand why wetlands are important and options for wetland restoration.

Section G. Climate Change and Wetlands Work

Nebraska’s wetland program does not work directly on climate change issues. Nebraska does not have a state climate change adaptation plan and the state does not work directly on issues that are considered to be “human-induced” climate change. The state does not conduct future climate change predictions or scenarios, instead looking at historical outliers as the basis for planning (e.g. 1969).

However, drought is a perennial concern for the state. Drought has impacted rivers, reservoirs, and ground water levels, threatening water supply, wetland habitat, and the State’s economy. Water extraction is regulated by Nebraska’s 23 Natural Resources Districts (NRDs), if triggers in the respective Ground Water Management Plan have been hit. Surface water appropriations are handled by the Nebraska Department of Natural Resources. Drought and floods have been occurring in cycles back to back in the state. Nebraska has a Drought Mitigation Task Force and is assessing management options involving dams and drilling wells. Some of this work is being done in the state through civil works planning by the Department of Roads. The state has been awarded an EPA program development grant to study issues around drought and Playa Lakes.

Climate change research is being conducted at the University of Nebraska, which has a climate office. . The City of Omaha has been looking at CSO issues.

Section H. Integration

Entity/Program Area	Yes/No	Description of the Connection
NPDES/Stormwater	YES	Within the agency, but MS4s are the only ones working on green infrastructure
303(d)	IN THE PAST	In one reporting cycle, wetlands were included – they are not currently included
305(b) reporting on wetlands	IN THE PAST	In one reporting cycle, wetlands were included – they are not currently included

Total Maximum Daily Load (TMDLs)	NO	(Only NPS work to mitigate pollutant loads)
Climate Change/ Resiliency	NO	
Land Use /Watershed planning	YES	Through the 319 program which emphasizes watershed approaches and involves wetland restoration or creation in Nebraska
Flood/Hazard Mitigation	YES	The Corps has a huge effort on the Missouri River that includes wetland work
Coastal Work	N/A	
Wildlife Action Plan	YES	Through Nebraska DF&W
Statewide Comprehensive Outdoor Recreation Plan (SCORP)	YES	Through Nebraska DF&W
Other (Specify)		

State Wetland Program Continuum

Continuum Stage		Core Element 1: Regulation	Core Element 2: Monitoring & Assessment	Core Element 3: Wetland Water Quality Standards	Core Element 4: Voluntary Restoration
Mature Stage	High	X 401 Certification Program + Voluntary Regulatory Program		X	X
Initial Implementation Stage	↑				
Development Stage			X		
Early Stage		Low			

Note: The state wants to emphasize that its wetland program carefully reviews proposed project designs and procedures.

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Section J. Useful Websites

State Wetland Programs

1. Nebraska Game & Parks Commission
 - a) Wetlands Info
<http://www.outdoornebraska.ne.gov/wildlife/programs/wetlands/>
 - i. Wetland Program Plan
http://www.outdoornebraska.ne.gov/wildlife/programs/wetlands/pdf/Wetland%20Program%20Plan_Nebraska_2010.pdf
 - ii. Wild Nebraska
<http://outdoornebraska.ne.gov/wildlife/programs/wildnebraska/wildnebraska.asp>
2. Nebraska Department of Environmental Quality
 - a) Water Programs
<http://www.deq.state.ne.us/NDEQProg.nsf/WaterHome.xsp>
3. Nebraska Department of Natural Resources
 - a) Conservation Reserve Enhancement Program
<http://dnr.ne.gov/CREP/CREP.html>
 - b) Integrated Water Management
<http://dnr.ne.gov/IWM/>
4. Nebraska Department of Roads
 - a) Wetland Mitigation Program
<http://www.transportation.nebraska.gov/environment/wetlands.htm#about>

Federal Government Programs

1. USDA Natural Resource Conservation Service
Wetlands Reserve Program
http://www.ne.nrcs.usda.gov/programs/wrp_wrep.html

Other Organization Wetland Programs

1. Rainwater Basin Joint Venture
<http://rwbjv.org/>

2. Saline Wetlands Conservation Partnership
 - a) Implementation Plan for the Conservation of Nebraska's Eastern Saline Wetlands
<http://www.lincoln.ne.gov/city/parks/parksfacilities/wetlands/links/ImplementationPlan.pdf>
3. Sandhills Task Force
<http://sandhillstaskforce.org/>
4. Ducks Unlimited
<http://www.ducks.org/related/nebraska-projects>
5. Nebraska Wildlife Federation
 - a) Adopt-a-Stream or Wetland Program
<http://www.nebraskawildlife.org/adopt-a-stream.html>
6. Nebraska Association of Resource Districts
<http://nrdnet.org/>
7. Nebraska Environmental Trust
<http://www.environmentaltrust.org/>