## LONG RANGE IMPLEMENTATION PLAN

## For Fiscal Years 2018-2022

#### **Purpose of Plan**

This Long Range Implementation Plan is developed by the Little Blue Natural Resources District to summarize the districts projects, programs, and activities planned for the next five years. Required by the Nebraska Natural Resource District Act. The districts are required to prepare and adopt individual project plans as it deems necessary to carry out projects approved by the District.

As use of our natural resources increase we need to ensure that the use is wise, efficient, and non-destructive. Regardless of what we may think or desire there are limits to our resources. This plan is designed as a flexible guide to outline the orderly development, management, preservation, utilization, and conservation in order to best serve the people of the district and the state. The district's planning relies to some degree on the input of other agencies, organizations and individuals. In addition to complying with the statutory requirements, this document is designed to allow the public to understand the needs and goals of the NDR in order to make intelligent decisions as to the advisability of the projects and programs planned by the district.

#### **District Location**

The Little Blue is one of the 23 Natural Resource District's in Nebraska. It lies in the SSE portion of Nebraska straddling the Little Blue River. All or parts of seven counties make up the Little Blue District: Thayer 24.02%, Jefferson 13.34%, Fillmore 6%, Clay 13.49, Nuckolls 16.6%, Webster 6%, and Adams 20.44% Counties. The Total area of the Little Blue District is approximately 1,537,280 acres.

The purpose of the Little Blue Natural Resource District is to develop and execute, through the exercise of powers and authorities granted by law, plans, facilities, works, and programs relating to:

- Erosion Prevention & control
- Prevention of damages from

flood water & sediment

- Flood retention and control
- Soil Conservation
- Water supply for any beneficial uses.
- Development, management, utilization,

& conservation of ground water and surface water.

- Pollution Control
- Solid waste disposal & sanitary drainage
- Drainage improvement & channel rectification
- Development & management of fish and wildlife habitat.
- Development of management of recreational & park facilities.
- Forestry & range management.

## SUMMARY OF CONSERVATION AND ENVIRONMENT PARTNERS

#### • Nebraska Association of Resources Districts (NARD)

- Coordination of Natural Resources Districts Activities
- Manages NRD Insurance and Retirement Programs
- Legislative Representation and Lobbying for NRD Interests
- Training for NRD Employees and Boards
- Coordination of Resources Issues with Other State Agencies

#### • Nebraska Department of Environmental Quality (NDEQ)

- Surface Water Quality & Sampling
- Groundwater Quality & Sampling
- Chemigation
- Beach Monitoring
- Public Water Supply Regulations, (includes rural water districts)

#### • Nebraska Department of Natural Resources (NDNR)

- Well Registrations
- Surface Water Permits and Administration
- Groundwater Management Oversight
- Dam Construction Permits and Dam Safety
- Flood Plain Management & Flood Insurance
- Administration of Funds: Soil and Water Conservation Funds, Water Quality Funds, Well Decommissioning Funds
- Project Development Funding through Water Sustainability Fund
- Nebraska Department of Health and Human Services (NHHS)
  - Water Well Standards and Licensing
- Nebraska Game and Parks Commission (NG&PC)
  - Wildlife Habitat
  - Parks & Recreation

- Fisheries
- Nebraska Department of Agriculture (NDOA)
  - Buffer strip programs
- USDA Natural Resources Conservation Service (NRCS)
  - Technical Services for Conservation Practice Design & Implementation
  - NRDs Local Contact in County Offices
- US Corps of Engineers
  - Waters of the US Project Permits (River and Stream Impacts)
  - Drainage Projects
- US National Weather Service
  - Rainfall reporting
- US Fish & Wildlife Services (USFWS)
  - Federal Wetland Basin Management
  - Wetland Improvement Programs
- US Environmental Protection Agency (USEPA)
  - Environmental Quality Activities
- Nebraska Emergency Management Agency (NEMA)
- Federal Emergency Management Agency (FEMA)
  - Pre-Disaster Hazard Mitigation
  - Disaster Relief and Reconstruction
- Nebraska Forest Services (NFS)
- US Forest Service (USFS)
  - Nursery Stock at Halsey Forest
  - Technical Assistance on Forest Management
  - Rainwater Basin Joint Venture (RWBJV)

(The RWBJV is a Quasi Governmental entity with an advisory board made up of Federal, State, Local government agencies, plus private landowners, businessmen and wildlife interests. Funding for the wetland restoration and acquisition projects comes through numerous wildlife grants. Work done on both private and public lands.)

- US Geological Survey (USGS) Stream Gage Monitoring, Geologic Studies
- University of Nebraska Lincoln Research, Studies, Data, Public Education, Technical Assistance.

#### **Board of Directors**

The board of directors is elected to protect and preserve a wide scope of natural resources within the district. The Little Blue Natural Resource District is governed by a 17 member board of directors, locally elected from 8 sub-districts and one At-Large position.

| <b>SUBDISTRIC</b> | T BOARD MEMBERS      | DELIGATE  |
|-------------------|----------------------|-----------|
| <b>POSITIONS</b>  |                      |           |
| 1                 | Mason Hoffman        |           |
| 1                 | Randy Urmacher       | Chairman  |
| 2                 | Warren Brakhahn      | Treasurer |
| 2                 | Charles Rainforth    |           |
| 3                 | Edward A Fleharty    | Secretary |
| 3                 | Everett Kellogg      |           |
| 4                 | Kevin Kissinger      |           |
| 4                 | Jesse Vonspreckleson |           |
| 5                 | Lyle Schroer         |           |
| 5                 | Matthew Spencer      |           |
| 6                 | Lyle Heinrichs       |           |
| 6                 | Steve Shaw           |           |
| 7                 | Alan Wiedel          |           |
| 7                 | Joseph Hergott       |           |
| 8                 | Gene Thomas          |           |
| 8                 | Jay Meyer            |           |

## **Staffing Needs of the District**

Since its beginning in 1972, the Little Blue NRD has steadily grown in responsibilities and the services offered. A professional staff has been retained to manage the programs and projects of the district. The figure below provides an overview of the organizational structure including the current staff and their job titles.

Besides permanent full time employees shown in the Staffing Chart, the District employs seasonal workers to assist in activities like tree planting, watershed and recreation area operation and maintenance and field water department activities. This practice will continue as these workers provide valuable assistance when time is of the essence in accomplishing seasonal priority activities. Projections for fulltime district staffing are highly dependent on the implementation date of additional groundwater controls. Positions which are most likely to be required in the near future if groundwater controls advance are the additional of a Data Entry Specialist and two to four additional Groundwater Technicians. An additional position which may be of value to the District would be a Public Relations Manager to support the District in activities which present particular tension points with the public.

## **Current Programs and Projects**

In the following pages you will find a brief description of the programs,

projects, and activities of the district. These activities support the districts ongoing efforts to protect lives, protect property, and protect the future of precious natural resources for the good of our residents.

**Education and Information:** It is critical that everyone understands the value of their natural resources and opportunities available for them to conserve and protect the environment they live in while enjoying the social, physical, and economic value of the natural resources we all depend on. The Little Blue NRD strives to inform and educate the residents of the district through these various ways:

th th Water/Earth Jamboree for 5 and 6 graders; Earth Festival; outdoor classrooms; teacher workshops and scholarships; 4-H and FFA camp scholarships; high school/college scholarships; land and range judging contests; Envirothon; free trees on Arbor Day; presentations; field demonstrations; community meetings; producer training; club and organization presentations; news releases; website; conservation awards; Nebraska Rainfall and Information Assessment Network (NE RAIN); Project Sense (sensor based nitrogen management); state fair booth; Husker Harvest Days.

**Water Quantity and Quality:** The district goal is to assure an adequate quality supply of water for multiple uses, through the proper conservation, management and development of the districts water resources, and has been accomplished through the various programs listed: Continuous groundwater data collection from the dedicated monitoring network; groundwater level monitoring; water quality sampling; administration of regulations governing the districts water quality and quantity subareas; promotion of water resources technologies and tools; decommissioning of wells; free nitrate testing; irrigation runoff controls; investigations of groundwater recharge possibilities; high capacity well permits; administration of chemigation program; meter maintenance; ultra-sonic meter well testing program; cost share programs for soil moisture sensors; and wellhead protection program for municipalities.

#### Soil Conservation, Erosion and Flood Control: It is

the districts intent to utilize the lands to their fullest capability and to ensure that the future generations have quality lands by continual conservation stewardship through the following programs. Develop programs that aid in soil erosion and enforce the Erosion and Sediment Control Act; promote conservation tillage and soil health; continue to offer funds for conservation construction, dams, and water quality projects.

**Urban Parks and Recreation Trails Assistance Program:** Working with the districts communities is vital for a strong commitment for special projects that aid in reducing and preventing soil erosion, flooding and other related resource problems in urbanized areas with the following programs offered:

Community tree resource program; urban conservation and trails program; and urban park and recreation program.

**Tree and Wildlife Enhancement:** An essential need throughout the district is quality tree and wildlife plantings that benefit landowners with lower costs, aid in comfort, aesthetics and an environment that is enticing for wildlife to co-habitat with the following programs: Tree and weed barrier program; grassland drills and no-till drills rental program; work with other agencies for more wildlife and wetland improvement programs.

**Recreational Facilities for Public Use:** The staff continues to properly maintain and operate the districts recreation areas that offer swimming, fishing, camping, trails, golf, archery, and educational opportunities. The current list of recreation areas includes: Buckley Creek, Liberty Cove, Lone Star, Prairie Lake, and Roseland Lake Recreation Areas. The districts also adding support to the Crystal Lake Recreation Area near Ayr Nebraska.

**Public Water Supplies:** A major function of the Little Blue NRD is management of its rural water projects. Providing an adequate supply of good quality water to areas that have a sparse or undesirable aquifer characteristics is a lifesaving accomplishment. In part of the Little Blue Public Water Project North and South.

## **Administrative Activities and Objectives**

• Activities from our administrative staff include

finalizing a state audit inquiry which really helped us understand how we can provide better documentation for our staff and directors, as well as having better awareness and accountability in our daily activities. The audit went very well, and moving forward the Little Blue NRD now has an even better structure.

- Annually on July 1<sup>St</sup> we also provide a budget for the coming year, which has to be submitted to the state by th.
  September 20 That has just been completed and an overview of the budget can be viewed in this plan.
- The Little Blue NRD is also working with a new database called Beehive that is really going to make things much more simplified. The purpose of this database is to become more efficient in the districts forms, mapping layers, mailing info, well permits, chemigation permits and getting rid of multiple spreadsheets.
- Another objective is to develop a new and refreshing website that will be very user friendly and interactive utilizing social media, fillable online forms, monthly updates, and layered mapping for water quantity and quality, along with other valuable info within the district. The goal will also be to get the districts database Beehive and the website to communicate for permitting and data entry.

## **LBNRD Groundwater Quality Program:**

Nebraska Legislation gives responsibilities to NRDs for managing and controlling non-point pollution. Non-point pollution is generally characterized by pollution which occurs over a broad area with a nonspecific point of discharge. The greatest source of groundwater pollution in the District is nitrates from commercial nitrogen fertilizer. In some areas, the levels exceed the maximum contaminant level of 10 ppm (parts per million) allowed by the state and federal government. High nitrates are a potential hazard to humans and livestock. Other sources of pollution can include high Iron, Magnesium, Sodium, Selenium, Chloride, and TDS or (total dissolved solids) and can also raise concern within the District. Some chemical concentrations in the groundwater can be stabilized, either by preventing the chemical from becoming sufficiently prevalent to cause a problem or by preventing the chemical from leaching into the groundwater. While all forms of non-point pollution can be a concern, the problem of high nitrates will remain a priority for the District. As a result of the nitrate issues the Board of Directors adopted the necessary rules, regulations, boundaries, and controls for the District. The District's program goal is to prevent rising nitrate levels district wide and lower average nitrate levels in areas where groundwater pollution already exists. The plan uses a Sub Area and Phased approach, with lesser restrictions in areas that are not high in nitrates and additional regulations applying to areas where higher nitrate concentrations occur in the groundwater. Because of the nature of nitrate pollution, reversing the trends is a challenging venture which requires many years of careful and intensive management to solve the problem. The District continues to work with farmers, agriculture business operators, and the general public to further reduce high nitrates in groundwater.

#### 2017 Nitrate Results

The District's focus for nitrate testing in 2017 was on the Eastern 1/3 of the District. The Bruning Sub Area is still an area that continues to show high nitrates therefore we continue to make efforts to reduce the nitrates in this area.

The district is also studying the Fairbury Sub Area as well. Although these two sub areas are close together surprisingly they are in two different aquifers. In 1999 the average nitrate levels for the Bruning Sub Area were 16.47 ppm. In 2017 the average is 15.40 ppm. In 2002 the average nitrate levels for the Fairbury Sub Area was 8.72 ppm. In 2017 the average is 9.80. So as you can see we still have some work to do within these areas, which is why we implement water quality rules based on nitrate levels. The Little Blue district is finding that there are lots of variabilities to water sampling for nitrates and the district is looking at ways to minimize that variability with detailed monitoring such as: consistent timing of sampling, as the pivot turns on, as the pivot is in the middle of its cycle, as the pivot ends its cycle, beginning of the growing season, end of the growing season will all help with minimizing differences in test results and understanding how the nitrates are moving within the groundwater.

# **Objective: Provide local funding to landowners to encourage the installation of water quality practices.**

The Little Blue NRD provides cost-share funds for water quality practices to be utilized throughout the district. The funds are generated through the collection of fees levied by the Nebraska Department of Agriculture for pesticide registration and applicator licenses. The funds generated are distributed by the Department of Natural Resources. These funds typically range from \$41,000 to \$48,000 per year.

Practices that are available for producers include: Low Angle or Drop Nozzles (NRCS design regulators required, conversions only, not new) Chemical and Fertilizer Applicator Control System, Nitrogen Inhibitor Equipment Practice and Variable Rate Irrigation (Equipment Only).

#### **PLANNED ACTIONS:**

- Utilize water quality funds throughout the district to support environmental improvements
- Limit cost-share to one contract per producer to spread benefits throughout the district.
- Continue to search for new cost-share practices which provide water quality benefits.

**Objective: Carry out an effective monitoring program** 

## for the District's water supplies.

The District has authority for both groundwater quality and groundwater quantity. The District began monitoring groundwater levels in 1974 and has expanded its monitoring well network over the years to better assess the impacts of groundwater uses. It also installed a dedicated monitoring network of 50 wells scattered across the principal aquifers of the District to evaluate the impacts of daily groundwater pumpage. Groundwater quality sampling began in the mid-1980s and has also expanded as evidence of groundwater contamination has continued to grow in the District. Both monitoring efforts are critical in determining the historic trends in groundwater levels and evolving water quality problems.

#### **PLANNED ACTIONS:**

- Continue to gather groundwater levels through the biannual and dedicated monitor networks to evaluate trends and determine appropriate response actions.
- Continue to gather groundwater quality samples to evaluate trends and determine appropriate response actions.
- Evaluate monitoring networks to insure that the monitoring sites are a suitable representation of the aquifer conditions.
- Identify and secure additional monitoring sites if existing sites are lost for any reason.
- Utilize the data gathered to make informed decisions about regulatory needs and/or actions

**Objective: Effectively conserve, protect and promote** 

#### wise utilization of the District's water supplies.

The Nebraska Groundwater Management and Protection Act requires the NRD to develop and implement a groundwater management plan. The plan includes management of both groundwater quality and groundwater quantity. In addition to outlining the process for monitoring the status of the quality and quantity within the District, the plan establishes a framework for rules and regulations to manage water development and use. Currently the Little Blue NRD Water Resources Committee is revising their rules and regulations to address evolving water resources issues in the District. The District is also engaged in the development of an Integrated Water Management Planning effort to address inter-related surface and groundwater issues.

#### **PLANNED ACTIONS:**

- Complete the update to the Groundwater Management Plan and secure State approval by December 2017.
- Implement actions and programs as prescribed by the plan.
- Be active in gathering sound science-based data to use in making management or regulatory decisions.
- Update the rules and regulations of the District to address water quality and quantity concerns by January 2018.
- Provide cost assistance for the decommissioning of abandoned water wells
- Administer the District's chemigation program to protect water supplies
- Work toward completion of the Integrated Water Management Plan in FY 2019
- Provide technical assistance to landowners to build support for effective management strategies
- Review the water plans of the District once every five years to determine if any updates are necessary.

**Objective: Encourage the Conservation of Soil Resources in the Little Blue Basin.** 

Each year the Little Blue NRD works with landowners to implement conservation practices district-wide using funding provided through the Nebraska Soil and Water Conservation Program. The District has established a maximum of 60 percent cost-share assistance up to \$5,000 per application. If a project is larger and can be treated all at once the total per application can be granted to \$10,000 per application, but funding would be limited to once every two years. Typically, NRCS assists with program signup, design and check out. Funding received is dependent on the State budget but typically ranges from \$75,000.00 to 100,000.00 annually. The Little Blue NRD also provides cost share monies through its own budget, usually ranging from \$200,000 to \$250,000 annually. Eligible practices are: Planned Grazing Systems, Terrace Systems, Terrace Underground Outlets, Water Impoundment Dams, Grade Stabilization Structures, Diversions, Grassed Waterways, Water and Sediment Control Basin, Dugouts for Livestock Water, Pasture Planting and Range Seeding, Critical Area Planting (Grass), Windbreaks, Windbreak Renovations, Irrigation Water Management and Repair Practices.

#### **PLANNED ACTIONS:**

- Administer cost-share programs to protect soil and water resources of the District.
- Continue to work with district producers in solving erosion issues on their property. If needed utilize dams to assist this problem of gully erosion.
- Utilize the NSWCP and Little Blue SWCP programs to help get appropriate conservation practices installed on Highly Erodible Lands.
- Periodically review administrative policies, including but not limited to, practice priorities, cost-share percentages, maximum assistance, and application procedures.
- Conduct annual sign-up periods for practice.
- Support increasing state funding assistance for the program.
- Conduct a survey of producers for their input on new cost sharable practices.
- Continue to seek cost-share program options that provide resources protection.

#### **Objective: Promote the protection of soil from wind and water erosion.**

In the past the NRD has worked hard to educate the public on the importance of protecting soil from wind and water erosion. Media such

as newspaper articles, radio announcements, and the District newsletter have been used to get the message out in the past.

#### **PLANNED ACTIONS:**

- Use local media to help educate the public on the importance of protecting soil from wind and water erosion.
- Use the District's website to educate the public on the importance of protecting soil from wind and water erosion.
- Continue to use District newsletter as an information tool.
- Develop more information through electronic media options as potential tools for education the public on erosion concerns.
- Help make the public aware of what HEL is and why it is important to manage and protect it properly.
- Support the creation and implementation of management practices that protect highly erodible land in the Farm Bill.

## **Objective: Partner with private landowners to install flood control structures.**

The Little Blue NRD has provided cost-share assistance for over 100 private dams throughout the district. These projects help to reduce flooding, soil and bank erosion, sediment deposition while providing multiple other public and private benefits. Adequate land treatment above structures is beneficial because it can extend the functional life of a dam. Land treatment can also reduce contamination from pesticides and fertilizers, which is particularly important if a dam is used for watering livestock.

- Evaluate the success of dams constructed in the past to determine the impact and benefits.
- Establish a list of potential dam sites. Work with local NRCS offices to do preliminary review and estimates.
- Encourage producers to pursue flood control projects on their land.
- Establish conservation practices upstream of dams to protect the long-term value of the projects.
- The Board will review the cost-share for dam program ever 3 years.

• Provide guidance to landowners about proper care and maintenance of private structures.

# **Objective: Inspect all District operated structures to assure that they are safe and operate properly.**

The Little Blue NRD is responsible for maintaining flood control structures in the District. Most of the structures are classified as low hazard by the State of Nebraska; however, the NRD does maintain significant and high hazard structures. To assure that the structures are functioning properly and safely, the NRD conducts periodic inspections. The State of Nebraska also does periodic inspections of dams, and those reports are also incorporated into the District's inspection program.

## **PLANNED ACTIONS:**

- Inspect all high-hazard structures biannually, and low and significant hazard structures annually.
- Insure that emergency plans for high-hazard dams are reviewed and updated as needed.
- Provide NRD staff with adequate training to assure that dams are properly operated and maintained.
- Coordinate dam inspections with the State of Nebraska DNR.
- Begin a photo journal of all dams inspected.
- Inform landowners regarding concerns or problems caused by their use or alteration of a structure and instruct them on the needed corrective action.
- Educate the public on the importance of inspecting and maintaining dams on private land.

#### **Objective: Maintain District watershed dams and levees for public good.**

The public investment in District watershed dams, levy projects and district lands is of great value to the residents of the District. The proper maintenance of these structures and projects is necessary to extend their useful life and provide continued multiple public benefits. The District will strive to operate all District projects and District lands for the purposes for which they were developed and in the best possible condition to extend their life and serviceability.

#### **PLANNED ACTIONS:**

- Conduct thorough inspections of District watershed dams once each year with all physical project characteristics, operations and deficiencies documented.
- Engage in timely repairs and correction of deficiencies to assure structural integrity and longevity.
- Annual reports will be prepared on each project noting how any project deficiencies were corrected for insurance purposes.
- Inspect projects during and following any significant storm event which causes the structures to operate to assure functionality are as designed.
- The District will develop emergency plans for any high hazard class District structures and keep the plans updated as needed to assure the protection of residents which live within the breach route of such reservoirs.
- District lands, generally associated with watershed projects, will be inspected several times each year and action taken to eliminate noxious or invasive weeds, address conservation needs and eliminate any unsightly or safety hazards.
- Any appropriation rights from reservoirs of the District shall be reviewed at least every 5 years for conformance to the terms of the agreement, and more often if conflicts occur.

#### Objective: Evaluate watersheds within the Little Blue Basin and determine if new flood control projects are needed and feasible.

Flood control structures has always been a priority for the Little Blue NRD. Over the years the District has investigated watersheds and developed plans where appropriate to provide flood control and other multipurpose benefits. Plans may include flood control structures which provide opportunity for water-based recreation in the District. Although several developmental watershed plans have been completed, there are still some watersheds that have not been evaluated and/ or planned.

#### **Planned Actions:**

- Utilize Light Detection and Ranging (LIDAR) Data to help identify and conduct initial planning for potential structure sites.
- Review watersheds within the NRD and determine if there is merit in the development of a watershed plan.
- Work with private engineers on cost estimates and design.
- Apply for cost-share monies to assist the building of flood control structures.
- Investigate potential stream flow augmentation projects to help maintain base flows in the streams and rivers and support Blue River Compact flows during the cropping season.
- Pursue other flood control projects such as channels, dikes and diversions which protect lives, property and public infrastructure.

## **Objective: Evaluate opportunities to enhance groundwater recharge for aquifer stability.**

The Little Blue NRD is situated in an excellent area to achieve groundwater recharge because the soils tend to have good infiltration rates and because the amount of rainfall received provides ample supply to recharge. Efforts are underway to capture some of the precipitation where it falls and provide structures which support groundwater recharge. Such projects include low-level in-stream weirs, off-channel diversions and oxbow reconnections.

#### **Planned Actions:**

- Work with local landowners and private engineers to identify potential project sites and develop structural designs which foster quality recharge projects.
- Investigate surface water transfer and storage projects to enhance groundwater recharge in areas where aquifers may be viable receiving vessels.
- Apply for cost-share monies to assist the building of water control structures for recharge.
- Collect data to evaluate the effectiveness of the projects concepts, quantify recharge benefits, identify operation and maintenance

issues; test alternate designs; identify potential water quality issues related to recharge concepts; and share results with others considering recharge.

## **Objective: Address erosion complaints on private lands.**

In accordance with the Nebraska Erosion and Sediment Control Act, the District has an approved sediment control plan. The plan is used to address sediment and erosion problems on private land. District staff inspects complaints to determine if violations of the District's standards are occurring. If warranted, the NRD requires that measures be implemented to reduce erosion on property and eliminate sediment damage on neighboring lands. The program also governs construction sites during development.

- Accept erosion and sediment complaints as necessary.
- Investigate all complaints to determine if violations of the Act and District rules are occurring.
- Assure that any complaints are handled in a fair and expeditious manner.
- Work with landowners to find the best and most cost effective solutions to address erosion issues.
- Work with local NRCS and landowners to assure required work is completed and the problem corrected.

# **Objective: Continue the present partnership with NRCS.**

The Natural Resources Conservation Service has been a key partner of the Little Blue NRD since 1972. The District currently works with offices in seven counties that encompass the NRD. District funded clerks are assigned to Adams, Clay, Fillmore, Jefferson, Thayer, Nuckolls and Webster Counties and the District's local contact for conservation efforts. NRCS typically provides the technical assistance for the Nebraska and Little Blue Soil and Water Conservation Programs and has also helped the NRD with designing dams, tree plantings and other conservation efforts. On larger projects such as watershed planning and larger dam design, the NRD may work directly with a Technical Service Provider (TSP) funds provided by NRCS.

#### **PLANNED ACTIONS:**

- Continue to provide clerical assistance to the Adams, Clay, Fillmore, Jefferson, Thayer, Nuckolls and Webster Counties.
- Partner with NRCS to plan and design dams.
- Utilize NRCS to provide technical assistance services for conservation practice design, layout and construction.
- Participate on the EQIP working Group.
- Work with NRCS and NARD to obtain and use TSP funding that is made available.

#### **Objective: Support Communities Through Urban Conservation Assistance Programs.**

These programs provide technical and financial assistance to citizen groups and governmental agencies in their efforts to reduce and prevent soil erosion, flooding and related resources problems in urbanized areas. Programs are also available to provide financial assistance to governmental agencies in their efforts to establish, develop and improve public parks, recreation areas and trails and to conduct urban forestry projects. The District will provide technical and financial assistance on eligible projects sponsored by citizen groups, private organizations or governmental agencies, which conform to good conservation and protection of natural resources, and when appropriate, create recreation opportunities for district residents.

## **PLANNED ACTIONS:**

• Develop and administer Inter-Local Agreements between the

District and cities and /or villages for project developments.

- Develop a historical summary of participation in urban conservation programs to assure compliance with inter local agreements.
- Periodically review programs practice list and cost-share percentages.
- Seek alternate funding opportunities for the joint projects.
- Work with the District's State Forester to complete tree inventories for communities in the District.
- Support community's efforts to develop sound forestry programs which include tree planting, removal, and maintenance.

# **Objective:** Provide public information on natural resources conservation, protection and management, and regulatory requirements.

The District uses a variety of methods to make information on water issues available to the public including newsletter articles, news releases to local media, meetings, and specific mailings. Since the NRD administers many regulatory programs, it is critical that those impacted are informed of any requirements placed on them by the NRD. Education is also a key component. With more regulatory requirements it is necessary to expand programs to target water users.

Current educational events: Water and Earth Jamboree at Liberty Cove and Clay County Fairgrounds; Water Festival in Jefferson County; Land and Range Judging Sponsors; support Statewide programs: Envirothon, Husker Harvest Days Booth, State Fair Booth.

- Continue to incorporate information on the District's programs into local media releases.
- Continue to sponsor the Water and Earth Jamborees, Water Festival, Land and Range Judging Programs throughout the District.
- Provide public information on new programs, particularly those that include regulatory requirements.
- Seek opportunities to create information and education programs that are specific to surface and groundwater.
- Make certain that the public is provided access to water quality and quantity data

collected by the District.

- Develop education programs that promote the sensible use of fertilizers, pesticides, and other potential contaminants.
- Continue to certify all producers throughout the entire District, to be in compliance with the Groundwater Management Plan.
- Work with a firm to redesign the LBNRD Website stressing more interaction.
- Develop a Facebook page that steers the public to the Website.
- Keep updating district brochures and factsheets of programs and projects.
- Utilize the NRD's newsletter and website to provide the public with information regarding water programs and issues.
- Investigate the need for an electronic newsletter.
- Continue to develop educational and informational programs targeted at youth, young adults and elderly.

# **Objective: Support programs that address solid waste disposal throughout the district.**

The District has been one of the sponsors for Household Hazardous Waste, Electronic Recycling and Tire Recycling throughout the district. The recycling programs have been well received by residents of the NRD and have reduced materials in the solid waste stream, supported repurposing of resources and protected the environment around us.

- Continue to work with the RC&D, counties and communities with household hazardous waste, electronic recycling and tire recycling programs.
- Promote recycling as an important means of reducing the waste stream and protecting the environment.
- Continue to seek grants which would support recycling events.
- Continue to actively engage in recycle projects with communities.
- Utilize recycled products in operations when available and economically reasonable to do so.

# Objective: Increase awareness about the benefits of trees and strive to increase tree planting in the LBNRD.

The District offers tree planting services for windbreaks, shelterbelts and other plantings. The forestry resources of the District have been under pressure in recent years due to land use conversions and invasive species. Drought and difficulties with nursery stock have also plagued the sale of trees and shrubs. Landowners have had limited interest in establishing a new tree planting due to high land and crop prices and other priorities for the land. This is one area that presents a challenge to the District and other agencies with forestry responsibilities.

#### **PLANNED ACTIONS:**

- District will increase public awareness about the important benefits of trees in the natural environment and strive to increase the planting of desirable trees and shrubs by 25% in the next five years.
- Provide quarterly information regarding the value of trees and tree plantings in providing shade, wind protection, livestock protection, wildlife habitat and timber resources.
- District will increase tree sales in the district by 2,500 trees each of the next five years.
- The NRD will continue its tree planting services program and strive to improve nursey stock storage and handling operations to achieve optimum survival of new plantings.
- Work with at least two communities each year to promote urban tree planting programs in our cities and villages.
- Provide at least one educational opportunity to landowners annually demonstrating proper tree care and the management of forestry resources for value-added benefits.

#### **Objective: Improve fish and wildlife habitat through**

# public education, cooperative programs, and land management.

The wildlife habitat resources of the District have been under extreme pressure in recent years due to land use conversions, intense agriculture, limited crop diversity and other agriculture practices. Landowners have had limited interest in establishing habitat due to high property taxes and the economic benefits of land conversions. This is one area that presents a challenge to the District with wildlife habitat responsibilities.

#### **PLANNED ACTIONS:**

- Work with state agencies and local wildlife conservation groups to identify programs that offer competitive opportunities for the establishment of wildlife habitat on private lands of the District, and implement such programs to enhance wildlife populations.
- Focus efforts for wildlife habitat development on 10 odd areas and sensitive environmental sites each year.
- Manage all District lands and projects to maximize fish and wildlife productivity. In that regard, the District will reduce invasive species on District lands, focus on prairie reestablishment and inter-seed one 10 acre watershed site each year with legumes.
- Provide a representative of the District to serve as an active member on the Rainwater Basin Joint Venture Management Board, seeking ways to restore and enhance the wetland basins of the area in line with the JV's long range plan.
- Work with the Nebraska Game and Parks to improve fisheries management activities on the District's recreation areas.

#### **Objective: Provide specialty conservation equipment** to landowners.

The District provides several pieces of specialty conservation equipment for use by the public. This equipment includes grassland drills, tree planting machines, and a wetland disk and cattle handling equipment in cooperation with the rainwater Basin Joint Venture. The proper maintenance of this equipment is necessary to extend their useful life and provide continued public conservation benefits.

#### **PLANNED ACTIONS:**

- Continue to make specialty conservation equipment available to landowners.
- Maintain all equipment in good repair and serviceability for the benefit of its patrons.
- Replace machinery as needed to assure specialty conservation equipment is readily available.
- Evaluate the desirability of acquiring additional specialty equipment for conservation purposes as needed.

#### **Objective: Operate and maintain public recreation and public use areas.**

The District will strive to operate all District recreation lands and projects in the best possible condition to provide outstanding outdoor recreation opportunities for the public. The District will also continue to support the development of trails and recreation facilities with partner agencies to enhance outdoor recreation opportunities and support healthy lifestyles.

- The District will continue to provide and maintain high-quality recreation facilities associated with District's recreation areas and public use areas to offer valuable recreation opportunities for the public.
- The NRD will make additional improvements at recreation areas as budget and public interests dictate.
- The LBNRD will evaluate and amend recreation area rules and regulations as needed.
- Develop a vegetation management plan for Prairie Lake and Buckley Creek Recreation Areas and begin removal of unwanted species within the next two years.
- Complete construction of Prairie Lake Recreation Area facilities to support various recreation activities in Adams County Area.
- The LBNRD along with the Nebraska Game and Parks, Nebraska Department of Environmental Control and the Village of Ayr will renovate the Crystal Lake in late 2017 or 2018.
- The District will provide ongoing insurance coverage for Crystal Lake

Recreation Area north of Ayr in support of the Village of Ayr's project.

- Investigate the possibilities of new water-based recreation facilities in the District.
- Assist communities with outdoor recreation projects and public trails, as appropriate.

#### Objective: Provide ample quality potable water supply to meet the needs of the rural water district residence, and examine additional opportunities to develop rural water or regional water supply systems as the needs arise.

The rural water projects of the Little Blue NRD have provided significant social and economic value to the eastern one quarter of the District and an area of northern Kansas.

- The District will provide professional management and operational services to assure that the public water projects function as designed and provide continued quality service to all customers.
- Maintain the existing projects to provide the longest life and serviceability possible.
- Inspect 5 percent of all meters each year and other key project components that have served their useful life and may need to be replaced.
- Meet with the city of Fairbury annually to evaluate the current water purchase agreement, discuss increasing service capacity and operational matters and water conservation measures.
- Continue to utilize the calling system for emergency needs to customers.
- Evaluate the high water demands during the summer months to assure that the project can meet the customer's demands.
- Keep a record of new applications for water service until more water is either purchased from Fairbury or wells added to the project are accomplished.
- Continue to monitor water quality conditions and assist communities which are experiencing water quality problems to identify potential water sources.
- Evaluate the development of regional water supply projects if the need arises, and offer cost share for new practices.
- Continue to seek funding opportunities to support studies on increasing the volume of water availability from the City of Fairbury.
- Continue to send customers a newsletter highlighting current water quality information and water conserving practices.
- Keep evaluating new meter technology to create more efficiency, and look into remote read options.
- Review and Investigate our static water plan.