

Middle Niobrara Natural Resource District



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Natural Resources Districts
40 YEARS

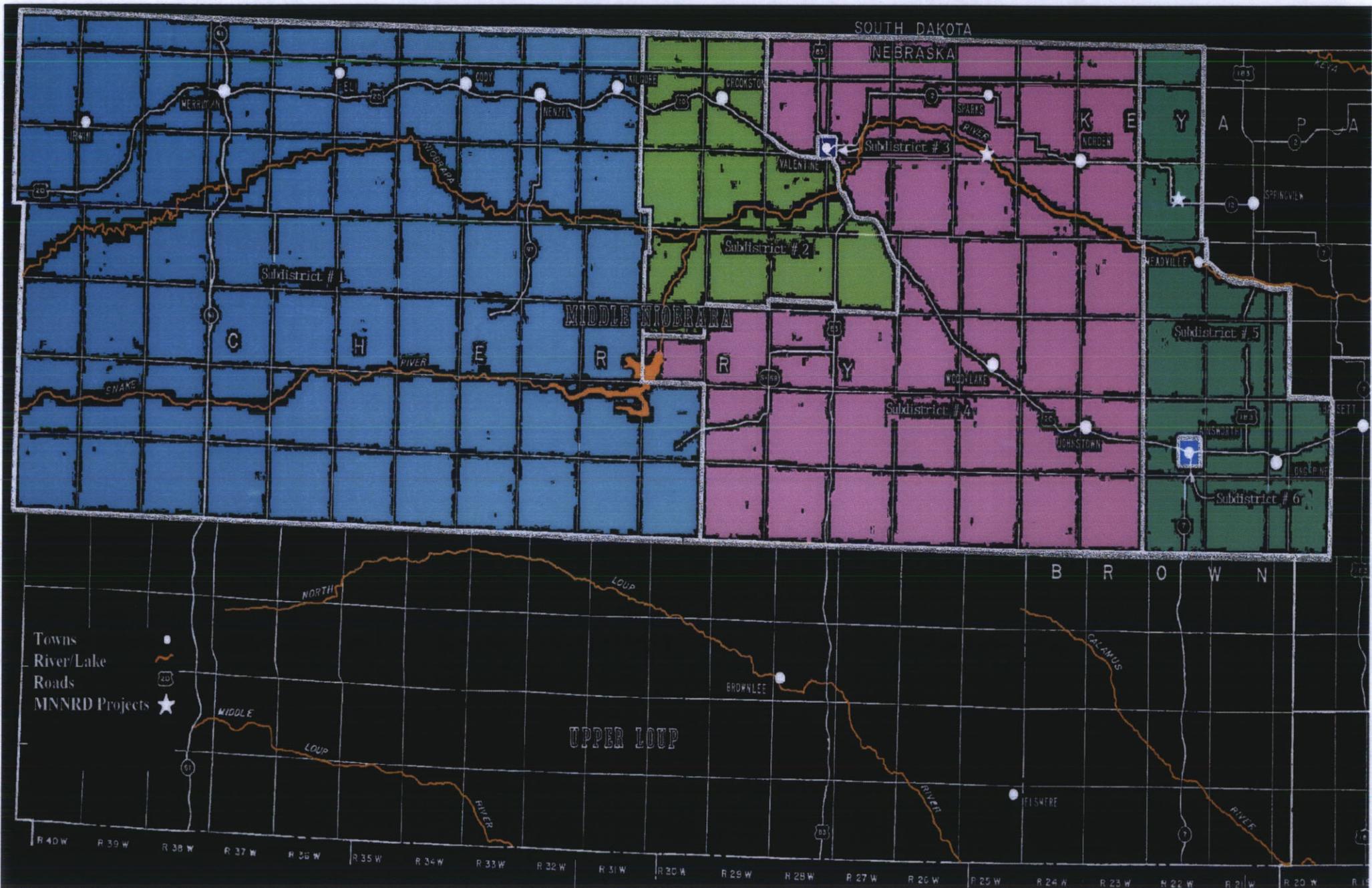
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Master Plan 2012

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DEPARTMENT OF
NATURAL RESOURCES



The Middle Niobrara Natural Resource District

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NRCS Clerk

The Middle Niobrara Natural Resource District

On July 1, 1972, over 150 special purpose districts in Nebraska were merged to form 24 natural resources districts. In 1989, the Middle Missouri Tribes and Papio Missouri NRDs were merged reducing the number of districts to 23. With boundaries generally utilizing Nebraska's river basins, NRDs are empowered to provide for effective planning, development, and management of the state's natural resources. Districts have the authority to levy up to 4.5 cents per 100 dollars of valuation in property taxes. This provides funding for a wide variety of programs and to hire staff to carry out these activities.

As stated in Chapter 2-3229 of the revised Statutes of Nebraska, the purpose of natural resources districts shall be to develop and execute, through the exercise of powers and authorities in this act, plans, facilities, works and programs related to:

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

The Middle Niobrara Natural Resources District's main office is located in Valentine, which has a staff of 5. In addition, the District has a sub-office in Ainsworth, which is utilized for storage and services, and a clerk is provided to the Natural Resources Conservation Service offices in Ainsworth and Valentine.

A board of directors ranging from 7 to 21 members governs each NRD in Nebraska. The Middle Niobrara NRD board consists of 7 members, 6 from designated sub-districts and 1 at-large. They meet once a month and are responsible for making the administrative and policy decisions. Each year, a budget is developed and approved by the board. The budget outlines the property tax revenue necessary to maintain the present programs and services as well as other sources of income such as sales, services and grants. Typically, the Middle Niobrara NRD budget is \$1,000,000.

Background

The Middle Niobrara NRD is located in north central Nebraska and includes portions of Brown, Cherry, Keya Paha and Rock Counties. With an area of 2.9 million acres, it is one of the larger districts in the state, but is one of the least populated. Some of the towns in the district are Merriman, Cody, Nenzel, Kilgore, Crookston, Valentine, Sparks, Norden, Wood Lake, Johnstown, Ainsworth, Meadville, and Long Pine.



Approximate Area in the Middle Niobrara NRD, by County

Cherry County	2,396,160 acres
Brown County	389,760 acres
Keya Paha County	167,040 acres
Rock County	30,720 acres
Total	2,983,680 acres (4,662 sq. miles)

Although the district is physically large in size, it is sparsely populated. Approximately 9,100 persons reside in the NRD with 60% living in cities or villages. In recent decades, Brown, Keya Paha and Rock counties have seen population declines, with Cherry County enjoying a small increase.

Precipitation and Climate

The Middle Niobrara NRD is in an arid to humid continental climatic zone. Temperatures can range from -30 to 110 degrees Fahrenheit. Summer highs tend to range from the low 80s to mid 90s with occasion periods of hotter weather. In the winter the average high ranges from 20 to 30 degrees. It is common for the lows to drop below zero during the winter months.

Precipitation ranges from 17 inches in the western portion of the NRD to almost 23 inches in the Brown - Rock County area. Most of the precipitation in the District falls during the months of May, June and July. Average annual snowfall is around 33.5 inches; however it can vary greatly from year to year depending on weather patterns.

Average Annual Precipitation

Ainsworth	23.1 inches
Valentine	19.5 inches
Merriman	18.6 inches

Average Temperature

(Valentine)

January	20.8 degrees
April	46.1 degrees
July	73.7 degrees
October	48.3 degrees

Topography

There are 4 major topographic regions in the Middle Niobrara NRD. The largest is the Sandhills, which covers 60% of the District. The Sandhills is a complex of once active sand dunes that have been stabilized as a result of increased vegetation. Although the Sandhills landscape may differ depending on the location in the NRD, they are typically a series of steep hills divided by long valleys. In most cases the valleys are made up of meadows, meandering streams or shallow lakes supplied by groundwater.

The Dakota - Nebraska Eroded Tableland is a 200,000 acre area lying north of the Niobrara River in northeastern Cherry and western Keya Paha Counties. This plain is nearly level to gently rolling with steeper slopes near streams and drainage ways.

The Ainsworth - Long Pine Table consists of approximately 50,000 acres located in western Rock and northern Brown Counties. This region is gently sloping nearly level with numerous drainage ways. Slopes become steeper near the drainage ways. The level topography combined with sandy loam to loamy soils has made this landform well suited for cropland.

A fourth topographic region is the Niobrara River Valley, which splits the entire NRD from west to east. The Niobrara River topography consists of a canyon 150 to 350 feet in depth with numerous breaks and tributaries. Streams supplied by groundwater feed into the Niobrara River across the entire NRD. The microclimates produced by the topography and tributary streams have resulted in several unique ecosystems along the river.

Resources

The Middle Niobrara Natural Resources District is located on the northern edge of the Sandhills, a unique region made up of an extensive system of sand dunes which have been stabilized by grass and other vegetation. The topography and sandy nature of the soil limits use of this area to livestock grazing. In the past, some attempts have been made to grow row crops in the Sandhills, most meeting with little if any success. The quality of the range in the Sandhills is dependent on the weather and the management practices implemented by the producer. The leaching potential is so high in this area, the groundwater resource is plentiful and of high quality. Pressure caused by drought has forced water resources to be analyzed and many individuals have sought out irrigation possibilities especially after being deemed fully appropriated in October 2007 and were just recently reversed in June 2011, with the new LB 483.

Cropland in the NRD is greatly limited by the topography and soil type. The biggest area of cropland is located on a table area near Ainsworth. There are a number of smaller areas of cropland throughout the District including in Keya Paha County, northeast Cherry County, an area known as German Settlement southwest of Crookston and in the far western portion of Cherry County.

Geology

During the Cretaceous period 65 to 100 million years ago shallow seas covered the Great Plains region. It was during this time that sediments were deposited that formed the Dakota Sandstones and Pierre Shales. Other formations such as the White River group were formed a result of windblown volcanic deposits during a period 25 to 35 million years ago. More recent formations such as the Ogallala resulted when alluvial deposits originating from mountainous areas of Colorado and Wyoming were deposited in the Great Plains.

The development of the sand dunes is a relatively recent event. It is estimated that they were first formed 10,000 to 15,000 years ago from windblown sands that had been deposited in earlier periods. During this timeframe, it is believed that limited precipitation (estimated by some as less than 10 inches per year) prevented vegetation from stabilizing the dunes thus they were very active. It has been suggested that the sand was still very active into the 16th century. As precipitation increased, vegetation became more abundant and stabilized the sand dunes.

Soils

Soil types in the NRD are closely related to the topography. Sand dunes in the Sandhills topographic region are mainly sand and fine sands. Soils in Sandhills valleys differ from the dunes as they have greater loam content with most of the soils being loamy sands or sandy loams. Valentine fine sand is the predominant soil in the Sandhills

The Dakota - Nebraska Tableland includes some of the sands and fine sand soils common in the Sandhills combined with sandy loam and loamy sand soils. Valentine fine sand and Ronson-Tassel sandy loam are common soils in this topographic landform. Most soils in the Dakota - Nebraska Table are extremely shallow with little more than a foot of topsoil lying over gravels and sandstone.

The Ainsworth - Long Pine Table soils differ greatly from the surrounding Sandhills. Most of the soils are loam and sandy loam in texture. Johnstown loam and O'Neill loam are common soils found in the Ainsworth - Long Pine Table Soils near drainage ways and at the boundary of the Sandhills region generally do have a greater sand component.

Perhaps the most unique soils in the Middle Niobrara NRD can be found in the Niobrara Valley region. A combination of sands, silts and loams can be found in the valley. Erosion has caused many soils to be shallow to gravel or sandstone. Examples of soil common to the Niobrara Valley include Tassel, Ronson and Duda soil types. It should be noted that soil types in the Niobrara Valley differ from the east to west with sandier soils such as the Valentine fine sands more common in the west.

Native Vegetation

Since rangeland makes up over 90% of the land in the Middle Niobrara NRD, it stands to reason that native grasses are the predominant vegetation. The most common grasses found in the District are native warm season grasses such as sand bluestem, little bluestem, sand lovegrass and prairie sandreed. Areas where loamy soils are more common, would include warm season grasses such as blue grama and buffalo grass

The Niobrara River Canyon has created a series of unique ecosystems as a result of the different microclimates that occur because of heat, humidity and sunlight. Trees such as oak, birch and ash are common on the south side of the river. On the warmer north side, Ponderosa pine and Eastern Red Cedar are more predominant.

Groundwater

Two major aquifers are present in the Middle Niobrara NRD, the Ogallala and Dakota Aquifers. A third minor aquifer, the Arikaree can be found in the far western part of the NRD on the Cherry/Sheridan County line.

The Ogallala aquifer can be found under almost 80% of the District. It is the major source of water for irrigation, stock and domestic wells in the NRD. Under normal conditions the Ogallala Aquifer provides an ample supply of high quality groundwater. Even though precipitation is limited in the NRD, the high permeability of the sandy soil allows for high recharge rates. Depth to water in the Ogallala Aquifer is highly dependent on the topography. It can range from near the surface to over 200 feet.

The Dakota aquifer is a principle source of water in the Dakota-Nebraska Eroded tableland region in northeastern Cherry and western Keya Paha Counties. Depth to groundwater ranges from 50 to 200 feet. Yields vary from small to moderate with only small areas producing water sufficient for irrigation. In general the Dakota Aquifer is of lesser quality than the Ogallala.

The Arikaree Aquifer is present in the far western portion of the District and it is the eastern edge of a major aquifer that extends to the west. Wells tend to be deeper then the Ogallala with the normal depth to water ranging from 50 to 100 feet.

Project and Program History

1975 - Moody-Fernau Dam

The District worked with several landowners, NRCS and Brown County to construct the Moody-Fernau flood control dam near Ainsworth. The dam replaced a county road bridge and the total cost of the project was \$28,000.

1975 - Snyder/Johnson Dam

The District worked with several landowners, NRCS and the Ainsworth Irrigation District to construct a dam near Johnstown to collect irrigation tailwater and reduce downstream erosion. Total cost of the project was \$15,200. Project costs were divided among the NRD, 4 landowners and the irrigation district.

1976 - Sandhills Rod and Gun Club

The District worked with the Community of Ainsworth and the Sandhills Rod and Gun Club to develop a shooting sports facility east of the community. Total cost of the project was \$38,000 with a grant provided by the Land and Water Conservation Fund providing much of the assistance.

1976 - Paul Goodwin Flood Control Structures

The District worked with Paul Goodwin to construct 2 flood control structures south of Kilgore.

1978 - Cub Creek Recreation Area

Cub Creek Recreation Area, located 8 miles west of Springview, represents one of the largest projects the District has sponsored. Partnering entities included the NRD, Keya Paha County, Nebraska Department of Transportation, and the Village of Springview. A dam was constructed on Cub Creek to create a reservoir of 31 acres. State Highway 12 was routed over the dam. The property consists of 300 acres, which is used for recreational purposes. Roads, picnic shelters and vault toilets were installed as part of the project. Total cost of the project approximately was \$320,000 with funds coming from several different sources including the Nebraska Department of Roads, Nebraska Resources Development Fund and RC&D.

1980 to 1990 Roadside Critical Area Treatments

During the 1980's the District co-sponsored several RC&D projects that addressed roadside erosion problems throughout the NRD. Some of those projects included: Willow Creek near Long Pine, Fish Hatchery Hill near Valentine, Cedar Street in Wood Lake, Sparks Hill south of Sparks, Long Pine Hill near Long Pine and McCullough Hill in Brown County. In most case a series of inlets and underground pipe would be installed to better channel runoff water from the road to an outlet point. Cost ranged from \$10,000 to \$50,000 depending on the size of the project. The RC&D program provided funding for these projects.

1980 to 1996 - County Soil Surveys

During this timeframe, modern soil surveys were completed in Brown, Cherry, Keya Paha and Rock Counties. To accelerate fieldwork, the NRD along with UNL Conservation and Survey, NRCS and the respective counties provided funding to hire additional soil scientists. Keya Paha County was completed in 1980, Rock County in 1985, Brown County in 1992 and Cherry County in 1996.

1981 - West Sand Draw Road Structure

The District cooperated with the North Central Nebraska RC&D, NRCS, Brown County and the Ainsworth Irrigation District on the construction of the West Sand Draw Road Structure located north of Johnstown. It provided several benefits including flood control, reducing erosion and improving the safety of a county road. Most of the project cost was provided through a grant from RC&D.

1981 to 1991 - Long Pine Rural Clean Water Project

As part of the federal Rural Clean Water Program (RCWP), the Long Pine Creek watershed located in northeast Brown and western Rock Counties was one of 21 watersheds nationwide targeted for federal assistance. 1.3 million dollars was provided to landowners over a 10 year period to implement best management practices that helped reduce non-point source pollution. The NRD was one of several agencies and landowners that sat on a committee to help administer the project. At the completion of the effort, surface and ground water monitoring was done to determine the impact the project had on water quality. Results showed that the project did have some positive impacts, largely to surface water quality.

1984 - Fishberry Canyon and Government Canyon Dams

Fishberry Canyon and Government Canyon Dams were constructed north of Valentine to reduce erosion and flooding on streams that feed the Valentine Fish Hatchery. The projects were constructed with the cooperation of landowners who provided land for the dams. Total Cost of the projects was approximately \$250,000 with the funding provided through the RC&D program.

1985 - Groundwater Management Plan - Quantity

In accordance to state statutes, the District developed a groundwater management plan to manage and protect groundwater quantity in the District. Much of the plan involved data gathering on the NRD's groundwater resource. The plan was developed with assistance from an engineering firm.

1986 - 7th and Macomb Critical Area Treatment

The 7th and Macomb project in Valentine was installed as part of an effort to reduce erosion caused by the runoff from the communities' storm sewer system. The storm sewer outlet point was extended and dropped in elevation to allow it to outlet into Dead man's Canyon. Cost of the project, which was funded by the RC&D program, was \$19,300. The City of Valentine also participated as a co-sponsor.

1987 - Valentine Northwest #2 Critical Area Treatments

Along with the City of Valentine and North Central RC&D, the NRD co-sponsored a project that extended a storm sewer 1,000 feet and resulted in an outlet into the Valentine Mill Pond. Previously the storm runoff water would travel down a large slope resulting in a considerable amount of silt being deposited into the reservoir. Cost of the project was \$145,000, with most of the assistance being provided by the federal RC&D program. The NRD provided \$6,000 in assistance.

1987 - Administration of the Nebraska Chemigation Act

Beginning in 1987, state statutes required that irrigation systems used to apply chemicals be permitted. Approved safety equipment was also required to reduce the potential for contaminating ground and surface water. The District administers the program locally for the State, handling permit applications and completing inspections.

1987 - Ainsworth Irrigation District Secondary Storage Reservoir

The RCWP Local Coordinating Committee identified excess irrigation runoff water from cropland into the Long Pine Creek Watershed as a key concern. To address this problem a secondary storage reservoir was constructed near Johnstown which allowed excess water from the Ainsworth Irrigation District canals to be diverted into the facility for temporary storage. The district partnered with the Ainsworth Irrigation District and Long Pine RCWP to construct this project. Funds for the project were generated through grants from the RCWP program and Nebraska Natural Resources Development Fund.

1988 to 1995 - Pine Ridge Environmental Institute

The District was one of 5 NRDs that helped sponsor the Pine Ridge Environmental Institute, a teacher's workshop held annually at Chadron State College. Lessons provided teachers with a better environmental background as well as offered them ideas on how they could incorporate natural resources into their classroom. Teachers attending the 2 week event received college credit for their participation. Each sponsoring NRD provided \$1,000 plus made scholarships available to teachers. Chadron State provided instructors as well as classroom facilities.

1990 - Bone Creek Livestock Waste Loading Assessment Study

Concerns had been raised regarding the levels of coli-form bacteria in Bone Creek, a tributary of the Long Pine Creek watershed located north of Ainsworth. Several feedlots, as well as the outflow from the Ainsworth sewage treatment plant, are located in a 2 mile segment of the stream. Samples were collected at 8 sites by NRD staff on a monthly basis and following runoff events for a 12 month period. The Nebraska Department of Environmental Quality assisted with the project providing funding to cover the NRD's expenses. DEQ is planning to include the results of the project in a report that is being developed as part of the Long Pine RCWP water quality assessment study.

1991 - Niobrara River Access Areas

In response to the growing recreational use of the Niobrara River, the District was involved in constructing 2 access areas along the Niobrara River east of Valentine. The first site, which is owned by the NRD, is located at Brewer Bridge south of Sparks. Facilities include restroom, parking, a launch area, picnic tables and drinking water. The District worked in partnership with the U.S. Fish and Wildlife Service to upgrade facilities at Cornell Bridge near the entrance to the Ft. Niobrara Wildlife Refuge. That site includes parking and restroom facilities. A portion of the funding for both projects was provided by the Nebraska Resources Development Fund.

1991 - Niobrara River

On May 24, 1991, the Niobrara River was designated by the United States President (George Bush Sr.) as a National Scenic River.

1992 - Cody Park Development

Cody was interested in upgrading restroom and shower facilities in their park. The NRD provided the community \$1,500 to assist with the project.

1993 to 1995 - Lone Pine RCWP Post Project Monitoring

As a follow-up to the Long Pine Rural Clean Water Project, the District assisted the U.S Geological Survey and Nebraska Department of Environmental Quality by providing assistance for field work. The NRD aided USGS with locating groundwater monitoring wells throughout the project area. USGS sampled those well sites for a 12 month period. These wells are now used by the NRD as part of their groundwater monitoring program. DEQ was responsible for completing the surface water assessment portion of the study. The NRD provided field staff to collect water samples over a 2 year period at sites throughout the Long Pine Creek watershed.

1994 to 1998 - WQIP-STEAP

Federal WQIP funds were secured to assist producers in the Ainsworth Irrigation District with implementing best management practices that reduce surface and groundwater contamination. To provide technical assistance for producers to carry out the project, the NRD received a federal 319 non-point source pollution grant totaling \$62,000. Most of the funds were used to hire a water quality technician for the 4 year life of the project.

1994 to 1996 - Valentine Mill Pond Phase 1 Clean Lakes Study

The District applied for and received \$65,000 from the federal Clean Lakes program to study the feasibility of renovating Valentine Mill Pond. EA Engineering was hired by the NRD to complete the study. Much of the study involved the collection of background data on water quality, precipitation, and plants. They also looked at the structural integrity of the dam and developed scenarios for renovating the lake. NPPD provided technical assistance for the project. A final report was published in 1996.

1995 - Groundwater Management Plan

The State required that all NRDs revise their groundwater management plan to include groundwater quality. Work on the plan was started in 1993 and completed in late 1995, when the Department of Water Resources approved it. In addition to incorporating information regarding groundwater quality, the NRD revised most of the quality portion of the plan. The plan outlined the need for a groundwater management area to address nitrate contamination.

1996 – Dead man’s Canyon Project

Following the completion of the 7th and Macomb project, it was determined that it would be beneficial if the storm sewer could be extended an additional 1,500 so it could outlet into Minnechaduza Creek. This would eliminate erosion that was occurring in Dead man’s Canyon north of Valentine. The NRD along with the City of Valentine received an \$81,000 Environmental Trust grant to complete the project. The final cost of the project was \$116,000. Project engineering was provided by NRCS.

1996 - Long Pine Headwaters Project

The District worked with a landowner south of Long Pine to install 2 experimental gabion structures in an attempt to reduce stream head cutting that was occurring. After heavy rain for 3 consecutive years it was determined that the structures would not work at the site and they were removed. Funding was provided through the federal 319 non-point source pollution program.

1998-Present - Monitoring Wells

To assist the NRD in collecting groundwater data, 52 dedicated monitoring wells were drilled across the Middle Niobrara District. The wells are used to collect water samples and measure changes in water levels. Currently have installed 38 of dedicated down well data loggers and continue to find funding to have one devoted to each monitoring well.

1999 - Well Decommissioning

The NRD used Natural Resources Enhancement Funds to provide cost share to several landowners who decommissioned wells.

1999–2001 - Valentine Mill Pond Restoration

For almost 30 years, there was interest in renovating the Valentine Mill Pond on the north edge of the community. Years of sedimentation had filled in the 30+ acre reservoir, which had many historical uses including swimming, fishing, boating and power generation. Partnering with the City of Valentine, Cherry County, Nebraska Game and Parks Commission, Nebraska Public Power District and adjacent landowners, a grant of over 1 million dollars was acquired through the Nebraska Environmental Trust. The total cost of the project is estimated at 1.4 million dollars and was completed in 2001.

1999 - Groundwater Management Area Establishment

The District board approved the establishment of a district-wide groundwater quality management area effective January 1, 2000. This was done in an effort to address problems with nitrate contamination in some parts of the NRD. Special requirements were put in place to better manage the application of nitrogen fertilizer. Additional monitoring and assistance programs will also be implemented to address the concern.

2002-2005 – Sedimentation Removal System

In 2002, a sedimentation removal system was setup at the Valentine Mill Pond. This project was finished in 2005 to help the Mill Pond from filling up with sediment.

2004- 2 Automated Weather Stations

In 2004, two Automated Weather Stations were installed one of which is located North of Sparks on County/State line and the other located South of Merritt Reservoir off of the Brownlee Road. This was a partnership with High Plains Climatology, UNL, Cherry & Keya Paha Counties, ULNRD, Farm Credit Services, and Sandhills Task Force. These stations continue to be maintained yearly.

2005 - County Soil Surveys

County soil surveys have been updated and made electronic.

2006 – Big Rock Fire

In the summer of 2006, a large fire known as the Big Rock Fire swept through the area and part of the city of Valentine burning homes and trees. The Middle Niobrara NRD as well as the help of the community, schools (FFA), city of Valentine, NWTF, and RMEF has successfully been replanting trees/shrubs in the burnt area. Over 18,000 trees/shrubs have been planted to help renovate the area and efforts will be continued.

2007 – Preliminarily determined fully Appropriated

In the fall of 2007, the Middle Niobrara NRD approved rules requiring certification of irrigated acres.

2008 - Designated Fully Appropriated

The Middle Niobrara NRD District along with others became fully appropriated on January 25, 2008. This meant no new irrigated acres or uses greater than 50 gpm could be allowed. In February 9, 2008, The MNNRD and 3 other NRD's contested the NDNRs Fully Appropriated Status. Certification of irrigated acres determined that the MNNRD has 128,265 irrigated acres.

- 91,628 Groundwater
- 29,652 Surface water
- 6,985 Combination

2011 – Reversal of Fully Appropriated Designation

On June 3, 2011, the Nebraska Supreme Court reversed the fully appropriated designation. After that on June 29, 2011, the NDNR notified the District that they have 120 days to come up with rules and regulations to comply with LB 483.

2011 – MNNRD’s rules/regulation complying LB 483

Rules/regulations complying with LB-483, governed new irrigated acres or equivalent water use for the next 4 years allowing up to 10,000 acres, or 2,500 acres per year.

2012 – Trees Planted throughout the District

Since the tree program has started the Middle Niobrara NRD has planted 2,278,945 trees/shrubs since 1980, along with laying 516 miles of fabric.

2012 – Happenings

- Due to the hot, dry summer, many fires have taken place across the district. The Fairfield Creek Fire burnt some 66,000 acres.
- McKelvie National Forest/ Merriman Fires burnt a combined 86,000 acres.
- Updated and revised LB 483 rules prior to the new sign-up period on August 6th.
- NRD’s partner to purchase lot and building at Husker Harvest Days near Grand Island.



Future Projects

- Completion of LiDAR for MNNRD.
- Continuing water shed plans for Long Pine Creek.
- Expansion of Middle Niobrara NRD building and lot.
- Enhancing information/education opportunities throughout the district.
- Continuing efforts to collect and interpret data of water quality and quantity district wide.
- Continuous efforts on planting trees/shrubs throughout the district

District Partners

Natural Resources Conservation Service

NRCS has provided technical assistance to the NRD, since it was formed in 1972. Assistance has included engineering on larger projects, technical assistance with the Nebraska soil and Water Conservation Program, designs for tree plantings and assistance with educational programs. Two offices serve the Middle Niobrara NRD, one in Valentine and another in Ainsworth. NRCS was formally known as the Soil Conservation Service.

University of Nebraska at Lincoln (UNL) Cooperative Extension

The NRD has worked with both the Cherry County and BKR Cooperative Extension offices on many projects over the years. Most of the projects have focused on educating the public and producers on natural resources related issues and concerns. The NRD and Cooperative Extension have also worked together on numerous projects that better promote education to students in the NRD.

Nebraska Association of Resources Districts (NARD)

The NARD has been coordinating/consolidating the NRD activities, I & E, and NRD programs.

North Central RC&D

The District is a member of the North Central Nebraska RC&D. During the late 70's and 80's, the RC&D program provided a considerable amount of assistance towards soil and water conservation projects. Many of these projects were too large for any local entity to address so they would not have been completed without the assistance from RC&D. In the 90's, RC&D funding for projects decreased, so they have directed more of their attention towards assisting communities with economic development. The RC&D came to an end in 2011.

Other partners

There have been numerous other agencies and groups that have assisted the NRD over the years. They include state agencies such as the Nebraska Department of Environmental Quality, Nebraska Natural Resources Commission, University of Nebraska Conservation and Survey Division, Nebraska Game & Parks Commission, Nebraska Forest Service, and Department of Water Resources. Federal agencies such as the National Park Service, Environmental Protection Agency, U.S. Fish and Wildlife Service and National Forest Service have been partners in several projects that the NRD has been involved with. Locally, the NRD has worked with all 4 counties within its boundaries, communities, and school districts.

Goals and Objectives

Soil Conservation and Erosion Prevention

Goal

Promote and Develop programs that protect the soil from water and wind erosion.

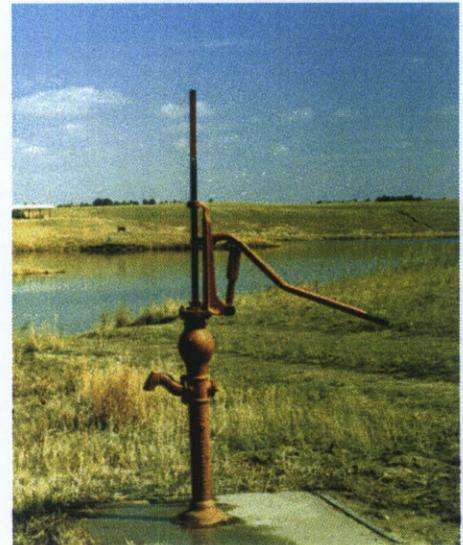
Objectives

- Encourage landowners and producers to use soil conservation practices
- Provide technical support to District cooperators using available sources from the NRD and NRCS offices
- Administer the District's Erosion and Sediment Control Program.
- Provide district cooperators access to cost share assistance to implement best management practices that reduce soil erosion
- Provide clerical assistance to NRCS offices in (KBR) and Cherry Counties
- Work with cooperators and other agencies to identify and address soil erosion problems on private and public lands promoting the best management practices
- Promote the importance of controlling erosion to District cooperators using local newspapers, radio and the NRD newsletter

Ground and Surface Water Management

Goal

Protect and enhance surface water and manage groundwater resources in accordance to the District's groundwater management plan.



Objectives

- Carry out programs as described in the District's groundwater management plan.
- Update and revise the groundwater management plan as required or deemed necessary.
- Educate the public on the importance of maintaining a good supply of surface and groundwater.
- Continue and expand monitoring programs to collect data on the status of the District's surface and groundwater resources.
- Share the results of monitoring with the public.
- Promote farming and ranching practices that reduce or prevent the contamination of surface and groundwater.
- Provide District cooperators with access to cost share assistance to aid with implementing management practices that protect surface and groundwater.

- Work with communities to implement programs that protect public drinking water supplies.
- Work with District cooperators and the Department of Environmental Quality to carryout requirements of the Nebraska Chemigation Act
- Promote the importance of, and provide assistance for, properly decommissioning abandoned wells in the NRD.

Flood Control

Goal

Work with the public to minimize damages to property and natural resources caused by flooding.

Objectives

- Maintain and make available to the public information on flood plains in the District.
- Promote efforts to limit the construction of buildings and other high risk structures in flood plains.
- Work with counties and communities who seek assistance in reducing damages caused by flooding

Range Management

Goal

Develop and promote programs that enhance the district's grassland resources.

Objectives

- Work with other agencies and partners to educate the public on the use of proper range management practices.
- Work with NRCS, Extension and other partners to develop, adopt, and promote the best and most appropriate range management practices for the NRD.
- Provide District cooperators with access to cost share funds to assist with implementing appropriate range management practices.
- Promote and support range education activities for both youth and adults.



Tree Planting and Forestry

Goal

Promote and establish programs that encourage tree planting and educate the public on the importance of trees.



Objectives

- Promote the importance of trees and tree planting to the public
- Assist cooperators with the design and layout of new windbreaks.
- Assist the public with selecting appropriate tree species for the area.
- Provide trees and tree planting services to cooperators at a reasonable price.
- Provide district cooperators with access to cost share assistance to aid with planting and maintaining windbreaks.
- Assist cooperators with maintaining existing windbreaks, identifying diseases and pest problems that occur in trees.
- Assist cities and villages with community tree planting projects.

Recreation

Goal

Promote, maintain and assist the development of outdoor recreation facilities when they are deemed necessary and in the best interest of the public.

Objectives

- Operate and maintain all District recreation facilities
- Examine opportunities and the feasibility for developing new recreation facilities to meet public needs.
- Review the potential for the development of recreational facilities as a component of projects proposed in the future.
- Work with communities to provide appropriate technical and financial assistance on park, trail and other recreational facilities being developed by those entities.



Wildlife Habitat

Goal

Recognize the importance of wildlife and wildlife habitat, using appropriate means to maintain habitat throughout the NRD.



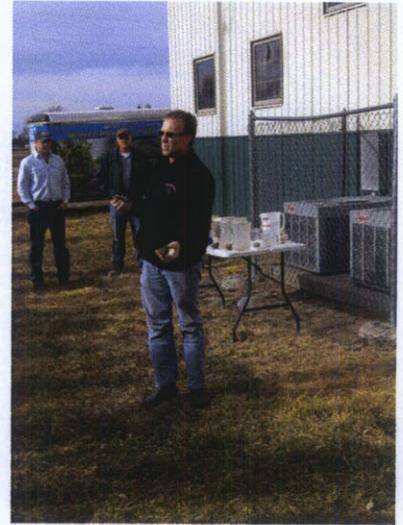
Objectives

- Work with landowners desiring to develop or improve wildlife habitat on their property.
- Work with Game and Parks, Pheasants Forever and other partners to make available assistance to landowners desiring to develop/enhance wildlife habitat.
- Provide cooperators with access to grasses, plants, trees and shrubs that are beneficial to wildlife in the District.
- Consider the needs of wildlife and develop appropriate habitat on District owned property.
- Work with local, state and federal partners to find methods to protect threatened and endangered species while balancing the needs and demands of landowners and producers.

Information and Education

Goal

Inform and educate the public about the importance of natural resources conservation.



Objectives

- Provide appropriate information to the public regarding the District's program and projects using newsletters, brochures, newspaper articles and radio.
- Promote educational programs for District schools and teachers
- Make scholarships available for students, teachers and producers that attend classes, seminars, workshops and other events that provide natural resources related education.
- Maintain award programs that honor individuals and families for contributions made towards conserving the District's natural resources.
- Keep District partners informed about NRD programs and assist them with the promotion of their programs and projects.

Maintenance and Operations

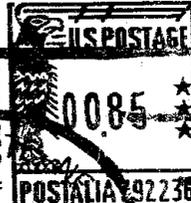
Goal

Establish programs that keep the District properties, buildings, vehicles and other equipment maintained in an appropriate manner.

Objectives

- Keep maintenance records on district vehicles and equipment
- Perform maintenance and repairs to District vehicles and equipment on schedule and when determined necessary.
- Establish a maintenance plan and regularly inspect recreational facilities, structures and other properties owned or operated by the District.
- Carryout regular maintenance and repairs to recreational facilities, structures and other properties owned or operated by the District.
- Perform maintenance requirements on a routine basis and upgrade or repair District office buildings as determined necessary.

Middle Niobrara NRD
526 E 1st
Valentine, NE 69201



Department of Natural Resources
301 Centennial Mall South
P.O. Box 94676
Lincoln, NE 68509-4676

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DEPARTMENT OF
NATURAL RESOURCES

