

Nemaha Natural Resources District

Long Range Plan

2023

Nemaha Natural Resources District
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Statement of Adoption

The 2023 Long Range Plan has been prepared to outline and explain the Nemaha Natural Resources District's activities, programs and projects for 2023 and beyond.

This Plan was adopted by the Nemaha Natural Resources District Board of Directors at their regular meeting held on October 12, 2023, in Tecumseh, Nebraska.



General Manager

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INTRODUCTION

The Nemaha Natural Resources District is one of 23 Natural Resources Districts (NRD's) created in 1969 with the passage of LB 1357 by the Nebraska Unicameral. Since its formation in 1972, the Nemaha NRD has been assisting people in the Nemaha River Basin in the development and protection of our soil and water resources.

Nebraska statutes require that Natural Resources Districts develop a *Long Range Implementation Plan*. The purpose of the plan is to “summarize planned district activities and include projections of financial, manpower, and land rights needs of the district for at least the next five years and the specific needs assessment upon which the current budget is based.” (Section 2-3277, R.R.S. 1943). The plan serves as a tool for carrying out the District's *Master Plan*.

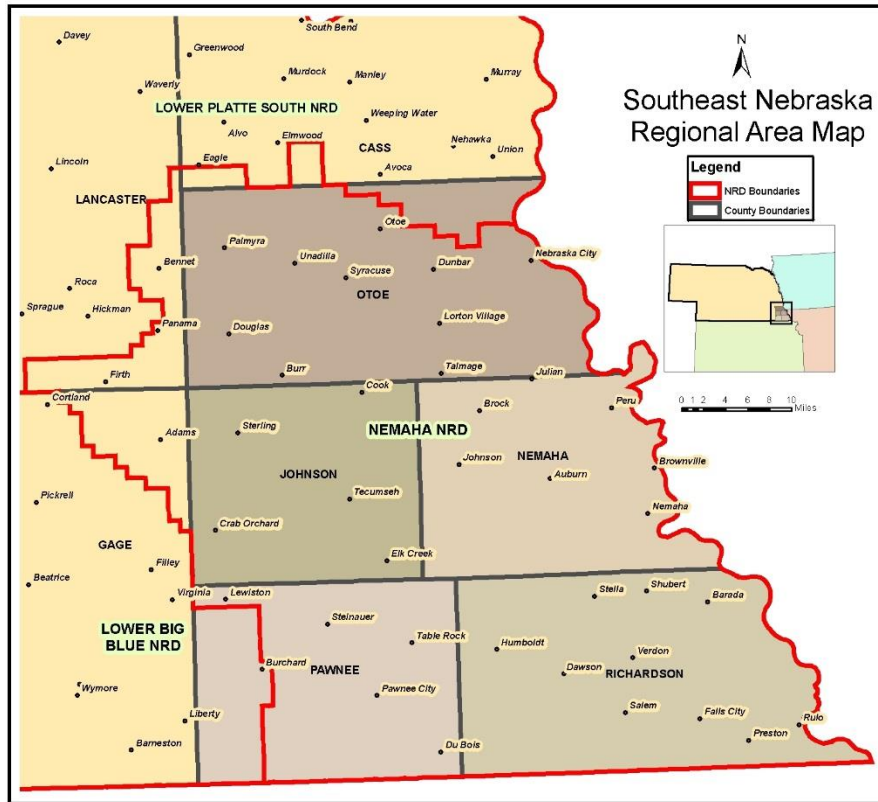
I. AUTHORITY AND RESPONSIBILITIES

The Natural Resources Districts were given statutory responsibility outlined in Sections 2-3229, R.R.S. 1943. This section states “The purposes of the Natural Resources Districts shall be to develop and execute, through the exercise of powers and authorities contained in this act, plans, facilities, works and programs relating to:

- (1) Erosion prevention and control,
- (2) Prevention of damages from flood water and sediment,
- (3) Flood prevention and control,
- (4) Soil conservation,
- (5) Water supply for any beneficial uses,
- (6) Development, management, utilization, and conservation of groundwater and surface water,
- (7) Pollution control,
- (8) Solid waste disposal and sanitary drainage,
- (9) Drainage improvement and channel rectification,
- (10) Development and management of fish and wildlife habitat,
- (11) Development and management of recreational and park facilities, and
- (12) Forestry and range management.”

Nemaha NRD programs and projects are available to meet the goal of properly developing our water and related land resources.

II. DESCRIPTION OF THE DISTRICT



Location: Southeast Nebraska (All of Johnson, Nemaha, and Richardson Counties; most of Otoe and Pawnee Counties; some of Gage, Lancaster, and Cass Counties)

Size: 2,402 square miles or 1,537,460 acres within the Big & Little Nemaha River Basins

Tributaries: Brownell Creek, Camp Creek, Long Branch Creek, Muddy Creek, Pony Creek, Rock Creek, Lores Branch, Negroes Branch, Spring Creek, Squaw Creek, Turkey Creek, Walnut Creek, Winnebago Creek, Bean Creek, Ziegler Creek, and Wilson Creek.

Population: 42,630 (2020 Census)

Taxing Authority: Up to 4.5 cents per \$100 of taxable valuation annually on all taxable property within the District and an additional tax equal to the amount by which our restricted funds budgeted to administer and implement ground water management activities and integrated management activities under the Nebraska Ground Water Management and Protection Act exceed our restricted funds budgeted to administer and implement ground water management activities and integrated management activities from FY 2003-2004, not to exceed 1 cent per \$100 of taxable valuation annually on all of the taxable property within the District

III. GOVERNING BODY & CURRENT STAFF

The Nemaha Natural Resources District is governed by a 21-member Board of Directors. Directors are elected during the general election for a term of four years with half of the members up for election every two years. Directors are elected by their subdistrict's voters. To allow balanced representation across the District, the area is divided into ten subdistricts, all with approximately equal population. Two board members represent each of the ten subdistricts. Also, one board member is elected at large every four years.

The NRD Board operates according to a set of by-laws which are kept on file at the District headquarters in Tecumseh, Nebraska.

BOARD OF DIRECTORS (As of September 15, 2023)

Name	Address	Subdistrict*
Jake Armknecht	Auburn	At-Large
Robert Lassen	Firth	1
Timothy Loseke	Hickman	1
Todd Boellstorff	Douglas	2
Russel Moss	Burr	2
Orval Gigstad	Syracuse	3
Doug Iske	Dunbar	3
Dan Hodges	Julian	4
Vacant		4
Kevin Thorne	Nebraska City	5
Randy Fox	Nebraska City	5
J. Duane Sugden	Sterling	6
Robbie Bohling	Johnson	7
Daniel Stukenholtz	Brock	7
Jon Keithley	Falls City	8
William Niedfeldt	Shubert	8
Mike Speece	Auburn	8
Alan Romine	Falls City	9
Vacant		9
Tim Schardt	Steinauer	10
Eldon Snoke	Humboldt	10

**Reflects update based on 2020 census*

The staff of the Nemaha NRD consists of 13 full-time positions (1 position currently vacant) in the headquarters and five clerks that serve in the Natural Resources Conservation Service offices throughout the District. Seasonal, temporary staff are hired as needed for help with watershed and recreation area maintenance. The NRD may also administer grant funds provided by NRCS or NACD to hire technical assistance within the NRCS offices. These positions are funded entirely through these grants.

Current Staff (*as of September 15, 2023*)

General Manager	Kyle Hauschild
Assistant Manager	Jane Kuhl
Water Resources Manager	Chuck Wingert
Administrative Bookkeeper	Brooke Gerdes
Secretary	Lisa Bartels
Resources Specialist	Aaron Stalder
Water Resources Specialist	Charlie Pierce
Field Technician	Ken Hatten
Field Representative	Mark McDonald
Field Representative	Steve Bartels
Field Representative	Tomas Chalé Aké
Information, Education, & Grants Coordinator	Ashley Rippe
Johnson County Clerk (Tecumseh)	Geralynn O'Malley
Nemaha County Clerk (Auburn)	Emaly Gerdes
Otoe County Clerk (Syracuse)	Lauren Shoemaker
Pawnee County Clerk (Pawnee City)	Kathy Harlow
Richardson County Clerk (Falls City)	Marianne Jensen

IV. PROJECTS & PROGRAMS

A. WATERSHED PROGRAMS

The Nemaha NRD has helped install and/or is responsible for operation, maintenance, and inspection of over 450 watershed projects comprised of both flood control and grade stabilization dams and structures.

ONGOING ACTIVITIES

1. General Maintenance
 - a. Complete annual dam inspections
 - b. Complete routine maintenance
 - i. Contracted maintenance
 - ii. Staff performed maintenance
 - c. Complete scheduled major repair items, NRD budgeted amount \$500,000
 - i. Rip rap projects
 - ii. Outlet Repairs
 - iii. Primary Spillway Replacements
 - iv. Slip Lining Projects
 - v. South Fork 14-4 repairs
 - d. Update Emergency Action Plans on high hazard structures
 - e. Partner with USDA NRCS through the Watershed and Flood Prevention Operations (WFPO) Program on Brownell Creek, Ziegler Creek, Wilson Creek, and Kirkman's Creek Watersheds
 - i. Designate \$100,000 each budget cycle towards future projects through WFPO projects around Syracuse.
 - ii. Designate \$30,000 toward the Kirkman's Cove Sinking Fund
2. Upper Big Nemaha 7-A
Engineering design and construction of toe drain.
3. Small Dams Cost-Share Program (None in FY24)

FUTURE PLANS

1. Address beaver issues on dams
2. Consider need for rehabilitation of aging watershed structures
3. Continue routine maintenance of watershed structures
4. Pursue other grant opportunities for watershed rehabilitation.
5. Assess the potential for quality small dam cost-share applications
6. Update Small Dams Policy for monetary or inflationary purposes

B. GROUND & SURFACE WATER/WATER RESOURCES

ONGOING ACTIVITIES

1. Groundwater Management
 - a. Review and update Rules & Regulations on an as needed basis. Last update was March 2020.
 - b. Adhere to the Rules & Regulations as set forth by the NRD
 - c. Continue membership in ENWRA (Eastern Nebraska Water Resources Assessment) including funds for ENWRA's GeoCloud
 - d. AEM Flight Data Collection & Area Report Development will be completed by January, 2024.
 - i. Funding Source: Water Sustainability Funding \$190,000
NNRD \$127,000 (FY23 & FY24)
 - e. Monitoring Well Project – Continue to download quarterly recorder data
 - f. Well Permitting
 - i. Wells permitted: FY23: 35, FY24 as of October 2023: 3
 - g. Inform public about changes/implement changes as per rules
 - h. Install 6 new continuous recording telemetry units
 - i. Replace 4 pressure transducers
2. Groundwater Quality
 - a. Phase II Area
 - i. Continue to monitor nitrate concentrations
 - ii. Continue annual sampling, potentially add a few additional wells
 - b. Continue free nitrate and bacteria testing as requested and monitor areas where nitrates are increasing
 - c. Continue spring and fall groundwater level measurement collection
3. Chemigation
 - a. Permits received/inspected – 341 received/113 inspected, of these 19 were new, 319 were renewal, and 3 were emergency.
 - b. Chemigation fees updated to \$30 for renewal, \$60 for new, and \$250 for emergency.
 - c. Anticipate the number of permits to increase as the number of irrigation wells constructed increases. Chemigation is a much more efficient way to apply fertilizer with less leaching potential.
4. Cost-Share Programs
 - a. Well abandonment
 - i. Wells closed/cost-shared in FY23: 25 and FY24 to date: 2
 - b. Flow meter & irrigation management equipment
 - i. Cost-share provided in FY23 for 10 flow meters, FY24 to date for 6 flow meters.

- c. Wellhead protection
 - i. Promote well decommissioning within wellhead protection areas
 - ii. Work with Syracuse on Wellhead Protection Plan development
- 5. Surface Water
 - a. Weekly beach sampling for cyanobacteria (toxic algae) and total coliform bacteria at NRD public lakes May – September.
 - b. Renew or process new surface water irrigation permits as needed

FUTURE PLANS

1. Projections for future well closures with NRD cost-share funds – average about 40 per year
2. Continue to advertise and promote well closures – review cost-share maximums
3. Telemetry
 - a. Install additional telemetry units to observation wells with pressure transducers installed
4. NDEQ Basin Rotation in 2027 (surface water sampling)
5. Consider renewal of existing surface water irrigation permits from NRD structures as they expire
6. Work with DNR on Voluntary Integrated Management Plan for 2027
7. Provide financial support for the development of the Nitrogen Dashboard which will include information on dam inspections, \$5,000
8. Pursue Irrigation Efficiency Cost Share pilot program. Applied for NET funding and will apply for WSF funding.

C. RECREATION

ONGOING ACTIVITIES

Ongoing activities at all recreation areas include spraying for noxious and invasive weeds, removal of dead or undesirable tree/shrubs, replacing or adding new trees/shrubs.

1. Steamboat Trace
 - a. Complete bridge re-surfacing
 - i. Boy Scout Bridge, \$2,500
 - b. Survey and re-seed trail right-of-way, \$25,000
 - c. Tree removal near depot road, \$7,500

2. Iron Horse Trail Lake
 - a. Fence repairs
 - b. Install trail markers on east side of lake
 - c. Install new roof over picnic shelter

3. Kirkman's Cove

4. Wirth Brothers Lake
 - a. Fence repairs

5. Prairie Owl
 - a. Maintain as day use area
 - b. Consider possible sale of property

6. Duck Creek
 - a. Connect trail to east side of lake
 - b. New picnic tables
 - c. Construct concrete wall for beach improvement project, \$10,000

7. Park Permits/Fees/Mowing Contract(s)
 - a. Encourage and find ways to increase website sales of permits
 - b. Continue 3-year mowing contracts split into two contracts (half of the areas in each contract)

FUTURE PLANS

1. Steamboat Trace
 - a. Hard surface problem points
 - b. Complete bridge re-surfacing

2. Iron Horse Trail Lake
 - a. Evaluate maintenance needs of sediment basin
 - b. Invasive tree control (burn/hay/spray)
 - c. Investigate options for installing warning siren

3. Kirkman's Cove
 - a. Replace restrooms in Amy Glathar area and tent camping area
 - b. Replace playground equipment in beach loop
 - c. Invasive tree removal
 - d. Investigate possibility of installing a warning siren in cooperation with Richardson County

4. Wirth Brothers Lake
 - a. Replace restroom
 - b. Replace boat dock

5. Prairie Owl
 - a. Continue to manage a day use area only.
 - b. Consider future sale of property

6. Duck Creek
 - a. Look at options for developing group facilities
 - b. Kayak launch
 - c. Develop options for treating erosion in mitigation area adjacent to hilltop camper pads

7. Sediment Basins-Kirkman's Cove
 - a. Seek/acquire grant funding for project
 - b. Construct sediment basin
 - c. Promote and help fund conservation practices within the watershed

8. Park Permits
 - a. Monitor and adjust fees as needed
 - b. Consider options for campsite reservations

D. CONSERVATION PROGRAMS

ONGOING ACTIVITIES

1. Soil & Water Conservation Program (SWCP)
 - a. Continue to supplement State funds with NRD budgeted funds
 - b. Erosion & Sediment Control Program-handle complaints with cost-share through SWCP when applicable

2. Nebraska Buffer Strip Program
 - a. Continue to administer contracts with NRCS
 - b. Continue to inspect all contracts annually
 - c. Funding provided entirely by Nebraska Department of Agriculture

3. Conservation Tree Program
 - a. Continue to offer trees/shrubs for sale
 - b. Continue to offer tree planting service for orders exceeding 200
 - c. Continue to explore options for a Windbreak Renovation Program
 - d. Wildlife Programs: Continue to offer programs through WILD Nebraska

FUTURE PLANS

1. Investigate options to encourage more tree plantings
2. Review approved practice schedule periodically (SWCP)

E. INFORMATION & EDUCATION/PUBLIC ASSISTANCE

ONGOING ACTIVITIES

1. Education/Youth Programs
 - a. Envirothon
 - b. Land & Range Judging
 - c. Water Celebration
 - d. Third Grade Plant A Tree
 - e. Watershed of Wonders Day Camp (every even-numbered year)
 - f. Scholarships for youth camps (ACE, Range Camp, etc.)
 - g. Outdoor classrooms: promote funding for small projects (<\$1,000)

2. Information Programs
 - a. Insight (quarterly newsletter)
 - b. Website
 - c. Social Media (increase use)
 - d. Newspapers
 - e. Events (State Fair, Husker Harvest Days, etc.)
 - f. Radio Ads and weekly live spot

3. Urban Special Projects
 - a. No Projects Approved for FY24
 - b. Continue to advertise program with local communities, schools
 - c. Add provisions in contracts that regular, quarterly updates will be required on all project.

FUTURE PLANS

1. Continue to offer Watershed of Wonders day camp in even numbered years
2. Incorporate videos into website, social media

F. OTHER PROGRAMS

ONGOING ACTIVITIES

1. Hazard Mitigation Plan
 - a. Applied for BRIC funding to begin updating the existing multi-jurisdictional HMP.
2. NeRAIN
 - a. Continue to fund new applicants (provide free rain gauges)
 - b. Continue to promote the use of NeRAIN across the district

FUTURE PLANS

1. Identify potential projects for hazard mitigation assistance
2. Update Hazard Mitigation Plan every 5 years as required
3. Provide recognition for long-time NeRAIN volunteers

G. DIRECTORS, STAFF, FACILITIES & EQUIPMENT

ONGOING ACTIVITIES

1. Election/Board of Directors
 - a. Advertise vacant D4 and D9 position
2. Staff
 - a. Continue to provide funding for NRD clerical support in NRCS offices
 - b. Administer TSP & other grant funds for NRCS technical support
 - c. Review and update personnel policy
3. Facilities Maintenance, Updates
 - a. Improvements, maintenance needs as identified
4. Equipment & Vehicle Needs
 - a. Monitor vehicle replacement schedule; update as needed
 - b. Replace vehicles per schedule

FUTURE PLANS

1. Consider number of Subdistricts (currently 10)
2. Consider number of Directors (currently 21)

H. BUDGET, FINANCES, FUTURE PLANNING (ONGOING)

1. Audit
 - a. Continue agreement with Schulz & Associates to perform annual audit
 - b. Evaluate need for seeking proposals to perform audit when present agreement expires
2. Insurance
 - a. Continue coverage through FNIC unless other options become available to consider that would provide coverage, particularly for high hazard structures
3. Master Planning
 - a. The District's ten-year Master Plan is scheduled to be updated in 2031.
4. Budget: Explanation of Revenues & Expenditures in FY24 Budget

REVENUE

Federal Grants & Funds: \$250,636

Kirkman's Cove Sediment Basin/Conservation Planning (EPA)
Hazard Mitigation Planning (FEMA)
Steamboat Trace Cleanup/Repair (FEMA)

State Grants & Funds: \$308,615

AEM Flights (Water Sustainability Funds)
Steamboat Trace Repair (Community Development Block Grant)
Water Well Decommissioning Funds (Nebraska Department of Natural Resources)
Nebraska Buffer Strip Program (Nebraska Department of Agriculture)
State Water Quality Funds (Nebraska Department of Natural Resources)

Local Property Taxes: \$2,633,351

Cash on Hand/Receivable from County Treasurers: \$609,905

Other: \$159,138

Landowner Share of Project Costs (hazard mitigation, water cost-share programs)
Tree sales & planting services
Park Permits & Electrical Hookup Fees
Chemigation Fees

EXPENDITURES

Watershed & Flood Control Projects: \$613,000

Upper Big Nemaha 7-A Repairs
Watershed Structure Repair/Maintenance

Recreation: \$212,300

Park & Trail Maintenance (rock, sand, tables, grills, utilities, mowing, new signage, etc.)
Duck Creek (beach improvement)

Personnel & Director Expenses: \$1,718,254

General Operation & Administration: \$237,247

Utilities, vehicle & equipment expenses, property maintenance, supplies, insurance, dues, postage, etc.; hazard mitigation plan update

Conservation Assistance: \$256,734

Tree Planting

Nebraska Buffer Strip Program

Soil & Water Conservation Program

WILD Nebraska

Water Quality/Quantity: \$156,340

Groundwater & Surface Water Monitoring

Well Abandonment

Chemigation

Flow Meter & Irrigation Management Cost-Share

Capital Expenditures: \$102,455

Two pickup replacements

Disc mower

ATV replacement

Information & Education: \$20,840

Awards, youth & education programs, newsletter & website, advertising, etc.

Sinking Funds: \$130,000

Watershed Development/Maintenance-\$100,000

Kirkman's Cove Watershed-\$30,000

Misc. Funds Payable: \$14,475

Includes accrued vacation & miscellaneous bills payable

Cash Reserve: \$500,000