Master Plan
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Partnership with the communities, families, and individuals in our region motivates the Upper Big Blue Natural Resources District to improve quality of life through effective stewardship of water and soil.

With expert knowledge, intimate understanding of the needs of the region, and commitment to fair, local governance, the Upper Big Blue Natural Resources District serves people and communities through a range of conservation activities. From improving practices for ag producers through education and research on best management practices, to improving life for all residents but assuring access to healthy drinking water and recreation areas, the Upper Big Blue Natural Resources District provides a vital service in Adams, Butler, Clay, Fillmore, Hamilton, Polk, Saline, Seward, and York counties.

The Upper Big Blue Natural Resources District is a political sub-division of the State of Nebraska. The District was created on July 1, 1972, along with 23 other NRDs across the state. The Districts cover the entire state, including all urban and rural areas. The Districts are governed by elected Boards of Directors that set individual District policies, approve programs and projects, set budgets, and approve expenditures. Each District has a general manager who reports directly to the board. The general manager of each district manages a staff that conducts the day to day activities to carry out policies, programs, and projects.
Our Mission

The Upper Big Blue Natural Resources District shall be a leader in conserving, protecting, developing, and managing the natural resources of this District for the health and welfare of the people of the District.

ROADMAP FOR THE FUTURE

As a leader in local natural resources management, the Upper Big Blue NRD knows that the focus cannot just be on today, but we must also look well into the future to ensure sustainability and conservation of our natural resources for generations to come. This is a challenging job considering the many competing uses and complex challenges, but one the Board of Directors and NRD staff are fully committed to taking on. However, we know this cannot be accomplished alone and we recognize that proper planning and partnership-building are essential. To reach our goals, meet our statutory obligations, and best serve the residents and producers of the District, we use a variety of strategies:

- Vision-casting for the next 10 years using this Master Plan to guide efforts
- Collaboration and partnerships
- A focus on water quality and quantity challenges and needs for agricultural producers, flood management in times of weather extremes, and ensuring adequate potable drinking water
- Efforts to address soil health and conservation in support of sustainable agricultural production that is vital to our economy
- Protection and management of important habitat and forestry resources, and providing recreational opportunities to help meet and balance a wide range of needs, interests, and uses
- Outreach and engagement with communities and producers to encourage participation, foster greater understanding, and provide necessary information and data to make informed decisions
Our Responsibilities

The Upper Big Blue Natural Resources District is a multi-purpose, local unit of Nebraska Government for management, development and protection of the soil and water resources. The basic responsibilities of the District, which are authorized by statute, are listed below:

1. Development, management, use, and conservation of ground water and surface water
2. Soil conservation
3. Erosion prevention and control
4. Flood prevention and control
5. Pollution control
6. Water supply for any beneficial uses
7. Prevention of damages from flood water and sediment
8. Development and management of recreational and park facilities
9. Forestry and range management
10. Development and management of fish and wildlife habitat
11. Drainage Improvement
12. Solid waste disposal

METHODS

The methods we will employ to meet these responsibilities are...

1. Leadership
2. Information and education
3. Technical advice and assistance
4. Cost-sharing
5. Construction and operation by the District
6. Monitoring, data collection, and research
7. Guidelines, recommendations, and regulations
8. Formulating and maintaining public and private partnerships
Purpose of this Document

The master plan for the Upper Big Blue Natural Resources District presents the goals and objectives relating to the 12 purposes of districts as stated in the revised statutes of Nebraska, Section 2-3229, (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 ground water 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. In accordance with Section 2-3276, the master plan is to be updated at least every 10 years, or more frequently if major changes in planning and development of objectives occur before the end of the period.

The master plan helps the district to expand our mission, vision, and statutory requirements into goals, objectives, and actionable items in conjunction with the Long Range Implementation Plan. This master plan was adopted by the Board of Directors on ((DATE)).

The priorities and goals are the framework for all Upper Big Blue Natural Resources District activities, programs, practices, and regulations. The board is guided by these priorities and goals in establishing policies and budgets. The staff does that same in carrying out day-to-day activities.

No attempt is made in the master plan to present current plans or budgets, or to present background information on resources and needs. Such information about the natural resources of the District is available from many other NRD publications. Comprehensive data and information is also on file at the District office. Individual project plans and studies are on file for planned as well as completed projects. Historical data concerning past programs, projects, staffing, and funding are also in the District files. The details of District programs, activities, and administrative policies are published in the following publications and documents, which are periodically updated:

- Long Range Implementation Plan
- Annual budget
- Programs and cost-share practices
- Rules and regulations
- Master Plan
- Annual report
- Audits
- Operating policies
- Personnel policies
The primary goal of the Upper Big Blue Natural Resources District is successful, long-term water management, for both quantity and quality.

The District strives to provide adequate supply of acceptable quality groundwater to fulfill the reasonable groundwater demands within the District for domestic, agricultural, manufacturing or industrial, and other uses deemed beneficial by the District Board of Directors.

**Groundwater Quantity**
The control area (now known as the Groundwater Management Area #1) was declared on December 9, 1977, with these goals:
- Encourage, promote, and regulate the efficient management and conservation of groundwater and to significantly reduce the rate of decline in the groundwater table.
- Hold the District groundwater level above the 1978 level through various programs and regulations.
- Provide an adequate water supply for existing users, as well as domestic users in the small region outside of the Groundwater Management Area #1.

**Groundwater Quality**
The special protection area (now known as the Groundwater Management Area #2) was declared on September 23, 1993, with these long-range goals:
- Reduce the potential for nonpoint source contamination of groundwater through education, research, management practices and incentives that would not adversely affect the economy of the area.
- Develop and implement an appropriate system of monitoring and evaluation of nonpoint source groundwater contamination including indicators such as nitrates in groundwater and the unsaturated zone, use of best management practices and other factors that are indicators of the rate of nonpoint source groundwater contamination.
- Encourage the use of best management practices to reduce deep percolation and to support research and adoption of equipment and techniques that have potential for reducing groundwater nitrates.
Groundwater Objectives

The Upper Big Blue Natural Resources District will seek to...

- Provide information and education and consider cost-sharing to encourage groundwater users to:
  - Attain the most economical use of groundwater
  - Use crop rotation
  - Control runoff
  - Construct water storage and land treatment where needed
  - Use irrigation scheduling
  - Use surface water where available
  - Check and maintain pumping plant efficiency
  - Keep records
  - Install flow meters (irrigation and urban)
  - Alternative irrigation systems (pivot conversions or sub-surface drip systems)
  - Sample soil for nitrogen carryover
  - Set realistic yield goals
  - Complete full nutrient analysis
  - Use nitrogen flow regulators
  - Split nitrogen applications
  - Use fertigation/chemigation
  - Proper lawn and garden watering and fertilization
  - Decommissioning of abandoned wells

- Monitor the groundwater conditions by:
  - Measuring spring groundwater levels District-wide in the established network of existing wells.
  - Measuring seasonal changes in groundwater levels using dedicated, continuous recorder wells.
  - Monitoring groundwater quality annually, district-wide in the established network of existing wells.
  - Monitoring seasonal changes in groundwater quality using dedicated water quality monitoring wells.
  - Work cooperatively with other agencies to collect and evaluate groundwater data.
• Regulate the use and protection of groundwater through the implementation of:
  » Groundwater Management Area quantity regulations to reduce conflicts between users and to manage the decline of groundwater.
  » Groundwater Management Area quality regulations to stabilize and reduce nitrate contamination of groundwater.
  » Chemigation regulations to reduce the risk of contamination of groundwater through irrigation systems
  » Irrigation runoff regulations to conserve groundwater and to reduce conflicts between neighbors

• Provide necessary budget, staff and other assistance to carry out an effective management and regulatory program
• Conduct studies and research to better understand and manage groundwater in the District
• Advocate groundwater management by natural resource districts at the local level
• Assist in the planning and development of domestic water supplies where requested by local units of government or citizen groups
• Encourage other agencies to conserve groundwater when implementing their programs, such as groundwater remediation plans
• Cooperate with municipalities on wellhead protection areas.
• Promote and publicize the conservation and wise use of groundwater, through an extensive and comprehensive public relations effort.
The Upper Big Blue Natural Resources District’s goal is to store, conserve, and protect surface water for beneficial uses as determined by the Board of Directors, such as domestic, agricultural, and manufacturing.

Surface Water Objectives

Objectives in this area include:

- Development of multipurpose surface water projects consistent with local desires for water conservation, water use, flood control, groundwater recharge, recreation, and fisheries and wildlife habitat
- Construct and/or cost-share on dams designed to maximize conservation water storage
- Encourage soil conservation practices as a method of improving water quality in streams and lakes
- Determine surface water project priorities consistent with the greatest long-term benefits.
- Obtain funding for surface water projects from private, other local, state, and federal sources to supplement the District tax requirement for such projects.
- Develop management agreements for surface water projects with affected units of local government and encourage such governments to assume the management, operation, and maintenance responsibilities connected with these projects
- Promote, publicize, and offer technical advice and assistance for surface water conservation.
The District goal is to maximize soil and water conservation efforts in order to preserve the resources for future use while maintaining production today.

Objectives

This is accomplished in a variety of ways:

- Prevent erosion through a voluntary land treatment program and by encouraging minimum or reduced tillage.
- Implementing erosion or sediment control regulations where necessary to reduce conflicts between neighbors.
- Discourage channel straightening and dredging, unless steps are taken to prevent detrimental effects.
- Minimize and control erosion of soil through improved control of erosion of soil through improved conservation practices, conversion of steep slopes with erosive soils to non-cultivated uses, protection of stream banks, and improved land management.
- Maintain soil nutrient levels for productive land use and reduction of water pollution through improved soil management practices.
- Cooperate with local units of government in implementing necessary erosion control practices, as needed, on all residential or commercial development, industrial development, road construction, and other non-agricultural sites.
- Promote, publicize, and offer technical advice and assistance to promote soil conservation.
- Obtain funding for soil conservation from private, other local, state, and federal sources to supplement District funds.
Goal: Flooding Prevention/Control

The goal of the District is to reduce flooding and flood damages to acceptable levels, while making the best use of flood plain land. Flood plain management is of prime importance, as in many cases, it is the most practical way to reduce flood damages.

**Objectives**

Objectives in this area include to:

- Encourage flood plain management as a necessary step in creating the proper balance between structural and non-structural methods of flood protection.
- Create a greater awareness of flood plain problems and potential solutions through local planning, education and information programs.
- Sponsor, construct, operate, and maintain flood control projects, where feasible, to protect property from flood damages. Design and plan for multi-purpose uses of flood control projects where ever possible. Acquire grants and other funding to supplement District funding.
- Promote public linear parks, greenbelts, and open space in flood plains as an alternative to allowing real estate development and building construction if lands have the potential of changing from agricultural to developed areas.
- Consider, on a case by case basis:
  - sharing the consulting services and costs with other local governments in connection with the planning of linear parks, greenbelts, and open space in flood plains.
  - acquiring grants for and sharing the land rights costs of flood plain buyouts with other local governments.
  - assisting communities with flood control projects by offering technical and administrative assistance, offering cost-share, and acquiring grants or other funds. Encourage multi-purpose uses of flood control projects.
- Encourage local cities and villages to assume sponsorship of all municipal storm water management projects.
- Discourage any creek or river straightening or shortening project within the District’s boundaries. Limit channel projects to those necessary for flood control. Discourage drainage improvements designed to develop additional real estate, or cropland, because of potential conflicts between property owners.
Goal: Pollution Control

The goal of the District is to minimize the misuse and pollution of our natural resources, to protect and enhance the quality of the land, surface water, and groundwater within the District’s boundaries.

Objectives

Objectives in this area include that the Upper Big Blue Natural Resources District will seek to...

- Protect ground and surface water from point and non-point sources of pollutants (see also “Groundwater Conservation and Management,” page 6).
- Inform and educate the public to make the citizens aware of potential and existing pollution and the need for prevention.
- Encourage other agencies to take water conservation and beneficial uses into account in cleanup efforts.
- Promote regional efforts toward managing solid waste, both urban and rural. Encourage the sound planning and development of solid waste disposal sites in order to adequately protect land and water quality. Encourage recycling of solid waste.
The District goal is to improve and increase the outdoor recreation opportunities in the region, especially in conjunction with multi-purpose water projects.

**Objectives**

The Upper Big Blue Natural Resources District will seek to:

- Plan recreation use on district owned projects. The level of recreation provided depends on the scope, size and cost of the project.
- Manage, improve, and/or expand the five existing district park and recreation facilities. Develop new park sites on major multi-purpose projects where the land is held in title by the district. Developed public use sites may include roads and trails, improved parking areas, picnic areas and shelters, drinking water, boat ramps, playgrounds, camping sites, trash service, and restroom facilities.
- Establish and manage primitive public use areas on undeveloped District projects and properties throughout the District. Primitive public use areas are to provide access for walking, and may include fishing or hunting where practical. Off-road unimproved parking is to be furnished for traffic safety. Roads, improved trails, picnic areas and shelters, drinking water, boat ramps, playgrounds, improved camping sites, trash service, and restroom facilities are not provided, maintained, or encouraged.
- Consider providing cities and villages, on a case by case basis, with planning and financial assistance for multi-use parks and recreation improvement and development that stresses natural resources such as tree plantings, wildlife habitat, and open spaces. Public use areas that have aspects of soil and water conservation are to have a priority. Ball fields, tennis courts, swimming pools and similar facilities need to be planned and funded by others.
- In flood plains, promote public linear parks, greenbelts, and open space for public access, by offering planning and financial assistance to counties, cities, and villages.
- Cooperate with counties and state and federal agencies, in public use area development and management where their activities are consistent with those of the District.
- Provide information and education to promote parks and recreation uses of public lands.
The District goal is to maintain and improve the quality of woodlands and grasslands in this region for soil and water conservation, as well as livestock production, timber, and wildlife.

**Objectives**

The Upper Big Blue Natural Resources District will seek to:

- Provide technical advice on forestry and grassland management. Encourage tree planting for windbreaks and other conservation purposes, and native grass plantings for soil erosion prevention. Encourage proper range and pasture management to provide for better mixes and stands of grass, while increasing productivity.
- Provide a tree planting program to assist landowners in planning for tree plantings, offer seedling trees for sale, and to provide a planting service for windbreak, Christmas tree or wildlife plantings.
- Consider providing cities and villages on a case by case basis, with planning and financial assistance for community tree, shrub, and native grass plantings.
- Discourage the conversion of existing tree plantings, woodlands, and grasslands to cropland or other uses.
- Promote proper tree trimming and pruning, and vegetation control undertaken by communities and power districts.
- Encourage outdoor classrooms and environmental education in order to show the importance of trees and grasses in conservation.
Goal: Fish & Wildlife

The District goal is to conserve and improve the fish and wildlife habitat found in the District.

Objectives

The Upper Big Blue Natural Resources District will seek to:

• Provide technical assistance for private landowners to develop and maintain new fish and wildlife habitat.
• Develop fisheries and wildlife habitat, where practical, on District projects.
• Obtain funding for habitat programs from private, other local, state, and federal sources.
• Discourage practices by public entities and individuals that result in the unnecessary destruction of permanent vegetation and trees.
• Encourage private landowners to preserve existing wetlands and/or restore original wetlands through Agriculture Land Easements (ALE), Wetland Reserve Easement (WRE) or other programs.
• Discourage dredge and fill activities, and conversion to croplands, unless there are reasonable wetland mitigation sites available.
• Encourage state and federal agencies and private landowners to work together to solve wetland habitat needs and irrigation runoff control, as well as working together to solve lowland flooding problems.
• Promote fish and wildlife habitat on private and public lands.
This Master Plan Document was Adopted by the Board of Directors, Upper Big Blue Natural Resources District, on October 15, 2020 in accordance with Nebraska Law (Section 2-3276)

Our Mission

The Upper Big Blue Natural Resources District shall be a leader in conserving, protecting, developing, and managing the natural resources of this District for the health and welfare of the people of the District. The core of the Upper Big Blue Natural Resources District focuses on these things:

- Water
- Soil
- Urban Conservation
- Flood Control
- Trees and Wildlife Habitat
- Recreation
- Grazing Lands
- Education