I INTRODUCTION

A. REASON FOR PLANNING

As required by Section 2-3277, each natural resource district shall prepare and adopt a long-range implementation plan to summarize activities and project needs of the district. The long-range implementation plan will be reviewed and updated annually, with copies sent to the Department of Natural Resources by October 1 of each year.

The Upper Loup NRD (ULNRD) is dedicated to the conservation, protection, development and management of our natural resources. The locally-elected Board is charged with the task of establishing policy that fits the interests of the State of Nebraska, the District, and its citizens. The General Manager is responsible for implementing the policies and direction that the Board has established.

This Long-Range Implementation Plan will give a general timeline for completion and will indicate the funding necessary to carry out the goals and objectives of this District. It also serves as an implementation tool of the District’s Master Plan.

The ULNRD works closely with local, state, and federal agencies to coordinate the management of our conservation efforts. The District values these relationships and recognizes that they are required to perform the tasks and responsibilities that the ULNRD has been charged with.

B. AUTHORITY AND RESPONSIBILITY OF THE DISTRICT

As stated by Section 2-3229 of the Nebraska Statutes, the purpose of NRDs shall be to develop and execute, through the exercise of power and authorities contained in this act, plans, facilities, works, and programs related to: (1) erosion prevention and control (2) prevention of damages from floodwater 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.

C. DESCRIPTION OF THE DISTRICT

The Upper Loup Natural Resources District, part of the Loup River Basin, is located in the north central part of the state and all except the southeast corner lies in the Nebraska Sandhills. It is comprised of 6,690 square miles, which includes all of Blaine, Grant, Hooker, Logan and Thomas Counties, and parts of Brown, Cherry and McPherson Counties. The distance from east to west is 120 miles, and from north to south is 78 miles and contains 4,275,000 acres.

The five main streams flowing through the District are the North Loup, Middle Loup, South Loup, Calamus and Dismal Rivers, along with these important tributaries: Goose Creek, Calf Creek, Big Creek, Wild Horse Creek and Rifle Creek.
The population of the entire Upper Loup is approximately 4,301 of which 66% is rural and 34% is urban. The District has 8 Villages each with populations under 500: Gandy, Stapleton, Thedford, Brewster Halsey, Hyannis, Mullen, and Dunning. There are 6 unincorporated towns in the District which include Ashby, Brownlee, Elsmere, Purdum, Seneca, and Whitman.

The area's economy depends largely on ranching, very little farming and industry uses do not currently exist. Approximately 91% of the land area is native range or pasture, 5% open water and wetlands, 1% irrigated cropland, less than 1% dryland, 2% other agland and barren, 1% forested, and less than 1% urban and roads.

The average per capita income of persons in some of the counties in the NRD is among the lowest in the state. This, along with the Upper Loup NRD’s assessed valuation being one of the lowest of the 23 NRDs; causes the District to plan carefully the amount of finances needed each year.

The entire District is within the Third Congressional District and the 43 Legislative District.

D. GOVERNING BODY and STAFF

The ULNRD is governed by a board of 11 directors, elected by voters at general elections, each serving a four-year term, with half of the members up for election every two years. The District is currently divided into five sub-districts, of equal population, with two members representing each sub district, plus one board member is elected at large every four years.

At Large  Patrick Wright
Sub-district 1  Eric Storer and Chris Vinton
Sub-district 2  Judy Ridenour and John Kraye
Sub-district 3  Miles Maseberg and Chris Higgins
Sub-district 4  Eric Schipporeit and Connie Cox
Sub-district 5  Tom Johnson and Richard Burnside

The Upper Loup currently employs 6 full time and 1 part-time employee. Temporary employees are hired for tree planting and other activities as needed.

General Manager: Anna Baum
Administrative Secretary: Jamie Green
Resources Technician: Shane Young
Resources Technician: Jake Jenkins
Information & Education Coordinator & Resources Technician: Lexi Hingtgen
Secretary / NRCS – Thedford: Pam Peterson
Recycling Coordinator (Part Time): Earl Rowley
E. CONSERVATION AND ENVIRONMENT PARTNERS

The District collaborates with many agencies, below is a list of the primary ones.

- Nebraska Association of Resources Districts
- Nebraska Department of Natural Resources
- Nebraska Department of Environment and Energy & US Environmental Protection Agency
- Nebraska Department of Health and Human Services
- Nebraska Game and Parks Commission
- Nebraska Emergency Management Agency & Federal Emergency Management Agency
- Nebraska Forest Services & US Forest Service
- USDA Natural Resources Conservation Service
- US Corps of Engineers
- US Fish & Wildlife Services
- US Geological Survey
- University of Nebraska, Lincoln

II. SUMMARY OF PLANNED ACTIVITIES

A. CONSERVATION COST SHARING PROGRAMS

The Upper Loup NRD has signed an agreement with the Nebraska Department of Natural Resources to administer the Nebraska Soil and Water Conservation Program within the area. Annual appropriation is available through that program for a variety of conservation practices within the District. The Nebraska Soil and Water Conservation Program will provide a share of the funding for installation of practices such as tree plantings, planned grazing systems, grass seeding, irrigation water management, grassed waterways, and other practices. As this program has developed, these practices have been given priority by the board of directors due to considerable demand for funds. Over the past 5 plus years the number of applications that cannot be approved, due to lack of funds, continues to be a growing concern of the District.

In conjunction with our memorandum of understanding with the Natural Resources Conservation Service (NRCS), the majority of our efforts to assist them are directed toward providing clerical help in the office. The Upper Loup NRD hires and pays for 100% of the clerk’s time in Thedford.

B. FORESTRY – RURAL AND URBAN

Tree planting remains an important program for the Upper Loup NRD. On average, the District sells and or plants between 25,000 and 40,000 trees and shrubs for residents both inside and outside of the District and installs 136,000 feet of weed barrier annually.

The District will continue to meet and cooperate with other agencies, attend educational and development meetings.
The ULNRD will continue to provide:
- Technical assistance (planning, purchasing, planting, installation, etc) to both rural and urban cooperators for tree/shrub plantings, weed barrier and drip line
- Monitoring of planting performance (through yearly customer call backs in spring) and tree survivability in the fall.
- District funds for tree/shrub planting cost-share for both rural and urban constituents as well as for ULNRD programs such as yard enhancement, memorial trees and trees in honor of new born children
- Cold storage for bare root trees
- Distribution of seedlings for cooperator planting
- Weed barrier fabric, fabric squares for resale
- Drip line and accessories for resale
- Tree planter for cooperators to rent, if they desire to complete their own tree plantings
- Tree and shrub donations to civic clubs, schools, and various youth organizations for planting
- Maintenance and evaluation of the newly planted Thedford Fire Hall Arboretum
- Education and information about our forestry services as well as the importance of this natural resource

C. RANGE AND GRASSLAND MANAGEMENT

Range and grassland make up the major portion of the ULNRD. As a result, establishment and proper management of grassland is a high priority. The District will continue to maximize effectiveness of cost-share programs, meet and cooperate with other agencies, attend educational and development meetings.

The ULNRD will continue to provide:
- District cost-share funds for a variety of planned grazing practices and control of invasive and noxious weeds
- The search for new cost-share practices which provide benefits
- No-till drills for rent by local producers for grass seeding programs. Currently the District owns one ten foot and one twenty-foot no-till drills.
- Support for education efforts for proper range management through such efforts as providing scholarships for those attending the Ranch Practicum program, Range Camp or Envirothon and sponsoring area range judging contests
- Education and information about our range and grassland services as well as the importance of these natural resources

D. GROUND WATER QUANTITY AND QUALITY MANAGEMENT

The Upper Loup NRD recognizes that ground water is one of the state’s most valuable resources and local control of its management is in the best interest of the public. The District implemented a Ground Water Management Plan in 1994 and the Ground Water Management Rules and Regulations in 2008. In 2013 ULNRD entered into the Lower Platte River Basin Water Management Plan Coalition along with the seven other Basin NRD’s. In 2016, the District completed and approved a Voluntary Integrated Management Plan (VIMP) along with the Department of Natural Resources (DNR). The District will work with DNR to implement and update the IMP annually. It will also continue to implement and refine Ground Water Management
Area Rules and Regulations as well as search for new practices which provide water quality and or quantity benefits.

The District will manage ground water so existing levels of domestic, agricultural, environmental, urban, rural and industrial activities are sustained for both the short and long term.

The District will maintain its efforts working with cooperating agencies on Integrated Management Studies, modeling, and data collection to obtain the best information for water management decisions.

The ULNRD will continue to provide the following in regards to quantity:
- District cost-share funds for a variety of water management activities such as conversion nozzles, soil moisture sensors, rainfall auto-shutoff valves, etc.
- Measuring and monitoring of 135+ static water levels (both manually recorded and data loggers in dedicated monitoring wells) and collection of information from District observation and monitoring wells (have well representation from all sub-aquifers)
- Certification of irrigated acres
- Reading of flowmeters and tracking ground water use across the entire District
- Development of plans and programs that will strive for a balance between water use and water availability
- Funding for stream gages one on South Loup river at Arnold and one on the North Loup River at Brewster
- Budgeting monies to study and look into potential location and need for dams, water augmentation, flood protection, and or groundwater recharge projects
- Education and information about all our water quantity services as well as the importance of this natural resource

To date the entirety of the District is and has always been in Phase 1 which means nitrate levels are between 0-5.9 milligrams per liter. The ULNRD will continue to provide the following in regards to quality:
- Sampling of all active domestic wells (~ 340 wells), requested unregistered Domestic wells (~300 wells), active irrigation wells (~775 wells) once every five years for nitrates and upon request coliform bacteria
- Sampling of any requested livestock wells, for nitrates and coliform bacteria
- Participation in the State-wide groundwater quality network
- Testing 25% of active domestic wells for manganese and iron
- Administration of the Chemigation Act
- Provide cost share for deep soil testing for residual nutrients and well decommissioning
- Encouraging operators to not apply nitrogen fertilizer on sand sails in the fall or winter
- Recycling services
- Participation in water quality studies and investigations
- Education and information about all our water quality services as well as the importance of this natural resource
E. INFORMATION AND EDUCATION

The Upper Loup NRD understands the importance of education of ALL its constituents and makes a full effort to inform and communicate to the general public about natural resources. Our part-time Information and Education Coordinator takes care of the majority of the duties; however, all District staff take part in educational efforts.

The ULNRD will continue to provide:

- News articles and public service announcements
- Quarterly newsletters
- Current and easy to maneuver website available 24-7, Facebook page
- Publications, brochures and pamphlets on a wide assortment of topics including NRD’s duties and responsibilities, District programs, services and projects, etc.
- Assistance with the Groundwater Festival
- Annual Arbor Day and Earth Day activities with grade school students
- Elementary, junior high and high school presentations as requested
- Presentations to civic groups, presentations and trainings for area producers
- Annual Junior High Field Day here at the office in Thedford
- Participate in the annual ACE (Adventure Camp about the Environment) in Halsey
- Promote and assist with local County Fairs, State Envirothon, Nebraska State Fair, Husker Harvest Days, Regional Land Judging and Area Range Judging contests
- Scholarships for Range Camp, ACE Camp, Ranch Practicum Program, and Envirothon
- Nature in The Neighborhood Grant to all nonprofit organizations residing in the District
- NARD Award entries
- Support for various Informational and Educational projects with other agencies and organizations
- A central meeting and training room for schools, civic organizations, and other agencies to use upon request
- Attendance at various local, state and national meetings to educate themselves and to work for necessary legislative changes

F. POLLUTION AND SOLID WASTE

Groundwater pollution in the District is addressed under the Groundwater Protection Act, which provides districts with authorities to stabilize water quality following designation of a special protection area, by the Nebraska Department of Environment and Energy.

The Integrated Solid Waste Management Act, requires municipalities and counties to provide for solid waste management services. In 2009 the District wanted to play more of a major role in the area of solid waste management and began its recycling program. These services proved to be in great demand and in 2012 the District built its own recycling building where we bale cardboard, paper and compaction of tin and aluminum. Recycle trailers are located in the Villages of Hyannis, Mullen, Seneca, Thedford, Stapleton, Halsey, Dunning, Brownlee and Purdum. Six additional trailers service the State 4-H camp, Bessey Nation Forest, Thedford school as well as several small businesses located in Thomas and Blaine counties.
The ULNRD will continue to provide:
- Trailers and transportation services of recyclables from villages, schools, businesses and other entities that request help
- Baling and compacting services for cardboard, paper, plastics, tin and aluminum
- Collection of glass and e-waste items
- Assistance to the RC&D’s, counties and communities with miscellaneous recycling events such as hazardous wastes, tires, etc.
- Education and information about our recycling services and additionally the importance and benefits of recycling, reusing and reduction

G. SOIL CONSERVATION AND EROSION PREVENTION

The ULNRD is authorized under LB 474 to implement a District Erosion and Sediment Control Program to limit soil loss and require conservation through a complaint system. In 2016 the District updated and amended the rules and regulations to implement that plan and the NRD is prepared to handle complaints and to work to achieve the goals of erosion reduction.

The ULNRD will continue to provide:
- Financial assistance to landowners to encourage conservation measures on privately owned land that produces long-term benefits for the general public. District cost-share funds can be used for a variety of erosion prevention activities such as construction of water impoundment dams, grade stabilization structures, grassed waterways, water and sediment control basins, critical area plantings (seeding), tree and shrub plantings, planned grazing systems, brush management, etc.
- Continuing improvement of the sediment and erosion control program
- Cooperation with other agencies
- No-trill drill rental
- Pertinent information and education efforts
- Education and information about our soil conservation and erosion prevention services and the importance of soil management
- Establishment of approved cultural management practices, vegetative practices or structural measures, as need on all lands to prevent wind and water erosion
- Development of proper range and pasture use and management plans or programs in order to properly conserve and efficiently utilize those range and pasture areas
- Application of irrigation water management techniques to all of the irrigated land in order to properly conserve and efficiently utilize soil, water, fertility and energy

H. WILDLIFE AND HABITAT MANAGEMENT

The Upper Loup NRD continues to promote and encourage the development, enhancement, and protection of wildlife habitat.

The ULNRD will continue to provide:
- District cost-share funds for assorted habitat activities such as tree and shrub planting program, grass seed program, etc.
- Cooperation with funding and administration of several private lands wildlife habitat programs such as WILD Nebraska and Corners for Wildlife
- Education and information about our wildlife habit programs and the need for taking care of wildlife and wildlife habitat
III. CURRENT AND PROJECTED NEEDS

A. PERSONNEL

The Upper Loup NRD has a current staff of six full-time and one part-time employee at the District Headquarters office in Thedford and one full-time District Secretary at the Natural Resources Conservation Service office in Thedford. Seasonal staff and some contract workers are employed for tree planting and mulch installation in the spring.

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B. FINANCIAL

The Upper Loup NRD has multiple funding sources available with the creation of NRDs taxing authority of 4.5 cents granted to the District in 1969, the 1 cent levy granted for water programs in 2004, the occupation tax granted in 2007, the ability to charge fees for certain activities, and furnish match money to apply for grant funding. This allows the District the ability to obtain financing by sources other than just tax dollars. The District's annual budget, property tax request, and resulting levies are set and approved by the Board of Directors. The FY 2020-2021 property tax request is $439,350.00 and the tax levy is .017 per $100 valuation.

Below is the table of budgeted amounts for current and planned activities.

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C. LAND RIGHTS

The Upper Loup is not currently, nor has any plans within the next 5 plus years to acquire any land easements.

IV. SUMMARY

It is the sincere intention of the Upper Loup Natural Resources District to do a thorough and equitable job of conserving, protecting, developing and managing the natural resources in the upper portion of the Loup River Basin. The Board of Directors and staff will review, adapt, and amend this long-range plan to reflect the needs of the basin and its residents. Reviews will be done on an annual basis and any modifications deemed necessary will be made by staff at the direction of the Board.