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September 21, 2015

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SEP 23 2015

DEPARTMENT OF
NATURAL RESOURCES

Dear Jeff:

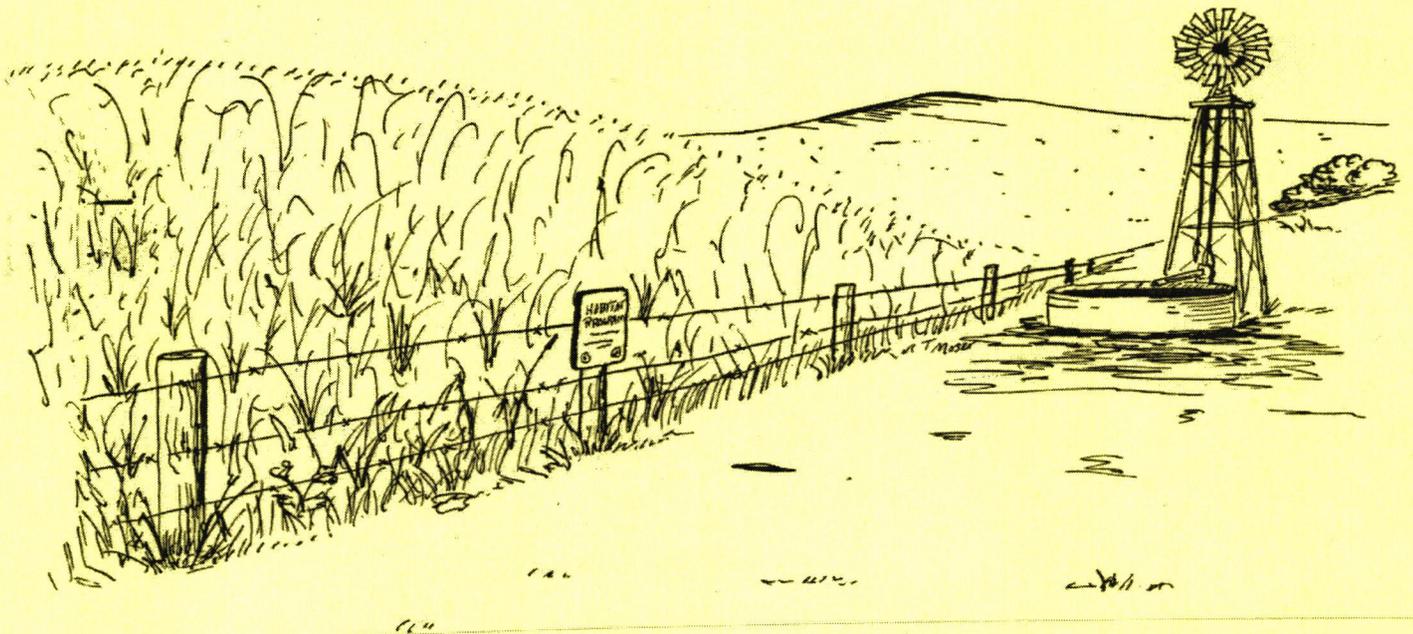
Enclosed is a copy of the Lewis & Clark NRD's Long Range Implementation Plan. The Board of Directors approved the plan at their September 17th meeting. If you have any questions or comments let me know.

Sincerely,

Marilyn Schumacher
Admin Sec'y

cc Game & Parks
NARD
Neighbor NRDs
NRCS Offices

Lewis and Clark Natural Resources District Long Range Implementation Plan



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DEPARTMENT OF
NATURAL RESOURCES

**LEWIS AND CLARK NATURAL RESOURCES DISTRICT
LONG-RANGE IMPLEMENTATION PLAN**

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SECTION III

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 and the Nebraska Game & Parks Commission by October 1 of each year.

The directors of the Lewis and Clark NRD feel the development and adoption of required plans is not only necessary to satisfy the requirements of the law, but is necessary to give an organized approach to budgeting and accomplishing the goals of the district.

B. PURPOSE OF THE PLAN

The purpose of the plan shall be to summarize the activities as planned by the NRD. It will show the expected financial, manpower and land rights needs for the current year and the projected needs for the next five years. The activities are listed in order of their priorities as given to them by the directors on February 19, 2009.

The plan will be used by the directors in their decision making to develop the water and related land resources for the common good of the people. It is also intended to inform the general public of the goals and purpose of the NRD.

C. 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 use; (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 facility works; and (12) forestry and range management.

The Lewis and Clark NRD has considered these authorities and for the purpose of this plan has consolidated them into the seven categories in Table 7 of this plan.

D. DESCRIPTION OF THE DISTRICT

The Lewis and Clark Natural Resources District is located in extreme northeastern Nebraska. It consists of 1,467 square miles in Dixon, Cedar and Knox Counties. (about 956,300 acres)

Soils vary widely within the District due to extensive glaciations ranging from glacial outcrops, Loess hills, to Missouri River alluvial. Rainfall amounts range from 22 to 24 inches annually, with frequent years of below normal rainfall. Elevation ranges from 1,100 to 1,875 feet above sea level.

Approximately 38% of the land area is native range or pasture and over 55% is cropland, approximately 20% is irrigated. Soil erosion on cropland is the District's most serious problem.

The areas economy depends largely on farming and ranching. Very little industry exists in the district.

The district has four major drainage areas: the Bazile Creek, the Bow Creek, the Aowa Creek and the Antelope-Beaver Creek.

The district has only small towns, the largest of which has a population of 1,554. Yankton, South Dakota across the Missouri River to the north, is the largest city near the district. 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 Lewis and Clark NRD's assessed valuation being one of the lowest of the 23 NRDs, causes the directors to plan carefully the amount of finances needed each year. The district has a projected decline in population over the next ten years. The decline is mainly due to an out migration of younger people.

The Lewis and Clark NRD is governed by a board of 11 directors, elected by voters at general elections, each serving a four-year term. The District is currently divided into five sub-districts of equal population with two members representing each subdistrict, plus one member at large. Elections are held every two years for half the members.

II. SUMMARY OF PLANNED ACTIVITIES

A. CONSERVATION COST SHARE PROGRAMS

The Lewis and Clark NRD has signed an agreement with the Nebraska Department of Natural Resources to administer the Nebraska Soil and Water Conservation Program within the area. An annual appropriation is available through that program for 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 terraces, tree planting, grade stabilization dams, planned grazing systems, grass seeding, and other practices. As this program has developed, these practices have been given priority by the board of directors due to considerable demand. NRD personnel spend about 480 hours per year on this program. The district has continued to use more of its NRD funds for its own cost-share programs, including a Deep Soil Testing Cost Share Program adopted in 1989 to monitor residual nitrogen, a Sealed Well Abandonment Program started in 1991, and a Community Assistance Program adopted in 1998.

B. GROUNDWATER MONITORING

The Lewis and Clark NRD has approved a revised groundwater quantity management plan within the District. Groundwater levels since 1975 measurements have not shown appreciable declines but 2012 conditions have changed that status. The plan amendment sets up control measures for water quantity should declines show a downward trend.

The district quantity-monitoring program, which began in 1975, now includes 35 observation wells across the District, which are measured for static water levels every spring and fall to determine groundwater fluctuation. This information is reported to the U.S. Geological Survey in Lincoln for computer charting.

A Groundwater Quality program is presently being carried out as detailed in the NRD Groundwater Management Plan, 1993. Approximately two hundred sites across the district are currently being sampled to track the level of nitrate-nitrogen in the groundwater. The resource technician also collects water samples from seven multi-level monitoring wells in the Creighton area. These wells allow the district to track the nitrate level in three different layers of the aquifer. Approximately 710 hours of the resource technician time is spent collecting samples, compiling data and sending information to the cooperators and appropriate agencies.

C. RURAL WATER DISTRIBUTION SYSTEM

The Cedar Knox Rural Water Project got its start in early 1978 as the Manager met with the Village of St. Helena's Council to discuss their problems in locating good quality water and funding a system to distribute it to homes. In an effort to determine the interest in water service not only for that town, but, more economically for other rural users, the NRD funded a survey in 1979 with the help of the Midwest Assistance Program. It showed extended interest into Knox County along the Missouri River. The NRD, at this point, appointed a Steering Committee and collected agreements for an engineering design on the project. The system was eventually constructed in 1981 and served 280 rural residences, including Crofton and St. Helena. An expansion to the Bow Creek area of Cedar County was constructed in 1990 to add 120 users including Obert, and in 1996 Fordyce was added. The system now serves 852 rural residents. Modifications for treatment plant capacity and improvements are being planned. Actual efforts on the NRD's part originally consisted of organization and administration of meetings, tours, mailings, etc., followed by the actual construction of the initial project at a cost of 2.2 million dollars in 1981, with additional construction in 1990-1992 nearing 2.7 million. This activity has caused the board to hire five project employees to run the plant and provide service within the project area. Administration time will continue to be required to accommodate the responsibilities of the NRD to administer and provide these project services. The actual function of the NRD is to review and ratify the recommendations of the Advisory Committee, which provides local guidance of the project. Consultant engineering services with HDR Engineering and McIntyre Consulting are used. The Project is self-supporting on income from water sales.

In 2005, the NRD in cooperation with Lower Elkhorn NRD began assisting the communities of Coleridge, Belden, Wausa, Magnet and McLean on a proposed regional water system that would serve rural residents as well. The project design was completed on a service area and the project was completed in 2012. The Lower Elkhorn NRD administers the Wau Col Rural Water System. The Lewis and Clark NRD will continue to serve on the Advisory Committee under an interlocal agreement.

D. WATERSHED PROJECTS

Aowa Creek Watershed is the only federal watershed project within the NRD and was started in 1969. It covers 55,350 acres in Dixon County and includes a total of 50 structures. At the present time the NRD has completed those structures. Sponsorship responsibilities to the NRD include land rights acquisition, and operation and maintenance. This requires the district to coordinate with the landowners concerned.

Construction of the Powder Creek Project Site # 31-20A was completed in 2003 at a total cost of over 2.9 million dollars. The Natural Resources Conservation Service (NRCS) plans, designs, and supervises the actual construction of the watershed dams. Aowa # 31-20A (Powder Creek) was approved for Natural Resources Development Fund Grant assistance, along with NDEQ Section 319 funding, Game & Parks Sportfish Restoration and Nebraska Environmental Trust Fund. It provides flood control and recreational benefits. Facility development continues on the site for recreation and fishery potential.

The Antelope-Beaver Creek Watershed, although not eligible for PL 566 funds, collected funding for flood control that was inherited by the NRD. Four structures were built on Beaver Creek and a fifth site was completed on Antelope Creek near Menominee, Nebraska. With donated easements provided by landowners on that site, NRCS completed design, planning, and construction in December 1986. Construction cost was \$503,438. Local coordination meetings were held and application for funding through the Nebraska Department of Natural Resources Resource Development Fund was approved. Local costs were divided between the NRD and Cedar County. The area was renamed in 1986 as the Chalkrock Wildlife Management Area and is maintained by the Game and Parks Commission. Limited facilities on the site are provided and open to the public for hunting and fishing.

The District has also investigated potential areas for flood control watershed applications. A potential dam site on Buffalo Creek was built in 1995 that will control runoff from 2150 acres that impact county and state bridges. Land rights were obtained and funding assistance provided by the Nebraska Environmental Trust on construction. The area was renamed Tatanka Wildlife Management Area in 1995 and was maintained by the Nebraska Game & Parks Commission until January 2005.

E. TREE PLANTING

The Lewis and Clark NRD, through Star Tree Service of Sioux City, Iowa, annually plants around 15,000 to 30,000 trees as a service to the residents in and outside the district. The effort is coordinated by the NRD staff, who receive and review NRCS job sheets, establish planting routes, monitor planting performance and handle tree sales. The NRD also orders conservation mulch and tree stock in bulk for resale and then bills customers for the services.

A great deal of administrative time is involved in ordering, selling and distributing trees even before planting activities begin. The NRD feels this is necessary to insure quality trees planted for the landowners. Once planting begins, the district depends on cooperation from the Natural Resources Conservation Service to make certain farmers understand their responsibilities and that the trees get planted according to the plan they have worked out with the farmers.

In 2015, the district planted over 16,800 trees on 40 farms and sold 29,600 total. The NRD also sold 134,000 feet of weed barrier. A survey of customers regarding satisfaction was conducted in 1994 and 81% rated our work good or excellent. Future year's plantings are expected to be similar. The NRD has provided over 1.8 million trees in the District since 1972.

F. GRASS SEEDING

The Lewis and Clark NRD owns one, seven foot no-till grass drill. The grass-seeding program offers drills to farmers at a cost to cover expenses to establish native grass plantings. The no-till drill is offered through Paul Goeden of Hartington and provided for by the Lewis & Clark Pheasants Forever Chapter with funding from Nebraska Environmental Trust lottery funds.

G. NRCS SUPPORT PROGRAMS

In conjunction with our memorandum of understanding with the Natural Resources Conservation Service, the majority of our efforts to assist them are directed toward providing clerical help in the office. This allows their staff to expend more time serving technical and conservation needs. The Lewis and Clark NRD hires and pays for 51% of the clerk's time in Knox County (Bloomfield), 75% of the clerk's time in Cedar County (Hartington), and 73% of the Dixon County clerk's time (Ponca). In addition to clerks, the NRD has employed temporary technical aides to assist NRCS crews during the busy summer months. Some funds are provided by NRCS for technical service providers to help administer Farm Bill activities.

H. INFORMATION AND EDUCATION

The Lewis and Clark NRD takes part in making a full effort to inform and educate the general public in resource matters as well as recognize those who are already conservation minded. The following programs are coordinated by the staff:

- a) Distribution of Stewardship material to the churches within the district that request materials.
- b) Provide to district schools NACD and NRD Conservation booklets on trees, water, soil, butterfly gardens and birds.
- c) Aquafest, a water education program for fifth grade students, is a coordinated effort between the Lewis & Clark NRD, Lower Elkhorn NRD, Papio-Missouri River NRD and the Cooperative Extension. Nearly 350 students from northeast Nebraska have attended the two-day event.

- d) The Wonderful World of Water, a water education program for ninth and tenth grade students, is a coordinated effort between the Lewis Clark NRD, Lower Elkhorn NRD, Upper Elkhorn NRD, Lower Niobrara NRD, and the Cooperative Extension Service. Nearly 26 teams from 14 schools attend this program held annually at Gillman Park, Pierce, NE.
- e) Offer natural resource presentations to schools on water, soil conservation, trees, and wildlife habitat. The staff utilizes the enviroscape model, groundwater flow model, and water rocket launcher.
- f) Distribution of nearly 500 trees annually to schools in conjunction with Arbor Day.
- g) Scholarships to ACE Camp at Halsey are given annually.
- h) Patefield-Green Memorial Scholarships are given in the amount of \$500 toward education in the agricultural field. Four recipients are selected by the Board.
- i) NRD slide presentations are given to churches, schools, and civic clubs.
- j) News releases are sent to local papers monthly to inform the public of the Lewis & Clark NRD programs
- k) Assisting the State Envirothon Competition, Nebraska State Fair, Husker Harvest Days and Area Range Judging Contests.
- l) Project WET (Water Education for Teachers) workshops will be offered to teachers within the District/ESU# 1.

In addition to these programs the NRD directors and staff attend various state and national meetings to educate themselves and work for necessary legislative changes.

I. SPECIAL PROJECTS

Chemigation is the application of pesticides and fertilizers directly through irrigation systems. As of January 1, 1987, no person may apply chemicals through chemigation unless first obtaining an annual permit from the NRD where the well or diversion is located. The permit holder must be the owner or operator of the land. Permits are required for each injection location and the District will conduct periodic inspections to insure compliance.

Applications for permits will be reviewed by the NRD, an inspection conducted and permits approved or rejected within 45 days of receipt. Before approval, the chemigation system must have a check valve and vacuum relief valve in the irrigation pipe, an inspection port for the check valve in the irrigation pipe, an automatic low pressure drain between the main check valve and irrigation pump, a

check valve in the chemical injection line and a simultaneous interlock device between the power system for the injection unit and irrigation pumping plant.

In addition, the person operating the equipment must be certified by the Department of Environmental Quality. The initial permit fee is \$50.00. An annual renewal fee of \$20.00 will also be charged. 2015 saw 427 permits issued. Fines can be leveled for violations. One-fourth of the resource technician's time is spent on Chemigation. 2014 saw 414 permits issued.

The Bazile Triangle Groundwater Quality Study was completed in 1990 as part of a joint NRD project, among three neighbor NRD's. A follow-up study was done in 2000 by the UNL Water Center. Both studies indicated an increasing scope and trend pattern of groundwater nitrate-nitrogen probably resulting from over application of commercial fertilizer.

In 1989, the District began offering cost share for Deep Soil Sampling. Reimbursement cost share is offered to cooperators who take samples to a depth of 3 feet for residual nitrate-nitrogen done by crop consultants. 75% of the actual cost is reimbursed on land in the Bazile Triangle GWMA and this program is only available in that area.

The Lewis & Clark NRD directors have created the Bazile Triangle Groundwater Management Area, effective October 2004 and set up rules and regulations to help better manage fertilizer application. The two township sized area includes 70 square miles and 44,800 acres. Programs will be coordinated with neighbor NRDs as part of the Bazile Groundwater Management Plan, working with Lower Niobrara, Lower Elkhorn, Upper Elkhorn NRD's to develop goals and objectives as well as an action plan that effectively reduces nitrate contamination in this area. A pilot program was started in this area in 2002 called "Siphoning Nitrates with Irrigated Pasture" (SNIP) to convert cropland to pasture and utilize groundwater nitrate-nitrogen through the crop. Annual cost share of \$100 per acre over two years is offered as incentive. NRCS guidelines are required.

A companion program titled "Siphoning Nitrates with Irrigated Hay" was also offered in 2005 to convert irrigated cropland to alfalfa to better tap into groundwater nitrate areas. A Chemigation Cost share program in the Bazile Triangle area offers \$4.00 per acre to encourage the practice where nitrogen fertilizer can be applied "as-needed" in smaller quantities.

In March 1991, the NRD initiated the Sealed Well Abandonment Program (SWAP) to call attention to unplugged inactive wells. The program was devised to provide an attractive alternative for physically accomplishing the task. Landowners obtain bids for NRD pre-approval on the work by a licensed well driller or pump installer according to state guidelines. Annual applications total up to 50 wells sealed per year.

In 2014, the NRD approved an appendix to its Groundwater Management Plan to address groundwater quantity issues for the entire District. The plan sets guidelines for well permits, flow meters, certified acres and other management components. It will also set criteria for areas that become water short with rules and regulations to control water use for the shared benefit of all. The NRD has also requested a voluntary Integrated Management Plan be developed with Dept. of Natural Resources over the next year to include surface water into a combined plan.

K. WILDLIFE HABITAT PROGRAM

The Lewis and Clark NRD was one of the original districts that created the Habitat Program. The directors feel it has been multi-effective in its accomplishments for re-vegetating marginal cropland, providing wildlife habitat, reducing erosion and opening lands to public access. This program won the Nebraska Wildlife Federation "Agency Conservation of the Year Award" for the NRD in 1974.

At present, the Nebraska WILD program has enrollment of over 5 cooperators for over 196 acres in the district. The district offers four main practices: Grassland and woodland habitat with a practice for tree and shrub planting. Starting in 2000, the District added a management option practice to provide wildlife enhancement practices. The project is funded partially through the Nebraska Game and Parks Commission, who had provided payment from Habitat Stamp revenue. At present, the total budgeted expense for 2015 is about \$7,820.

L. PROJECT OPERATION AND MAINTENANCE

Operation and maintenance for the district is a required program primarily taken up by efforts in the Aowa Creek Watershed.

The watershed operation and maintenance in the past has consisted of weed control and fence repair on existing structures. In future, however, there will be more major item repairs in addition to those. Following a summer inspection tour, the manager or technician will take care of operation and maintenance problems. However, since we now have 50 structures built, this will become more expensive and time consuming in the future.

The District can anticipate a moderate increase in funding for these operation and maintenance activities and has set up a sinking fund to meet those responsibilities.

M. POLLUTION CONTROL

The Lewis and Clark NRD has been authorized under LB 474 (1986 Legislature) to implement a District Erosion and Sediment Control Program to limit soil loss and require conservation through a complaint system. Rules and regulations have been adopted to implement that plan so the NRD is now prepared to handle complaints and to work to achieve the goals of erosion reduction. Conservation education and awareness are to be given future emphasis.

Groundwater pollution in the District will also be 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 Environmental Quality.

N. ROAD STRUCTURES

Road structures have been built to replace bridges in each of the three counties of the district in cooperation with the local county boards. The NRD policy on cost sharing has allowed for up to 50% of the cost for construction on those sites having 75% of the drainage under proper conservation treatment. Accomplishments vary according to county board consideration, and applications are processed through the Natural Resources Conservation Service to the NRD for approval. The NRD plans to continue to encourage this program.

O. ROADSIDE EROSION CONTROL

The Lewis and Clark NRDs roadside erosion control program presently consists of encouraging counties to use native grass mixtures for road seeding. Knox, Cedar, and Dixon Counties have been contacted on options available.

P. RECREATION FACILITIES

The Lewis and Clark NRD has provided limited assistance to communities planning for recreation. Such requests are considered on a case-by-case basis. Limited facilities for recreation will also be provided according to watershed plan requirements on 340 acres at Buckskin Hill WMA and 467 acres at Powder Creek. Those facilities include boating, picnicking, parking areas and boat ramps. Now utilized as a Wildlife Management Area, they are both open to the public for fishing and hunting purposes and are being operated and maintained by the Nebraska Game and Parks Commission. Similar facilities were also installed at Chalkrock Lake WMA.

In 1998, the NRD approved a Community Assistance Program to aid cities and community on local projects. Fifty percent cost share is available to develop conservation practices on development

areas, outdoor classrooms, tree planting projects, landscape designing on park areas, and dry hydrant installation.

NRD personnel activity in this program will increase for the next few years to coordinate this work.

Q. MISSOURI RECREATION RIVER ACTIVITY

On July 15, 1976, the Lewis and Clark NRD became the first local agency along the Missouri River to sign a contract with the U.S. Army Corps of Engineers as local sponsors for the Missouri River Erosion Control Demonstration Project (Section 32). This initiated the bank stabilization of critical sites along that stretch of the Missouri River from Yankton to Ponca where erosion had been particularly abrasive to the shoreline. A total of five sites were selected by a committee of representatives from the NRD, Cedar and Dixon Counties, the Department of Natural Resources, the Army Corps of Engineers, the Nebraska Game and Parks Commission and members of the Missouri River Bank Stabilization Association. Three of the sites were designated critical and the contract to begin on the first one (Brooky Bottoms Road) was let on October 20, 1976. The other two in Dixon County (Mulberry Bend and Ryan Bend) were completed in 1977. Completed later were Ionia Bend in Dixon County in 1978, and Cedar County Park in 1979-1980.

As sponsor for the project, the District has responsibility for: (1) obtaining the necessary right-of-way; (2) holding and saving the United States free from damages resulting from construction; (3) operating and maintaining all works after completion. The credit for initiating the project goes to the Missouri River Bank Stabilization Association.

The NRD has obtained the necessary easements on all of the five areas to this date and construction was completed on all for a total cost of \$2,640,000.

The NRD continues to support the "Recreation River" national designation of this stretch of the river because of the unique inclusion of bank protection features. The District obtained a conservation easement north of St. Helena on over 1000 acres and has since participated in activities with the National Park Service to cooperate on management activities. In addition, the district is a member the Missouri River Bank Stabilization Association group to promote conservation improvements for landowners along the river.

In 2007, the NRD was successful in obtaining Transportation Enhancement Act grant funds for the Meridian Trail Project, Phase 1. The district worked with Eisenbraun and Associates on the design with construction of the hiking/biking trail completed in May, 2012. The Phase 2 application to continue the trail from Gavins Point Dam to the old Highway 81 Meridian Bridge has been halted due

to Nebraska Dept of Roads policy to not allow trail construction in Highway ROW. Some finish work is planned on the Phase 1 site in 2016.

In 2010, the NRD was also awarded a grant from the Nebraska Game & Parks Recreational Trails Program for Missouri River Water Trail signage. Together with University of South Dakota Missouri River Institute, the project was completed in 2011.

R. GROUNDWATER IRRIGATION RUNOFF CONTROL

Rules and regulations concerning violations of the Groundwater Management Act (LB 577-1977) have been adopted by the Lewis and Clark NRD. Complaints regarding illegal wells or improper irrigation runoff can be made to the District office in Hartington for proper procedures to comply.

At present, the Lewis and Clark NRD has had one complaint filed on improper runoff. The directors decided that it was not valid and rejected it. It is hoped that common sense and knowledge of the law will eliminate many of these problems.

S. ADMINISTRATION

Since 1973, the Lewis and Clark NRD has employed a District Manager and a percentage portion of NRCS Clerks for the three counties. The district office staff also employs a full time office manager assistant manager and a resources technician, along with five rural water project employees. Under guidance by the NRD directors, the manager assumes responsibility for the district office activities, rural water administration, contract and compliance official on cost share and habitat programs; Aowa watershed coordinator; observation well monitoring; tree planting coordinator and public relations official. The office manager's duties are fiscal, secretarial, accounting and receptionist, as well as, taking minutes at meetings. The NRCS clerks serve in a clerical and receptionist capacity. The district assistant manager and resource technician's primary duties include groundwater permitting, Aowa maintenance, information & education, Chemigation, groundwater monitoring, and other responsibilities.

Requirements resulting from state and federal programs and responsibilities may require additional workload in the future. In the past year, administration has taken up about 10 percent of the employee's time.

**TABLE 1-LAND RIGHTS NEEDS
FISCAL YEAR 2016-2021**

PROJECT	FEE TITLE		EASEMENT	
	DESCRIPTION	ESTIMATED COST	DESCRIPTION	ESTIMATED COST
NONE				
TOTALS		None		None

TABLE 2 - PERSONNEL TIME REQUIRED FOR DISTRICT

PROGRAM AND PROJECTS - FISCAL YEAR 2016

PROGRAM OR PROJECT	MANAGER	ASSISTANT MANAGER	RESOURCE TECHNICIAN	RURAL WATER OPERATORS	OFFICE MANAGER & BOOKKEEPER	CLERKS	TOTALS
A. CONSERVATION COST SHARE	100		100		100	240	540
B. GROUNDWATER MONITOR	110	520	700		20	60	1410
C. RURAL WATER SYSTEM	215			8320	2080		10615
D. WATERSHED PROJECTS	155	250	100		200	50	755
E. TREE PLANTING	220	170	300		180	600	1470
F. GRASS SEEDING	10				10	20	40
G. NRCS SUPPORT PROGRAM	100				200	4200	4500
H. INFORMATION & EDUCATION	80	450	200		160	100	990
I. SPECIAL PROJECT	315	300	300		100	140	1155
J. HABITAT PROGRAM	115				20	80	215
K. PROJECT O&M	55	410	300		10		775
L. POLLUTION CONTROL	40				90	100	230
M. ROAD STRUCTURE	10						10
N. ROADSIDE EROSION CONTROL	10						10
O. RECREATION FACILITIES	30	150	100		40		320
P. MO RIVER BANK ACTIVITIES	120				20		140
Q. GW IRRIGATION RUNOFF	10						10
R. ADMINISTRATION	585				980	500	2065
TOTALS	2280	2250	2100	8320	4210	6090	25250

**TABLE 3 - SUMMARY OF COSTS BY PROGRAM OR PROJECT
FISCAL YEAR 2016**

	EQUIP- MENT & SUPPLIES	PERSON- NEL	PRO- FESSIONAL SERVICES	OPERATING COSTS	LEGAL	CONSTRUC- TION	TOTAL	FEDERAL STATE	RURAL WATER PROJECT	TOTAL
A. CONSERVATION COST SHARE	\$100	\$2,030		\$11,000		\$85,000	\$98,130			\$98,130
B. GROUNDWATER MONITOR	\$700	\$7,000		\$56,500		\$356,000	\$420,200			\$420,200
C. RURAL WATER SYSTEM	\$250	\$7,530					\$7,780			\$7,780
D. WATERSHED PROJECTS	\$3,200	\$12,070		\$12,000			\$27,270			\$27,270
E. TREE PLANTING	\$27,000	\$18,600		\$73,000			\$118,600			\$118,600
F. GRASS SEEDING	\$50	\$100					\$150			\$150
G. NRCS SUPPORT PROGRAM	\$2,500	\$69,000	\$26,000				\$97,500			\$97,500
H. INFORMATION & EDUCATION	\$500	\$8,790		\$5,000			\$14,290			\$14,290
I. SPECIAL PROJECT	\$14,080	\$26,440	\$19,500	\$53,000			\$113,020			\$113,020
J. HABITAT PROGRAM	\$250	\$1,150		\$10,000			\$11,400			\$11,400
K. PROJECT O&M	\$10,700	\$21,000	\$10,100	\$32,000			\$73,800			\$73,800
L. POLLUTION CONTROL	\$150	\$4,500					\$4,650			\$4,650
M. ROAD STRUCTURE	\$100	\$90					\$190			\$190
N. ROADSIDE EROSION CONTROL		\$120					\$120			\$120
O. RECREATION FACILITIES	\$100	\$180				\$5,000	\$5,280			\$5,280
P. MO RIVER BANK ACTIVITIES	\$150	\$1,650					\$1,800			\$1,800
Q. GW IRRIGATION RUNOFF		\$150					\$150			\$150
R. ADMINISTRATION	\$5,470	\$60,000	\$10,000	\$58,000	\$1,000	\$38,200	\$172,670			\$172,670
TOTALS	\$65,300	\$240,400	\$65,600	\$310,500	\$1,000	\$484,200	\$1167,000	\$0	\$0	\$1,167,00

TABLE 4 - SUMMARY OF PROJECTED LAND RIGHTS NEEDS 2016-2021

PROJECT	EASEMENT		FEE TITLE	
	DESCRIPTION	ESTIMATED COST	DESCRIPTION	ESTIMATED COST
NONE				

TABLE 5 -- SUMMARY OF PROJECTED PERSONNEL NEEDS 2016-2021

(time in hours)

PROJECT OR PROGRAM		2015	2016	2017	2018	2019	2020
A. CONSERVATION COST SHARE	MANAGER	100	100	100	100	100	100
	SECY & CLERKS	340	100	100	100	100	40
	RES TECH	100	100	100	100	100	100
GROUNDWATER MONITOR	MANAGER	110	220	230	240	250	260
	RES COORD & TECH	1220	1220	1620	1620	1620	1620
	OFFICE MANAGERS	20	20	20	20	20	20
	NRCS CLERKS	60	260	270	280	280	300
C RURAL WATER	MANAGER	215	215	215	215	215	215
	BOOKKEEPER	2080	2080	2080	2080	2080	2080
	OPERATORS	8320	8320	8320	8320	8320	8320
D. WATERSHED PRO. & ROAD STRUC	MANAGER	155	155	155	155	155	155
	RES COORD & TECH	350	350	350	350	350	350
	OFFICE MANAGERS	200	200	200	200	200	200
	CLERK	50	50	50	50	50	50
E. TREE PLANTING	MANAGER	220	220	220	220	220	220
	RES COORD & TECH	470	470	470	470	470	470
	OFFICE MANAGERS	180	200	200	200	200	200
	NRCS CLERKS	600	600	600	600	600	600
F. GRASS SEEDING	MANAGER	10	10	10	10	10	10
	OFFICE MANAGERS	10	10	10	10	10	10
	NRCS CLERKS	20	20	20	20	20	20
G. NRCS SUPPORT PROGRAM	MANAGER	100	75	75	75	75	75
	OFFICE MANAGERS	200	200	100	100	100	100
	NRCS CLERKS	4200	4200	4200	4200	4200	4200
H. INFORMATION & EDUCATION	MANAGER	80	80	80	80	80	80
	RES COORD & TECH	650	650	650	650	650	650
	OFFICE MANAGERS	160	160	160	160	160	160
	NRCS CLERKS	100	100	100	100	100	100
I. SPECIAL PROJECTS	MANAGER	315	335	345	355	365	375
	OFFICE MGR & CLERK	240	240	240	240	240	240
	TECHNICIAN	600	800	800	800	800	800
J. WILDLIFE HABITAT	MANAGER	115	115	115	115	115	115
	OFFICE MANAGERS	20	20	20	20	20	20
	NRCS CLERKS	80	80	80	80	80	80
K. PROJECT O&M	MANAGER	55	55	55	55	55	55
	OFFICE MANAGERS	10	10	10	10	10	10
	TECH	710	710	710	710	710	710
L. POLLUTION CONTROL	MANAGER	40	40	40	40	40	40
	OFFICE MGR & CLERKS	190	190	190	190	190	190
M. ROAD STRUCTURE	MANAGER	10	0	0	0	0	0
N. ROADSIDE ERO. CON	MANAGER	10	10	10	10	10	10
O. RECREATION FAC	MANAGER	30	10	10	10	10	10
	RES COORD & TECH	250	250	250	250	250	250
	OFFICE MANAGERS	40	40	40	40	40	40
P. MO RIVER BANK ACT	MANAGER	140	120	120	120	120	120
Q. GW IRRI RUNOFF	MANAGER	10	10	10	10	10	10
R. ADMINISTRATION	MANAGER	585	595	605	645	625	635
	OFFICE MANAGERS	980	980	980	980	980	980
	NRCS CLERKS	500	500	500	500	500	500
TOTALS		25250	25495	25835	25905	25905	25895

TABLE 6 - SIX YEAR SUMMARY OF PROJECT NRD COSTS AND REVENUES

COSTS BY PROJECTS AND PROGRAM	2016	2017	2018	2019	2020	2021
A. CONSERVATION COST SHARE	65,130	90,000	90,000	90,000	90,000	90,000
B. GROUNDWATER MONITOR	420,200	300,000	300,000	300,000	300,000	300,000
C. RURAL WATER SYSTEM	7,780	15,000	15,000	15,000	15,000	15,000
D. WATERSHED PROJECTS	27,270	80,000	80,000	80,000	80,000	80,000
E. TREE PLANTING	118,600	100,000	100,000	100,000	100,000	100,000
F. GRASS SEEDING	150	2,000	2,000	2,000	2,000	2,000
G. NRCS SUPPORT PROGRAM	97,500	100,000	100,000	100,000	100,000	100,000
H. INFORMATION & EDUCATION	14,290	10,000	10,000	10,000	10,000	10,000
I. SPECIAL PROJECTS	113,020	141,000	141,000	141,000	141,000	141,000
J. WILDLIFE HABITAT PROGRAM	11,400	20,000	20,000	20,000	20,000	20,000
K. PROJECT O&M	73,800	70,000	70,000	70,000	70,000	70,000
L. POLLUTION CONTROL	4,650	4,000	4,000	4,000	4,000	4,000
M. ROAD STRUCTURES, DAMS	190	10,000	10,000	10,000	10,000	10,000
N. ROADSIDE EROSION CONTROL	120	1,000	1,000	1,000	1,000	1,000
O. RECREATION FACILITIES	5,280	50,000	50,000	50,000	50,000	50,000
P. MO RIVER BANK ACTIVITY	1,800	5,000	5,000	5,000	5,000	5,000
Q. GW IRRIGATION RUNOFF CONTROL	150	2,000	2,000	2,000	2,000	2,000
R. ADMINISTRATION	172,670	200,000	200,000	200,000	200,000	200,000
TOTAL COSTS	1167,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
SOURCE OF REVENUE						
UNENCUMBERED BALANCE	239724	100,000	100,000	100,000	100,000	100,000
STATE FUNDS	293000	150,000	150,000	150,000	150,000	150,000
LOCAL FUNDS (RENT, TREES)	140406	100,000	100,000	100,000	100,000	100,000
PROPERTY TAX	493870	850,000	850,000	850,000	850,000	850,000
TOTAL REVENUE	1167000	1,200,000	1200,000	1200,000	1200,000	1200,000

TABLE 7 - FISCAL YEAR 2016

	SOIL CONSERVATION AND EROSION CONTROL	WATER QUALITY AND POLLUTION CONTROL	SURFACE & GROUNDWATER SUPPLY & MANAGEMENT	FORESTRY & RANGE MANAGEMENT	FLOOD CONTROL	RECREATION FISH & WILDLIFE	MISSOURI RIVER	TOTAL
A. CONSERVATION COST SHARE	\$30,000	\$20,130	\$22,000	\$12,000	\$14,000			\$98,130
B. GROUNDWATER MONITOR		\$74,700	\$345,500					\$420,200
C. RURAL WATER SYSTEM		\$5,000	\$2,780					\$7,780
D. WATERSHED PROJECTS	\$5,270	\$5,000			\$10,000	\$7,000		\$27,270
E. TREE PLANTING	\$55,600			\$63,000				\$118,600
F. GRASS SEEDING				\$150				\$150
G. NRCS SUPPORT PROGRAM	\$37,500	\$17,500	\$17,500	\$17,500	\$7,500			\$97,500
H. INFORMATION & EDUCATION	\$4,250	\$3,000	\$3,540	\$500	\$2,500	\$500		\$14,290
I. SPECIAL PROJECTS	\$7,400	\$17,500	\$74,120	\$3,000			\$11,000	\$113,020
J. WILDLIFE HABITAT PROGRAM	\$5,700			\$4,200		\$1,500		\$11,400
K. PROJECT O&M	\$30,700			\$6,100	\$37,000			\$73,800
L. POLLUTION CONTROL	\$2,500	\$2,150						\$4,650
M. ROAD STRUCTURES, DAMS					\$190			\$190
N. ROADSIDE EROSION CONTROL	\$120							\$120
O. RECREATION FACILITIES						\$5,280		\$5,280
P. MO RIVER BANK ACTIVITIES							\$1,800	\$1,800
Q. GW IRRIGATION RUNOFF CONTROL			\$150					\$150
R. ADMINISTRATION	\$22,700	\$32,770	\$53,200	\$13,000	\$29,200	\$15,600	\$6,200	\$172,670
TOTAL	\$201,740	\$177,750	\$518,790	\$119,450	\$100,390	\$29,880	\$19,000	\$1167,000

TIMETABLE FOR ACTION: Fiscal Year 2016

For the purpose of giving the Board guidance in pursuing their objectives, they have designed the following schedule as a timetable for accomplishing their projects. This schedule is based on respective quarters of the year for action on each item of the Implementation Plan. Some items are ongoing and cannot be categorized into one three-month period, so will be grouped under "ongoing projects".

JULY THROUGH SEPTEMBER

1. Continue recreation planning on Powder Creek Project. Also, work on operation and maintenance in watershed.
2. Inspect Wildlife Management Areas. Check on signs, gravel, and other maintenance needs.
3. Provide information on Deep Soil Testing Program to encourage use and benefits for fertilizer management.
4. Follow up on chemigation inspections - normal and enforcement.
5. Inspect Buffers Strips and Habitat Program areas for signs of vandalism or violations.
6. Obligate and administer cost share programs under the State Soil and Water Conservation Act and Lewis and Clark NRD programs.
7. Work on administration of rural water project, revenue analysis, treatment modifications and exercise valves.
8. Monitor Sealed Well Abandonment Program activities for performance and payment.
9. Take Groundwater Quality Samples and analyze results.

OCTOBER THROUGH DECEMBER

1. Accept Habitat Program contracts as available and correlate information with Nebraska Game and Parks Commission.
2. Work with all groups on Missouri River planning efforts
3. Provide tree planting costs and information to requesting cooperators in the District, bulk order spring trees needed.
4. Hold annual meeting and make awards presentation.
5. Monitor irrigation wells in the District for static levels and report measurements.

6. Follow up on Meridian Trail planning and maintenance
7. Follow up on Powder Creek maintenance in Aowa Creek Watershed.
8. Follow up on Cedar Knox Rural Water Project Plan of Operation and coordinate options for rural water service elsewhere
9. Administer and coordinate Groundwater Management Plan updates in Creighton area and for NRD.

JANUARY THROUGH MARCH

1. Make payment to Habitat Program cooperators and approve acres for new contracts.
2. Administer and organize tree planting operations, including tree purchase and sales.
3. Send representatives to national convention to educate and broaden the outlook of local NRD.
4. Distribute request for Patefield - Green Scholarship applications to District schools to be presented by NRD Directors.
5. Review management programs in Bazile Groundwater Management Area
6. Organize Chemigation inspections and issue permits.

APRIL THROUGH JUNE

1. Monitor irrigation wells in the NRD for static levels and report measurements to U.S. Geological Survey Division.
2. Plan conservation education programs.
3. Assist landowners in tree planting operations.
4. Distribute resources stewardship material to district churches.
5. Extend youth scholarships to resident students for ACE Camp
6. Coordinate rural water project activities as needed.
7. Present Patefield-Green scholarships to four outstanding seniors in the NRD at \$500 each.
8. Conduct and coordinate chemigation inspections on new and renewal permit applications.
9. Implement and administer complaint process under Groundwater Management Act, as well as Sediment and Erosion Control complaints.

10. Make annual inspection of Aowa Watershed structures and perform necessary operation and maintenance.

CONTINUOUS YEAR AROUND PROJECTS UNDERTAKEN BY THE NRD:

1. Provide schools with NACD Conservation Booklets and teacher guides.
2. Provide schools, churches, and local groups with films and slide shows on NRD activities.
3. Attend state and local meetings to provide guidance, inform public, and educate our efforts toward conservation.
4. Distribute periodic news releases on activities of the NRD.
5. Coordinate water quality studies and problems and work with communities and other NRDs on groundwater modeling efforts.
6. Coordinate and participate in other agency activities relating to natural resource problems and developments.
7. Review budget documents as well as Long Range Implementation Plan, Master Plan, Sediment & Erosion Control Plan and Groundwater Management Plan for revision and implementation. Also revise NRD Rules and Regulations and Policies as determined by NRD Board.
8. Monitor activity of the Corps of Discovery Welcome Center for proper fiscal management and quality public service.
9. Process Well Permit Applications and follow up on Certified Acres, flow meters and other permit requirements.

SUMMARY

The Master Plan put together by the Lewis and Clark Natural Resources District Board of Directors is designed to be practical and workable. It is the hope of the Board to obtain the cooperation and interest of all other agencies and the public in pursuing its goals and objectives in the same manner as we have received in the past.

It is the sincere intention of this natural resources district to do a thorough and equitable job of maintaining and developing the resources of this district. With the help and assistance of concerned individuals working toward preserving our natural resources, we can achieve that purpose for which we are in existence.