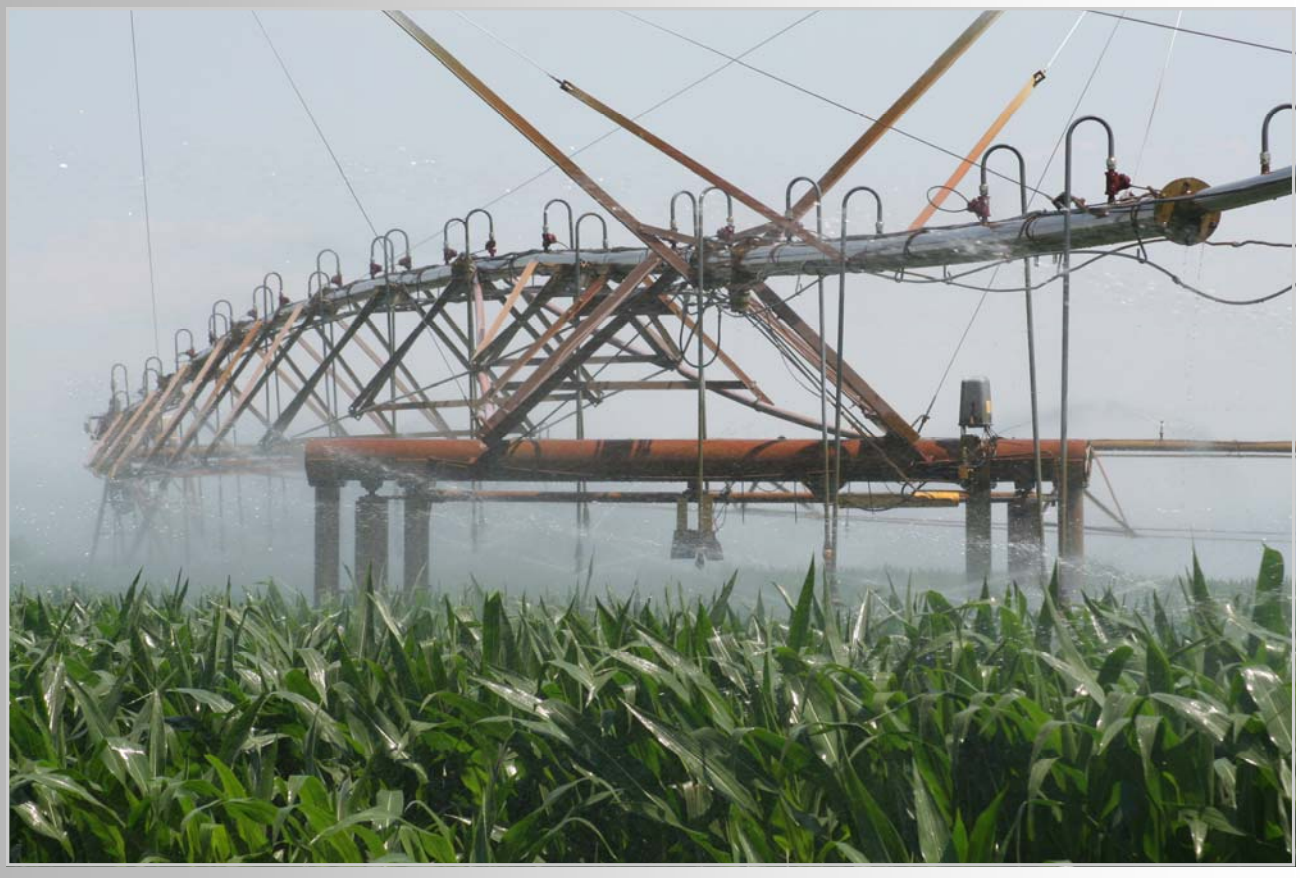
Long Range Implementation Plan

For Fiscal Years 2014-2019



Central Platte Natural Resources District

This Plan was approved by the board of directors on November 20, 2014

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I. District Authority

The Central Platte Natural Resources District is required to prepare and adopt a long range implementation plan under the Nebraska Natural Resources District Act. This plan summarizes the planned district activities and includes projections of financial, manpower and land right needs of the district for the next five years, as well as a specific needs assessment upon which the NRD's long range implementation plan is reviewed and updated. For planning purposes, areas of responsibilities are consolidated under the act into the nine categories that are listed in FIGURE 4 on page 5. In 2011, the NRD's Master Plan for years 2011-2021 was approved. The Act requires the Master Plan to be updated every ten years.

The district is also required to prepare and adopt individual project plans as it deems necessary to carry out projects approved by the district. If those project plans involve state regulations or state financing, they must be filed with the appropriate agency in accordance with state law that specifies the powers and authorities to be exercised by NRDs in fulfilling their purposes of developing and executing the plans, facilities, work and programs relating to the topics. All programs are to be in conformance with the goals, criteria and policies of the state water plan as developed by the Nebraska Natural Resources Commission.

Fertile soils and abundant water come together in the District to provide a productive union that multiplies their values, resulting in the extensive agricultural production upon which the economy of the Central Platte Valley is built. As use of our resources increases with growing population and desire for a quality life, 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. Decisions on the resources need to be made as much as possible by choice and not by chance.

Within the time available to develop the plan and considering the ever-changing technology and law, it's not possible to develop a plan that incorporates all features of resource development and management that are within the areas of the NRD's responsibility and authority. The 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. In addition to complying with the statutory requirements, this document is designed to allow the public to understand the needs and goals of the NRD in order to make intelligent decisions as to the advisability of the projects and programs planned by the district. The District's planning relies to some degree on the input of other agencies, organizations and individuals. Public information meetings are held periodically and comments from hearings held are considered in the planning process. Representatives from outside agencies and from other local governments are included in the board's committee process whenever it is appropriate.

District Location Central Platte is one of 23 natural resources districts in Nebraska-see **FIGURE 1** below. It lies in the south central part of Nebraska, straddling the Platte River. There are 2,136,304 acres in the district. CPNRD extends for about 175 miles from the Lincoln-Dawson county line on the west near Gothenburg, to Hwy 81 on the east near Columbus. In 2001, 38 square miles of Frontier County (originally in the CPNRD) were added back to the District after a petition request from landowners and transfer approval from the Secretary of State.

FIGURE 1. Nebraska's 23 Natural Resources Districts

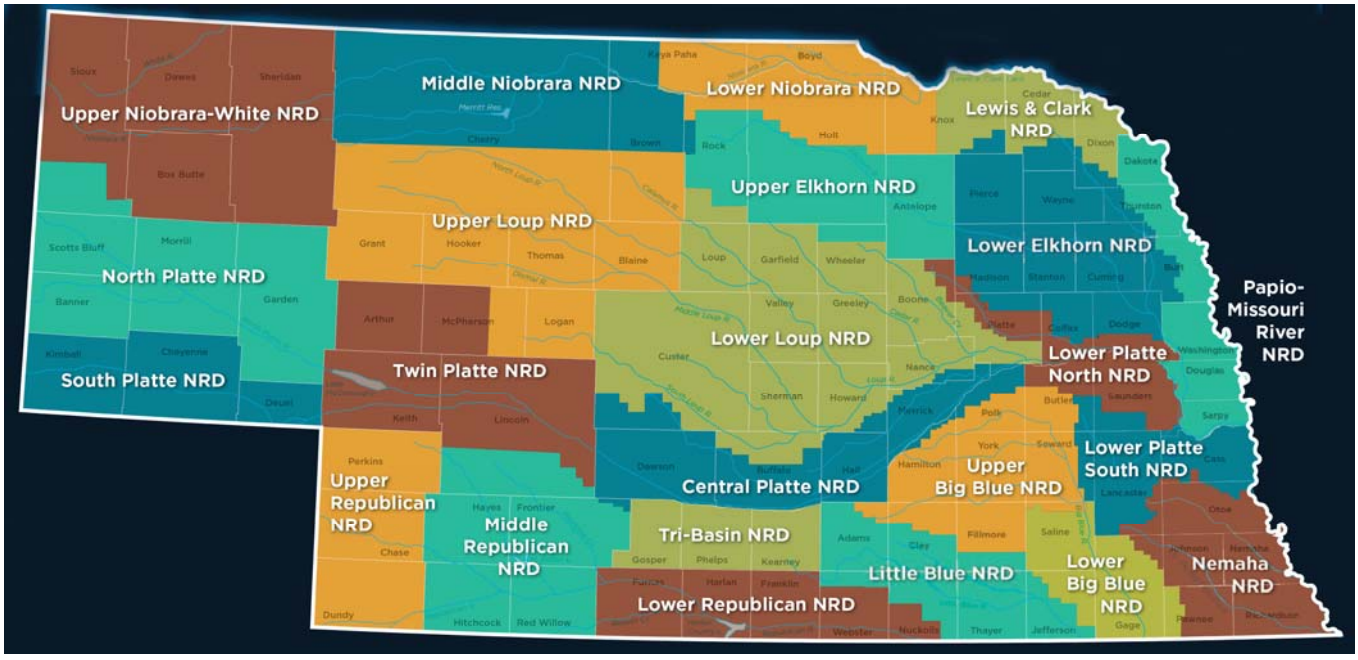
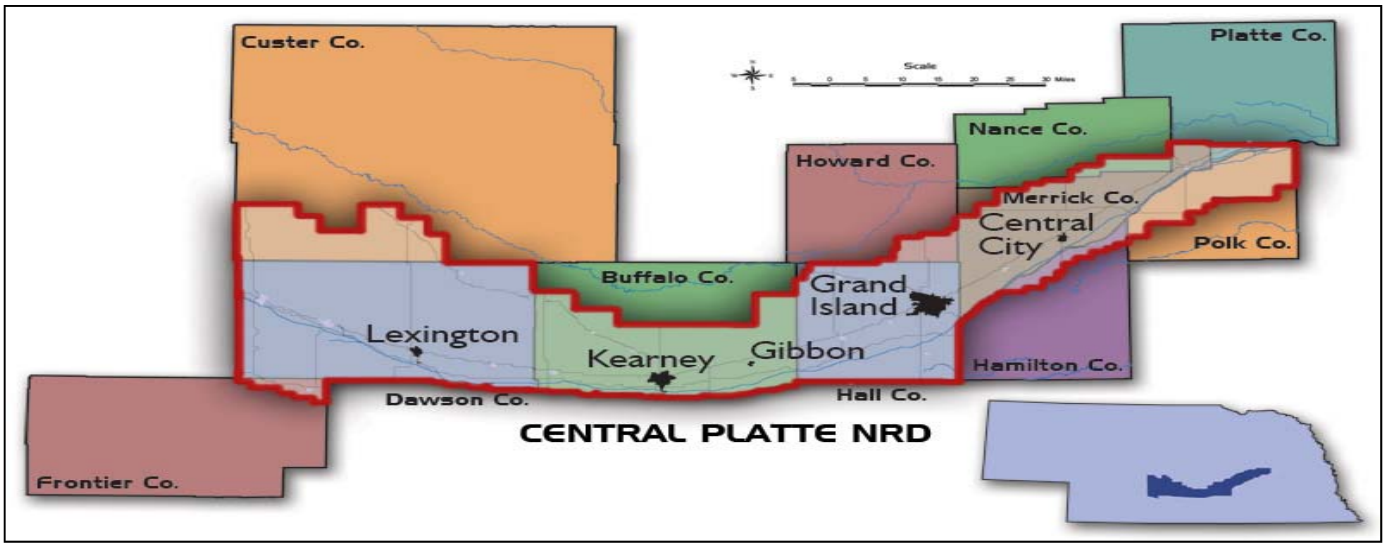


FIGURE 2. Counties in the Central Platte Natural Resources District



Counties Eleven counties have land included in the district. All of Dawson County and parts of Frontier, Custer, Buffalo, Howard, Hall, Nance, Merrick, Hamilton, Platte, Polk. Bordered by Lower Loup, Lower Platte North, Upper Big Blue, Little Blue, Tri-Basin, Middle Republican and Twin Platte NRDs.

Population According to the 2010 census, the population of the NRD grew during the 10 years since the previous census from 125,349 to 137,966 and increases are expected for the urban population in the future. The rural population is also expected to increase but will likely occur at a slower pace than the urban change.

First Class: 3 cities with populations of more than 5,000/less than 100,000: Grand Island, Kearney, Lexington.

Second Class: Seven cities with populations of more than 800/less than 5,000: Cozad, Gothenburg, Central City, Gibbon, Wood River, Shelton, Elm Creek.

Villages: The NRD also has 17 villages, populations under 800: Doniphan, Cairo, Overton, Alda, Silver Creek, Duncan, Clarks, Chapman, Amherst, Sumner, Riverdale, Farnam, Hordville, Oconto, Miller, Eddyville, Eustis.

FIGURE 3. Municipal Populations in the Central Platte NRD (Based on 2010 U.S. Census)

Grand Island 48,520; Kearney 30,787; Lexington 10,230; Cozad 3,977; Gothenburg 3,574; Central City 2,934; Gibbon 1,833; Wood River 1,325; Shelton 1,059; Elm Creek 901; Doniphan 829; Cairo 785; Overton 594; Alda 642; Eustis 401; Silver Creek 362; Duncan 351; Clarks 369; Chapman 287; Amherst 248; Sumner 236; Riverdale 182; Farnum 171; Hordville 144; Oconto 151; Miller 136; Eddyville 97 **TOTAL: 137,966**

Topography The broad Platte River valley lowlands, loess hills, dissected plains and sandhills. In the western part, the upland tablelands merge into the rolling loess hills, which in turn drop into the flat lowlands of the valley. These lowlands, in some areas, consist of several flat terraces with relatively steep slopes between the terraces. The dissected plains and loess hills have a very well developed drainage pattern that discharges onto poorly drained flat valley lands. The valley is broad through the central portion and the drainage pattern becomes less well developed toward the eastern end of the district.

The Platte River is an important feature of the district. It's also the largest river in the state, traversing the entire length of the state from west to east and serving as a major tributary to the Missouri River. With origins in Colorado, the Platte is formed by 2 branches, the North and South Platte, converging near the city of North Platte. While there are some minor tributaries in the NRD that flow into the Platte, the major tributaries of the Loup and Elkhorn rivers, join the Platte east of the District. The Platte River is too shallow for navigation and is used primarily for irrigation, recreation, generation of hydroelectric power and as habitat for wildlife.

Land Use The District's land use includes cropland, pasture and rangeland, some woodland and other minor cover, urban/residential development, streams and other water, and transportation. Much of the cropland is irrigated row crop and estimated at 90% by the NRCS. About 10% of the irrigation uses are surface water, mostly from the Platte River, which takes place primarily in the western part of the District. The majority of the irrigation in the NRD uses groundwater, which, in the western part of the District comes from the Ogallala Aquifer and in the eastern part of the District comes from Pleistocene (Wisconsin) sands & gravel. Groundwater is also the major source of drinking water in the District.

River System River system within the NRD includes 205 miles of the Platte River, 49.9 miles of the North Channel and 173 miles of the Wood River.

Congressional District The entire district is within the Third Congressional District.

Nebraska Legislative Districts Districts 22, 23, 33, 34, 35, 36, 37, 41, 43.

Department of Roads parts of the NRD lie within 4 of the 8 Field Districts- 3, 4, 6,7

Public Service Commission parts of the NRD lie within 3 of the state's 5 Districts- 3, 4, 5

Nebraska Game & Parks Commission parts of the NRD are within 4 of the state's 7 Districts-3, 4, 5, 6

Agriculture Largest industry within the NRD, as well as the entire state. Major crops grown include corn, soybeans, alfalfa and wild hay. Livestock raising is prominent featuring cattle, hog and turkey operations along with some dairy and sheep. Livestock feeding operations are scattered throughout the District. Many of the NRD's industries are related in a major way to agriculture, which is important in generating income for the state's (and NRDs) largest economic sectors: service, government and manufacturing. Tourism also plays a role in the NRD's economy.

Education Education is an important aspect for the population of the NRD including two community college areas, three educational service units (ESU 7, 9, 10). Branches of the Universities and Central Community Colleges exist at Kearney and Grand Island, with off-campus centers in many communities within the NRD.

Court Districts Four county court judicial districts and four district court judicial districts serve portions of CPNRD.

Administration When Nebraska joined the Union in 1867, natural resources issues were treated as issues of property and often pitted neighbor against neighbor, so the State Legislature was usually asked to provide solutions to specific problems. The Legislature usually responded by creating a special-purpose governmental unit that could resolve an issue, but often without sufficient authority or funding to provide effective long-term solutions instead of just stopgap measures. By the late 1960s, Nebraska had over 500 special purpose districts including: irrigation, drainage, soil conservation, watershed, rural water, watershed improvement boards, reclamation, sanitary improvement districts and sanitary drainage districts. In addition, state agencies were empowered to deal with some natural resources issues.

The solution was for the state to create a unique system of natural resources districts (local government districts) that could deal with a wide variety of natural resource-related problems and opportunities. In 1972, 24 NRDs (now 23) were established to replace 154 special purpose districts. The designated Mid-Platte East NRD covered portions of the Platte Valley that were being served by four watershed districts and several Soil and Water Conservation Districts in an 11-county area. One of the first acts by the district's board of directors was to change the NRD's name to Central Platte Natural Resources District. The city of Grand Island was selected by the first board as the headquarters. Ron Bishop, general manager of the watershed district, became the first general manager. Lyndon Vogt was hired as general manager in June 2013 when Bishop retired. Vogt was previously manager of the Upper Niobrara White NRD in Chadron and Lower Niobrara in Butte.

FIGURE 4. CPNRD's Consolidated Areas of Responsibilities

1. Soil conservation and erosion control.
2. Flood prevention, control & channel rectification.
3. Drainage.
4. Groundwater, surface water and water supply.
5. Water quality, pollution control, solid waste disposal & sanitary drainage.
6. Fish and wildlife habitat.
7. Forestry management.
8. Recreation and parks.
9. Range management.

Partnerships The District works in collaboration with the NRCS, Nebraska Game and Parks Commission, Bureau of Reclamation, the Army Corp of Engineers and other organizations on projects within the District. In recent years, however, the NRD filed a lawsuit against the Farm Service Agency (FSA) to receive data records for producers within the District. In August 2011, the NRD lost the lawsuit in appellate court. Attorneys suggested that CPNRD concentrate on trying to get the law changed since the only option left would be to have it heard before the U.S. Supreme Court; who probably wouldn't hear the case. In April 2012, U.S. Senator Ben Nelson spoke with the board via conference call regarding the Farm Bill and announced that provisions had been included in the Senate version of the proposed Farm Bill. There has been no progress in this effort.

Board of Directors The board of directors is elected to protect and preserve a wide scope of natural resources within the district. There are 21 members, each serving a four-year term. The board consists of one at-large member and two directors in each Subdistrict - who are elected in alternate election years.

FIGURE 5. Board of Directors (as of 10/2014)

SUB DISTRICT	BOARD MEMBERS	COMMITTEE / DELEGATE POSITIONS
At Large	Dick Mercer	Chair-Western Projects, Water Resources, Water Quality, Budget, Water-Funding Task Force
1	Brian Keiser	Western Projects, Water Resources Committee
	Jay Richeson	Chair-Water Resources, Western Projects, Programs, Budget, Variance/Appeals, Water Quality
2	Dwayne Margritz	Western Projects, Water Resources Committee
	Bill Vasey	Western Projects, Water Resources, Variance/Appeals
3	Steve Sheen	Western Projects, Programs, Water Resources, Variance/Appeals
	Marvin Reichert	Western Projects, Water Resources, Variance/Appeals, Water Quality
4	Keith Stafford	Western Projects, Water Resources Committee
	Bob Schanou	Chair-Programs Committee, Water Resources, Variance/Appeals, Water Quality, Budget
5	Jim Shiers	Western Projects, Programs Committee
	Jim Bendfeldt	Vice-Chair of Board, Variance/Appeals, Budget, Western Projects, Water Quality, NARD Delegate
6	Jerry Milner	Eastern Projects, Water Resources Committee
	Mick Reynolds	Chair-Eastern Projects, Programs, Water Resources, Budget, Water Funding Task Force, Water Quality, Nebraska Natural Resources Commission
7	Ed Stoltenberg	Eastern Projects, Programs Committee
	Jerry Wiese	Eastern Projects, Water Resources
8	LeRoy Arends	Eastern Projects, Programs, Water Resources Committee
	Alicia Haussler	Treasurer, Eastern Projects, Programs, Water Resources, Water Quality, Budget, Executive
9	Ladd Reeves	Eastern Projects, Water Resources, Variance/Appeals Sub-Committee
	Ed Kyes	Chairman, Eastern Projects, Programs, Variance/Appeals, Water Quality, Budget, Executive
10	Charles Maser	Eastern Projects, Programs Committee
	Barry Obermiller	Secretary of Board, Eastern Projects, Water Resources, Water Quality, Budget, Variance/Appeals, Executive Committee

Staff The general manager is responsible for the hiring and management of NRD employees. The number of employees will remain about the same in this planning period. There are currently 23 employees including four secretaries in NRCS offices. Temporary employees are hired to help with tree planting and other activities as needed.

FIGURE 6. Staff (as of 10/2014)

General Manager- Lyndon Vogt Administrative Director- Dianne Miller Projects Assistant- Tom Backer
Secretary, Central City- Sara Carlson Range Management Specialist-David Carr
Water Resources Specialist-Dan Clement Programs Coordinator-Kelly Cole Biologist-Mark Czaplewski
Thirty Mile Canal Manager- Jim Harris Secretary, CPNRD-Deb Jarzynka Secretary, Lexington-Samantha Keith
Cozad Ditch Company Canal Manager- Tom Laird Secretary, Grand Island-Angie Lau
Information/Education Specialist-Marcia Lee Secretary, Kearney-Shelly Lippincott
Resources Conservationist-Shane Max Projects Manager-Jesse Mintken Data & Compliance Officer-Sandy Noecker
Thirty Mile Irrigation Secretary- Marci Ostergard Thirty Mile Irrigation Technician- Mike Ostergard
GIS Coordinator-Angela Warner Hydrologist-Duane Woodward GIS Image Analyst-Luke Zakrewski

II. Flood Control/Drainage

GOAL: To control floodwaters and/or to provide open floodways that will keep floodwater damages to an acceptable minimum.

Much of the area of the NRD has long been plagued by floods. On the average, there's a flood every year in some area of the District, with major floods occurring every six to eight years. The land area within the District is unusual in the fact that most of the tributaries of the Platte River run almost parallel to the Platte itself. Consequently, the tributaries span many miles of the flat terrace or bottom lands adjacent to the Platte before emptying into the river. In the central and western ends of the District, most of the tributaries originate in the uplands where flood control structure sites are plentiful, but then drop off into the flat terrace or bottom lands and meander for many miles before reaching the Platte River. Many of the District's other streams, such as Silver Creek, Warm Slough and the North Branch, originate in the flat terraces or bottom lands where there are no sites for flood control structures. Even Prairie Creek has no flood control structure sites except in its extreme upper reaches.

The Wood River has approximately 173 miles of channel meandering through the fertile Platte River Valley. There are numerous flood control structure sites in its upper reaches. However, in the flood of June 1967 on the Wood River, most of the rain contributing to the flooding in the Grand Island area fell east of Kearney where there are few flood control structures sites. Although flood control structures are, or could be, of great benefit to this area, total protection cannot be achieved without some form of channel rectification. The Board has adopted, as a general policy, the design and construction of flood control measures on a watershed basis.

The NRD has developed over 30 flood control structures. The plans for these structures have been designed to provide for orderly development of flood control and other related resources activities in watersheds, with each watershed plan encompassing a number of individual project plans in the total watershed development. The NRD has plans or works, in various stages of development, for flood control in numerous watersheds. On the following pages, you will find the majority of projects that the NRD has completed, projects being maintained and projects in planning

Plans for individual projects that are subject to state and/or federal regulations or require financing from state and/or federal sources are on file with the appropriate agencies as well as with the NRD. CPNRD also has a continuing maintenance program on the snagging/clearing projects to reduce flood damages in the District.

PROJECTS COMPLETED

1. Snagging and Clearing Projects

Oconto- In February 2001, the board approved emergency snagging and clearing of a drainage channel on the northern edge of Oconto, located between Hwy 21 and Hwy 40 that was hit by a tornado in 2000. The project was completed in March 2001.

Platte River- In May 2000, 60 bridge pilings were removed on the north & south channels of the Platte River east of Hwy 281 at a cost to the NRD of $6,000.

Dry Run– 1.5 miles of snagging and clearing was completed in February 2011. The project included removal of debris and clearing of the bottom of the channel that had been silted in. Landowners paid for the center pivot crossings to be lowered. The NRD's total cost for the project was $30,000.

Lower Spring Creek- Snagging & clearing on Lower Spring Creek in Dawson County was completed in 1994. Construction was completed in February 1995 on approximately 18 miles of Spring Creek. Annual maintenance is performed by the District as needed. In January 2001, the board approved an additional 5,000 feet at a cost of $6,275.

2. Warm Slough/Trouble Creek Flood Control Project Due to a history of flood damage to agricultural and urban property within Central City, a project was proposed for reducing flooding along those streams; caused by storm runoff into the Warm Slough, Dry Run and Trouble creeks. That project would have included construction near Grand Island in order to take care of storm runoff from the city, as well as channel clearing and renovation from Grand Island to Central City. A study determined that portions of the project were not economically feasible. A revision was made that subsequently dropped the infeasible portions from the plans. Partial funding was provided by the state through the Nebraska Natural Resources Development Fund. Cosponsors, with varying shares of the local matching portion, were CPNRD, Merrick and Hall counties, and cities of Grand Island and Central City. Construction was completed in 1993 and maintenance responsibilities were turned over to Merrick County and Central City. In 2002, the NRD performed snagging and clearing of the Lower Warm Slough from Grand Island to Central City with an initial cost of $110,000. Additional funds in the amount of $23,000 were transferred to complete the project since the construction company was required to truck the

dirt away due to close proximity of wetlands in the area. From June 1-8, 2008, Central City received over six inches of rainfall, which exceeded a 100-year event. The project has improved drainage of the entire watershed.

3. Prairie-Silver Flood Control Project A flooding problem was studied by the NRD in central Hall County, just west of the city of Grand Island. The District determined that the problem was caused by two short stretches of Prairie Creek and Silver Creek that produced channel overflow after large storm events. A project was developed to correct the problem by cleaning out the channels and constructing training levees to prevent the overflow. Construction was completed on the project in 1986. Construction and land leveling in the area disturbed natural drainage flows along the Prairie/Silver Creek, northwest of Grand Island. In February 2000, a design proposed by the Natural Resources Conservation Service was approved by the board to install a uniform drain and add culverts for a two-mile stretch. The total cost was $22,000 of which the NRD provided $17,500.

4. Clear Creek Watershed The Clear Creek watershed, located in Polk County and encompassing approximately 75,700 acres, has had a long history of flooding. A feasibility report for flood prevention and watershed protection was developed and completed in 1978 which lead to the construction of 15 flood control structures completed in Clear Creek Watershed over the last several years. Cost share from the Natural Resources Development Fund was received on five of the larger structures. Polk County provided cost share funds to construct the additional smaller structures including road structures. Although there are no definite plans for the construction of large structures in the Clear Creek Watershed, the NRD is planning to continue the construction of smaller structures whenever requested and needed.

5. Lepin Ditch Flood Control Project Landowners petitioned the NRD board in 1993 to solve a problem caused by excess storm runoff that was overloading the "old north channel" of the Platte River, north of I-80 in southwest Hall County. A study by the Nebraska Department of Roads (NDR) & CPNRD determined that the problem resulted when I-80 was constructed and an attempt was made to redirect runoff from the Lepin Ditch to another crossing site under the Interstate. A further determination was that a culvert should be placed in the vicinity of the natural channel to allow runoff to flow under the Interstate instead of pooling in that area before draining to the crossing provided. A joint project was developed at a total cost of about $700,000, partners included the NRD, NDR and Hall County. Easements were obtained from the area landowners for construction and maintenance of the ditch. The county provided site preparation and ditch excavation and provides maintenance since the project is complete. The NRD contributed about $120,000 to pay for the project, which was completed in 1995. The Department of Roads provided cost-share money for the culvert under I-80. Hall County provides necessary maintenance for the project.

6. Cairo Downtown Improvement Project In 2007, the NRD approved $50,000 in flood control funds to aid in the construction of adding a 48" drainage outlet for the Project to divert excess water along the Hwy 11 corridor. The previous drainage system couldn't handle a one-year rainfall event, which caused overflow ponds and flooding in low areas. The community of Cairo contributed $2 million to the project.

7. City of Gibbon The board received a formal request for help with a drainage project from the City of Gibbon. Olsson Associates discussed proposed solutions to the city's current drainage system including: relocating the existing sluice gate, improvements on hydraulic conditions at the outfall and installing an automated sluice gate system. The total cost of the project is estimated at $150,000. The project will be added to the Hazardous Mitigation Plan so it will be considered for Federal funding in the future. In 2008, the request to help the City of Gibbon with improvements to the storm water system was approved in the amount of $50,000. The project was completed in 2010.

8. Odessa Area Flood Control Project Miller and Associates of Kearney completed the final design of the Odessa Area Flood Control Project in September 2008. As part of the final design, the engineering firm developed reliable system concepts, innovative, practical and cost-sensitive design ideas with realistic implementation alternatives for up to $15,000. The Project is located east and south of Odessa, Nebraska, which is approximately nine miles west of Kearney on Hwy 30. The project boundaries include the Odessa Road to the west, 24th Road to the North, and Sartoria Road to the east. The projects consists of improvements to approximately two miles of existing roadside and field drainage ditches, replacement of culverts and supplementing existing culverts. The project was completed in 2010.

PROJECTS UNDER MAINTENANCE

1. Kearney Northeast Flood Control Project A cooperative effort involving the City of Kearney, Buffalo County and CPNRD, was initiated in March 1990 due to the expansion of the city of Kearney. The expansion toward the northeast has resulted in increased flooding on an unnamed tributary of the Wood River resulting mainly from storm runoff. The NRD obtained aerial photography and participated in survey work needed for topographic mapping of the affected area. After the mapping was completed in 1991, NRCS conducted a feasibility study to determine what options were available.

In 1995, Miller & Associates was hired to develop a plan for the watershed; including channel improvements, drop structures, road crossings & a detention cell. Cosponsors shared costs of the project & agreed to do the construction in phases so taxpayers would not have a large one-time impact. To stop a serious erosion problem at the point where water had

been entering the Wood River, a drop structure was constructed in 1996 at the cost of $240,000 by the NRD. As part of it's bridge replacement program, the County also built a road structure used by the project. The project was completed in three phases:

Phase I: The existing channel was widened starting at the drop structure and meandered westerly and south to a point near 56th Street on Eaton Road.

Phase III: (Completed before Phase II) In 2000, properties were bought and construction was completed on the detention cells and channel improvements. Detention cells are located 1/2 mile north of "N" Ave and 56th St in Kearney. Construction included 300,000 yards of excavation with a 50 ac/ft storage design for a 100-year storm and a 50 ac/ft storage design for a 25-year storm on the other cell. In 2003, the NRD approved a contract change to complete channel improvements south of the detention cells and to control erosion. There were 800,000 cubic yards of soil excavated to create the channel. Storage capacity is 200-300 ac/ft.

Phase II: This was the last phase to be completed. It consisted primarily of channel improvements from the Phase I channel south to about 39th Street and then westward to Antelope Road. Phase II to Phase III, from 56th Street to Avenue N was completed in the spring of 2006. Total cost of the project was $3.4 million.

2. Kearney West Clearing Project In the fall of 1999, landowners west of Kearney requested a clearing project to assist them with flooding problems along Turkey Creek, which is also known as the Platte River North Channel. About 2 1/2 miles were cleared after the request. In 2000, an additional mile was cleared and snagged. Snagging & clearing was also performed on the North channel in 2001 at a cost of $8,650. In 2002, the NRD was notified that the North Channel of the Platte River/Turkey Creek had eroded to within 5 feet of a local sandpit. The U.S. Corps of Engineers surveyed the problem and provided an Emergency 404 permit to the NRD to stabilize the bank. The City of Kearney provided 25% of the total cost (approximately $1,850) and the NRD provided $13,500.

3. Dry Creek Clearing Project Debris from a wind storm or tornado fell into the Dry Creek channel northeast of Cairo in 1997, prompting a request from landowners for a clearing project. The NRD Board authorized a clearing project. The cost of the project completed in the winter of 1998 was approximately $11,500. Area landowners petitioned the NRD to complete about 21,000 feet of additional clearing. The project was completed in the winter of 1999-2000 at a cost of about $42,000. In July 2011, $15,000 been added to the 2012 budget to complete the three-mile channel improvement to the west of the Central Nebraska Airport. The board approved a motion to prioritize work with Hall and/or Merrick counties to construct an additional culvert under Gunbarrel Road. Maintenance is performed by the NRD as needed.

4. Amick Acres Project The Amick Acres Project improvement area is in south central Hall County, just to the west of Doniphan. It diverts flood and drainage water away from the Amick Acres residential subdivision by utilizing part of a county road ditch for approximately one mile of channel. The initial cost of the project was $25,000; most of which was assessed to the benefiting landowners. Maintenance is performed as necessary at a estimated cost of $500-$1,000 annually. Actual costs are calculated and assessed to benefiting landowners.

5. Platte County Project The Platte County Project is an improvement area in Platte County, located just southwest of Duncan. The project provides drainage improvement and minor flood control benefits to 1,300 acres of irrigated cropland in southwest Platte County. Maintenance is performed as necessary at an estimated cost of $500-$1,000 annually. Actual costs are calculated and assessed to benefiting landowners.

6. Wood River Watershed Snagging and clearing was completed from the mouth of the stream to Gibbon in 1972. In 2002, one mile was cleared at a cost of $20,000. Annual maintenance for the Wood River Clearing Project is about $10,000. Additional spot clearing is continuing in the western portion of the District.

7. Moores Creek Flood Control Project In the early 1980s, the NRD and others recognized the need in Hall and Merrick counties for flood control on Moores Creek and authorized a feasibility study. Project sponsors included the NRD, City of Grand Island, Merrick County and Hall County. The feasibility study was submitted to the Nebraska Natural Resources Commission in January 1984. The Commission subsequently approved the Moores Creek Project and agreed to cost share at a 65% rate. A three-phase construction plan was developed and carried out. **Phase I:** Channel improvements from the mouth near Archer upstream to the Hall-Merrick county line. Completed in 1990. **Phase II:** Three detention/retention and wildlife habitat enhancement cells improved the Moores Creek channel from the Hall-Merrick county line upstream to Grand Island. **Phase III:** Waterways and bridges constructed to enable storm runoff from the Capital Heights area, northwest of Grand Island, to drain into the improved Moores Creek channel. Project was completed in 1995. Annual maintenance performed as needed with an approximate cost of $20,000.

8. Wood River Flood Control Project After 30 years of planning, the Wood River Flood Control Project was put to the test on May 11, 2005, and recognized as an event that exemplified the importance of flood control projects within the District. The 300 foot-wide channel of the diversion project provided flood control protection for 1,500 homes and businesses. A total of 7.21 inches of rain fell between May 11th -May 12th, more than any one-day of rainfall during the 1967

Flood. (In 1967, 10 inches of rain fell over nine days from June 7-15, with the most falling on June 13 at 3.2 inches.) The project was put to the test again in June 2008, when the area received 6" of rain from June 1-8. After the extensive damage in Grand Island caused by the Wood River and Warm Slough in 1967, the area is now protected by the Wood River Flood Control Project. The U.S. Army Corps of Engineers participated in studies in the early stages of the Project. After new rules for such projects were adopted in the 1980s, the Corps reviewed its findings and conducted reconnaissance studies to determine whether a project was possible after the criteria changed; which indicated highly feasible floodway projects using several different routes. Following public hearings in 1989, the Corps narrowed the choices and began a study to determine the actual feasibility of a route to carry excess water from the Wood River and Warm Slough into the Platte River.

Appropriation and construction-start authorizations were obtained from Congress in Fiscal 1996. The Corps' revision of plans and increased projected cost, required new Congressional re-authorization which was accomplished in 1999. Construction began in March of 2000.

In 2002, the Corps contract was increased by $1 million due to miscalculations regarding the amount of topsoil needed for the project. 180,000 yards of soil was added with cosponsors paying $95,000 of the increase. A total of 500 acres were involved in land acquisition for the project, which was constructed from 2 miles west of Hwy 281 to the Hwy 34 bridge along the Platte River. Five bridges were constructed. Then, a reappraisal of the Hall County Park resulted in an agreement with the Hall County Board and compensation for damages to the RV park. In March 2002, a final bid letting for the remaining construction took place and approval was given by the board to proceed with the remaining 11 tracks of land needed for the project.

FIGURE 9. Wood River Flood Control Project

Benefits of the project include flood control for flood zones in the Grand Island, rural Hall and Merrick counties and groundwater quality improvement. Close to 7,000 acres of land were taken out of the flood zones. In October 2004, FEMA revised its floodplain maps taking away the need for flood insurance in southern Grand Island. Landowners had been paying $317,000 to protect $56 million worth of property prior to the revision of the floodplain maps. Full funding of the Federal share enabled construction to be completed on schedule. The NRD borrowed funds in the amount of $1.1 million at an interest rate of 6.5%, to meet the needs of project construction over a 2-3 year period. All monies were reimbursed to the NRD by the State of Nebraska through a cost share grant and the other local sponsors. The entire project was completed and dedicated in May 2004. Total cost was about $15 million in the following amounts: $7,148,000- U.S. Army Corps of Engineers $4.million– Nebraska DNR $1.4 million- Central Platte NRD, $1.2 million-City of Grand Island $352,000- Hall County $200,000-Merrick County. The NRD is responsible for maintenance of the project with costs split between the cosponsors.

9. Prairie Creek Clearing Project Flooding from Prairie Creek caused considerable damage to agricultural property in the past. While the Prairie-Silver Creek Flood Control Project had a local effect, it didn't solve all of the flooding problems on Prairie Creek, nor did it evolve that a feasible project could be developed to solve all of the flooding problems on the stream. However, further study indicated that damages could be reduced by keeping the channel clear. Snagging and clearing projects involving the selective removal of timber, trash and debris from the stream channel in an area of 35 feet on either side of the center of the channel were initiated. All projects are completed from the mouth of Prairie Creek in Merrick County to the Hall-Buffalo county line. Annual maintenance is approximately $10,500.

10. Buffalo Creek Watershed-Structures Feasibility planning for flood control was completed in the Buffalo Creek Watershed, located in Custer, Dawson and Buffalo counties. The NRD applied for and received approval for cost-share funding from the Natural Resources Development Fund to construct seven flood control structures in the watershed: B-1, B-3, C-5, F -l, F-3, F-5 and F-7. Additional work:

B-1: B-1, the largest structure, was completed in 1983 along with the supply canal, 1.6 miles of power line relocation and 1/2 mile of county road improvement. In addition to flood control, the purpose of the project was expanded to include recreation and groundwater recharge. Cracks were identified in the B-1 structure in the fall of 1983. Repair consisted of installing a chimney drain system on the back side of the structure. Repair was completed in 1985.

In 1987, the reservoir was opened for day fishing. In 1995, a petition from numerous landowners requested that the NRD discontinue filling the reservoir because they were concerned that the reservoir contributed to high water tables in the county. Hydrological studies conducted by the NRD showed that the B-1 reservoir made no significant contribution to the high water tables and that projected groundwater declines had not materialized due to continued strong annual rainfall

amounts. However, the request to stop filling the reservoir was granted effective January 1, 1996. In May 2009, the board voted to start filling the B-1 Reservoir in Lexington every other year starting in spring of 2010 and was required to fill the reservoir once every five years to keep the NRD's water right. In March 2011, the board approved leasing water from B-1, for a one-year basis, to 40-45 individuals who needed 1-15 ac/ft of water. In March 2013, the board voted to start filling the reservoir every year and to get it back to its original concept. The NRD will receive 4,000 acre/feet of water per year from NPPD to fill the reservoir and there are plans to have the NGPC begin stocking the reservoir within this planning period.

F-7: Cracks were identified in the structure and repair was completed in 1990 at a cost of $11,500. Two sites in the Buffalo Creek Watershed north of Lexington were studied by a Kearney engineering firm to determine their potential as flood control structures. Based on the study, the NRD board determined that construction of flood control structures at those sites was not feasible and that all further planning efforts for the watershed would be discontinued. Operation & maintenance continues for all of the structures in the watershed including dam safety checks. In addition, the NRD will fill the reservoir periodically with the minimum amount of water to satisfy the project's Platte River water right.

11. Silver Creek Watershed Located in Merrick County, this watershed encompasses approximately 90,000 acres. A feasibility study was completed in 1979 to provide flood relief in the watershed. The project was completed in four parts and consisted of mainly channel improvement. **Phase 1A:** Lower 4.1 miles of Silver Creek. **1B:** One mile of Silver Creek and 15 miles of the Clarks drain. **Phase 2:** Continued upstream on Silver Creek for 6 miles. **Phase 3:** The next 10 miles upstream. **Phase 4:** Wasn't completed until the fall of 1987 due to wet weather in the 1985 and 1986 construction seasons. The 11-mile stretch upstream from Hwy 14 north of Central City to Silver Creek's headwaters west of Chapman. The Board approved extension of the project at a cost of $7,500 in February 2000 due to additional flooding. Maintenance costs are approximately $20,000 annually.

12. County Road Structures The NRD has established a road structure program to help counties provide minor flood control. Under the program, the counties replace bridges on their roads with structures that generally consist of an earthen embankment with a culvert or tube at the bottom. Storm water is stored in small reservoirs to prevent damage to agriculture land below the road structure. The District has completed a number of these structures in cooperation with the county highway departments in several counties. The "county road structures" programs are primarily conducted on a request basis. The NRD will continue its responsibility for maintenance on these county road structures.

PROJECTS UNDER CONSTRUCTION/PLANNING

1. Upper Prairie Silver Moores Flood Control Project The NRD and the City of Grand Island completed a detailed analysis of the hydrology and 100-year floodplain in the upper parts of the Dry, Prairie, Silver, and Moores Creek watershed located south of Hwy 2 & east of Hwy 281. To accomplish flood control, upland and lowland flood control structures will be created including roadways to act as dams, berms will be built to keep the creeks within their banks, water detention cells will be built on 500 acres at the former Cornhusker Army Ammunition Plant. Because of the widespread improvements to croplands and expanding development of urban property in the study area, an application and feasibility study report were filed with the Nebraska Natural Resources Commission for cost sharing for a 10-year, $15.5 million construction project. The project was approved & received $8.3 million in state funding, with the remaining $7.2 million to be financed by the cosponsors. The completed project will include:

- 3 P.L.566-type floodwater retarding sites in upland areas of the Prairie Creek watershed southwest of Cairo
- one upland detention site in the Dry Creek watershed
- a series of small excavated floodwater detention sites in lowland areas along upper Prairie Creek
- 3 excavated off-channel detention sites in the Silver Creek Watershed
- one low-level berm to prevent basin overflows from Silver Creek into Moores Creek
- Other parts of the Prairie Creek channel are slated for clearing to improve their capacity

Construction was phased over a 10-year period, starting with construction of the off-channel lowland sites in Silver Creek and stepping through the rest of the facilities depending on their contribution to flood control. The study showed that a 100-year flood would inundate 23,000 acres of lands south of Hwy 2, producing crop damages of $3 million a 10-yr flood would cause $1.6 million in crop damages. In addition, the flood waters would collect along Hwy 2 resulting in large quantities of water flowing east into developed areas of northwest and west Grand Island.

The results of the study proved true on May 11, 2005 when central Nebraska was hit with a flood. The city of Grand Island sustained an estimated $3-5 million in damages and Hall County sustained a total of $12-15 million. There were 2,769 homes and businesses damaged in the area that would receive flood relief from the project. The project also includes acquisition of or easements to 1,800 acres (mostly dryland crops or pasture), excavation of 3,500 acre-ft of off-channel storage in lowland areas, construction of 6 upland floodwater detention dams and outlet works and installation or replacement of a few roadway culverts under Hwy 2 and other county roads.

About 500 acres of irrigated cropland will need to be acquired for purposes of constructing flood detention cells at strategic locations. The design phase began in 2005, construction in September 2006. In September 2011, directors approved a revised agreement with Hall County on the White Cloud Road dam. As part of the agreement, CPNRD set up a maintenance fund for up to $10,000 for 10 years for erosion, gravel, etc. The entire project is scheduled to be completed by the summer of 2018.

In 2013, the board approved a contract modification request from JEO in the amount of $469,624 for modifications include changing existing tasks and performing additional tasks that were not included in the 2012 contract. In August, there was a transfer of $500,000 from construction to land acquisition. Both items are within the Sinking Fund expenditures part of the 2014 budget, so no action was necessary.

As of September 2014, PCUL 1 was 40% completed and PCUL 2 was 70% done- both are scheduled to be completed by December 2014. 3.8 million cubic yards of dirt had been excavated and the levee portion of the project is under design. The board approved two change orders from Pruss Excavation Co. for the Project including a change order for PCUL 1 in the amount of $43,017.42 for additional work on foundation channel & spillway excavation, topsoil placement, weed control and placement of spoils. The second change order was for PCLU 2 in the amount of $1,922.00 for excavation of the north & south dams, core trench, and foundation channel cleanout. The cost of moving dirt went from $.75 per cubic yard to $2.50, causing the cost of the project to increase from $16 million to $29 million.

2. Hazardous Mitigation Plan The board hired engineering firm JEO apply for a Hazardous Mitigation Plan for Federal Emergency Management Agency. JEO sent the application to FEMA for 75% cost share to develop the study. Many communities in the NRD expressed interest in pursuing the study since the potential FEMA funds available would enable communities to take action and reduce threats from natural disasters. In September 2008, the NRD was awarded a FEMA grant to develop the multi-jurisdictional All-Hazard Mitigation Plan. Public input from officials and landowners were a key component of the hazard mitigation planning process. Regional meetings were held in February to obtain input on the hazard mitigation plan in the initial stages. Potential hazards affecting the area and individual communities were identified, critical facilities located, and potential mitigation actions or projects were listed. Among the many projects being considered to protect people and property are flood and drainage system improvements, purchasing backup generators for critical facilities, evaluating/replacing alert sirens, purchasing weather radios, constructing public tornado shelters/safe rooms, tree inventory and maintenance programs to reduce electrical outages. Kirkham Michael Engineering of Lincoln, Nebraska, assisted in the development of the plan. In July 2012, the board approved the Plan and has since received all of the participant signatures required. The Plan is currently active.

2A. Ice Jams Ice jam prevention is a new program that has been included in the Hazard Mitigation Plan. In July 2011, the board approved an inter-jurisdictional cooperative agreement on how to deal with ice jams in the Middle Platte River, with the formation of a continual escrow (interest-bearing) account in the amount of $50,000. If an ice jam where to begin, the NRD would be the first entity to start the process of calling FEMA and NEMA; in which the entire process could be completed in one day. The agreement is signed by seven partners who have deposited $37,000 in an emergency fund to use in the case of an ice jam on the Platte River. Partners include Central Platte and Tri-Basin NRDs, counties of Phelps, Buffalo, Merrick, Polk, and Hamilton. The counties of Hall, Dawson and Platte did not approve the Interlocal Agreement and are not eligible for help if an emergency arises.

3. Elm Creek/Turkey Creek Watershed A feasibility study was conducted for $125,000 and was submitted to the Nebraska Resources Development Fund to request cost share on the project. The board voted to proceed with a community meeting regarding the feasibility study for the Elm Creek Watershed Flood Control Project. The Plan, developed by Olsson Associates, consists of a 975-acre flood control and re-regulating reservoir located northwest of the Village of Elm Creek, and two dry flood control structures located on Turkey Creek. The reservoir would provide both traditional flood reduction benefits to the Village of Elm Creek, as well as non-traditional environmental benefits including recreation.

The Turkey Creek structures would reduce current peak flows to downstream areas. Together, the flood control structures would provide flood protection to the Village of Elm Creek and downstream cropland. The preliminary cost estimate of the project is $22.8 million. The District met with 130 landowners in June 2006, to get feedback from the community. In order to gather scientific data about the leaching possibilities, the board approved a study with OA to perform a geotechnical investigation/seepage analysis of the area. The study involved the drilling 30 test borings at the reservoir site and adjacent lands to determine if leaching would raise adjacent water tables to a level that would create problems for either cropland or basements. OA developed a preliminary design feasibility study and the NRD has applied for Resources Development Funds. In May 2009, directors approved a motion to allow Ron Bishop to work with Jerry Kenny, executive director of the Platte River Recovery Implementation Program (PRRIP) on a Memorandum of Understanding to detail financing on studies to be conducted for the proposed project; and an expansion of study with OA to determine delivery canal capacity, discharge capacity, groundwater impacts and sizing options for water storage.

In June 2012, the board again reviewed the project due to a potential new source of funding from the Nebraska Water Cash

PROJECTS UNDER PLANNING/CONSTRUCTION

Fund. Kevin Prior with Olsson Associates (OA) reviewed the engineering work that OA had been done so far. The board authorized staff to work with OA, Nebraska Public Power District (NPPD), State of Nebraska and the Platte River Program on options to move forward with a project. The proposed project was estimated at 6,800 -12,000 acre/feet depending upon future agreements with a projected cost of at least $35 million. In July 2013, the board approved the transfer of funds designated for the proposed Elm Creek Re-regulating Reservoir to Central Nebraska Public Power & Irrigation District's new J2 project. The remaining $631,465 for the Elm Creek project was cut from the budget.

4. LiDAR A LiDAR agreement was approved in July 2012 to provide district-wide coverage of topographic elevation developed from aerial radar detection. The NRD's cost will be $40,000 for Custer County, providing necessary data for several projects and programs. Data is scheduled to be collected from November 2012 to March 2013, with results available for use in August 2013. Other NRDs & partners involved in the agreement to collect statewide data include: Lower Platte North, Twin Platte, Lower Loup, North Platte, and Middle Niobrara NRDs; Nebraska Department of Natural Resources, Department of Environmental Quality and the Natural Resources Conservation Service.

5. GI Dewatering Study Since September of 2000, the NRD has been participating in the Grand Island Dewatering System Study that identified a practical groundwater dewatering system to remove groundwater from residential basements and minimize impacts on the project area. The study also assessed potential transmission and discharge location options, financing options, potential impacts on water quality and quantity, and subsidence issues. The Study used both low and high capacity vertical wells.

The NRD delivered public opinion surveys to the northwest & southeast project areas prior to the initiation of the Study, with the majority of responses returned as "very interested" in the Study. The Study areas fall within the "Valleys" topographic region, characterized by low relief along streams that are underlain by alluvial clay, silt, sand and gravel. The general direction of groundwater flow is east to northeast generally paralleling the Platte River. Evapotranspiration (ET) losses are relatively high due to a shallow water table. The saturated thickness of the Quaternary deposits in and around Grand Island ranges between 80-200'. Depth to the water table ranges from 5-20' below ground level.

In May 2012, Olsson Associates, presented information to the board about the draft 2012 Study to improve and expand project implemented in 1998. The original study involved 29 dewatering wells compared to 33 in the 2012 updated study. Three dewatering areas and areas of contamination were taken into account with wells proposed to be outside of those plumes. Prior reported that the Grand Island City Council was receptive to the proposed updates and that the Council would like the NRD to be involved in the project. There has been no further contact from the Grand Island City Council.

6. Clarks Floodplain Silver Creek is the major source of flooding in the area. The board approved participation in the Clarks Floodplain mapping study up to $5,000; which is 50% of the expected cost of the study and needed to meet FEMA requirements. The study and funding will be a part of the 2014 Fiscal Budget.

Objectives

1. *To establish management practices on cropland and grassland that would keep a minimum 2,000 pounds per acre of vegetative cover on, or above, the ground surface at all times.*
2. *To design floodwater retarding storage in all structures that have a suitable site.*
3. *To have a minimum of 75% land treatment established, or in the process of being established, before starting construction of a floodwater retarding structure.*
4. *All land shaping will consider its effect upon reducing flood damage, including upstream and downstream.*
5. *To preserve open floodways adjacent to streams and channels adequate to carry a 100-year-frequency storm with a rise in water elevation of one foot, or less, above the existing conditions.*
6. *To secure a public awareness and acceptance of the need for and the application of needed measures to reduce floodwater damage.*
7. *To carry out floodwater control practices at a satisfactory rate.*

III. Soil Conservation and Erosion Control

GOAL: To use each acre within its capability and to treat each acre according to its needs as set forth in the technical guidelines adopted by the District.

The Nebraska Soil & Water Conservation Program (NSWCP) is administered by CPNRD for the Nebraska Department of Natural Resources. The program provides financial assistance to landowners to encourage conservation measures on privately owned land that will produce long-term benefits for the general public. Landowners apply to the NRD for these funds. After determining eligibility and the availability of funds from the Commission, the NRD acts on the application. Landowners whose applications are approved have 5 months to complete the work.

Nebraska Soil & Water Conservation Program

2013-2014 Cost Share distributed through NSWCP = $94,515.91

50% Cost Share:

* terrace systems, terrace underground outlets, water impoundment dams, grade stabilization structures
* diversions, grassed waterways, water & sediment control basins, dugouts for livestock water
* pasture planting/range seeding, critical area planting, planned grazing systems
* windbreaks/renovation, drip systems, weed barrier, brush management, streambank stabilization
* repair of practices, irrigation tailwater recovery pits, underground return pipe from reuse pits
* Irrigation Water Management: surge valves, flow meters, goose necks, drop pipes/conversion nozzles, rainfall auto-shutoff valves, buried pipeline to convert gravity systems to pivots, subsurface drip irrigation, soil moisture sensors and data readers.
* brush management

2013-2014 Cost Share distributed through CPNRD = $232,637.12

60% Cost Share: Well Abandonment

50% Cost Share: Streambank Stabilization, Windbreaks & Weed Barrier, Flow Meters, Urban Forestry Program, Prescribed Burn Program, Cover Crop, Drain Tile

Annual Funding

The year of 2014 was the largest funding year CPNRD landowners have ever received with 92 contracts totaling $2,708,780.79 and conservation practices contracted on 15,015 acres. The increase is credited to new Farm Bill funding.

EQIP contracts approved in 2014:

- Water Conservation: $1.9 million; 49 contracts/6,500 acres
- Grazing Lands: $210,000; 13 contracts/4,500 acres
- Soil Health: $200,000; 19 contracts/3,100 acres
- Forestry: $41,000; 10 contracts/190 acres
- Animal Feeding Operation: $435,000; 1 contract/700 acres

Contracts per field office included: Merrick County-16 contracts, Hall County-18 contracts, Buffalo County-43 contracts, Dawson County-15 contracts.

FIGURE 8. Central Platte NRD Cost Share Programs

PRACTICE	AMOUNT FUNDED by CPNRD 2013/2014
Trees & Weed Barrier	$21,645.32
Center Pivots	$73,260.84
Streambank Stabilization	$8,376.25
Well Decommissioning	$55,779.75
Urban Forestry	$0
Phragmites Control	$579.74
Cover Crop	$0
Soil Moisture Sensors	$16,000.00
Grazing Deferment	$0
Drain Tile	$0

PROGRAM	AMOUNT FUNDED through CPNRD 2013/2014
Corners For Wildlife	$3,120.00
Buffer Strip	$58,875.22
WILD Nebraska	$0
NSWCP	$94,515.91

Total Cost Share Distributed Since 1972: $9,893,429.01

Funding From Other Sources

WILD Nebraska Program: **NRD provides annual payments, NGPC provides grass payments.**
There were no contracts through CPNRD in 2014.

Buffer Strip Program: **Nebraska Department of Agriculture**
Total payments through CPNRD in 2014 were $53,875.22.

Corners for Wildlife: **Pheasants Forever**
Total payments through CPNRD in 2014 were $3,120.00.

Special Initiative Cost Share Programs

The NRCS special emphasis programs for 2015 will be cover crops, irrigation water management probes and the Regional Conservation Partnership Program (RCPP). Of the 500 pre-proposals submitted, the *Ogallala Aquifer & Platte River Recovery* proposal for the Regional Conservation Partnership Program (RCPP) was one 350 that advanced and are invited to submit full proposals. Only four projects from Nebraska advanced. The proposal addresses excess/insufficient water, inadequate habitat for fish and wildlife, soil erosion, water quality degradation, inefficient energy use, and air quality impacts. These resource concerns would meet environmental habitat needs under the Platte River Recovery and Implementation Program. RCPP funds requested over the 5-year period from NRCS is $10,000,000; with $12,564,450 matching funds provided by all the partners including Central Platte NRD, Twin Platte NRD, Thirty Mile Irrigation District and Southside Irrigation District. The full proposal was submitted by the deadline of October 2, 2014.

Emergency Initiative

In July 2014, the NRD and UNL Extension hosted an outreach meetings for storm assistance at the American Legion Club in Gibbon. Over 170 people attended to learn what options were available following a devastating hail storm just one week prior to the meeting. Landowners received information on how cover crops are proven to re-establish residue lost during extreme weather conditions and protect the soil from water and wind erosion.

Dean Krull, UNL/CPNRD project coordinator, with assistance from Dr. Bruce Anderson and Dr. Roger Elmore, presented samples of damaged corn and soybeans. Ray Ward of Ward Laboratories, Keith Berns of Green Cover Seed and Rich Russell of Arrow Seed discussed replanting options depending on the severity of damage, crop insurance ramifications, nitrogen capture and cycling in hailed corn, and best choices of cover crops for forages and soil health. John Miller answered questions on rain and hail insurance.

NRCS announced the new EQIP cost share program called the *Storm Damage Cover Crop Cost Share Initiative*; which provided assistance for producers to plant a cover crop on those fields that lost residue cover on cropland fields caused by storm damage during the 2014 cropping season.

Objectives

1. *To establish adequate permanent cover on all Class VI & all Class VII land.*
2. *To establish approved cultural management practices, vegetative practices or structural measures, as needed on all lands to prevent wind and water erosion.*
3. *To safeguard the land for the continued production of food and fiber.*
4. *To establish erosion control measures, as needed on all industrial development sites, residential development sites, or road construction sites and other non-agricultural development sites.*
5. *To apply irrigation water management techniques to all of the irrigated land in order to properly conserve and efficiently utilize soil, water, fertility and energy.*
6. *To develop proper range and pasture use and management plans or programs in order to properly conserve and efficiently utilize those range and pasture areas.*
7. *To re-establish vegetative cover on those range and pasture sites classified as "poor" condition.*

NRCS Technical Service: The USDA-NRCS provides technical assistance to landowners to help solve conservation problems while carrying out the NRD's programs. The NRD assists with this effort by providing personnel to NRCS to assist with their activities and to help administer the NRD's programs. The following list indicates projected annual goals for this program for this planning period. Continued support for the District's cost sharing programs is expected from the Board of Directors. A continuous evaluation is conducted to ensure that cost share programs are providing necessary assistance for landowners to develop conservation practices and best management practices.

FIGURE 9. 2015 Goals—Natural Resources Conservation Service and Central Platte NRD

CPNRD PERFORMANCE MEASURE	GOAL
Cropland with conservation applied to improve soil quality	17,000 Acres
Land with conservation applied to improve water quality	33,000 Acres
Grazing land with conservation applied to protect and improve the resource base	14,300 Acres
Land with conservation applied to improve irrigation efficiency	12,000 Acres
Wetlands created, restored or enhanced	80 Acres

Conservation and U.S. Agriculture

Non-federal agricultural and forest lands cover 70% of the lower 48 states or 1.4 billion acres. These lands produce strong agricultural/forest sectors, supply habitat for wildlife, filter groundwater supplies, regulate surface water flows, sequester carbon and provide open space and scenic vistas. However, farming/ranching may or may not have negative environmental consequences including: water & air pollution, soil erosion and loss of wildlife habitat.

Conservation Programs Today

USDA programs address conservation/environmental concerns in 4 ways::

1) Educational and technical assistance.
2) Financial incentive payments through conservation on working farm, ranch and forest lands (EQIP, CSP, WHIP, etc.) and conversion to conservation use to achieve specific environmental benefits (WRP, GRP).
3) Protection of agricultural lands from conversion to other uses (FRPP): conservation compliance, regulatory requirements through Clean Air/Clean Water/Endangered Species (CNMPs, HFR).
4) Conservation technical assistance.

Conservation and Environmental Benefits

- Soil erosion—43% decline from 1982 to 2003.
- Livestock—establishing CNMPs through EQIP.
- Wetlands—Decline in losses from 1950's to 1990's; net gain of 260,000 acres from 1997-2003.
- Wildlife habitat—increases in grassland bird, waterfowl populations and Western State pheasant, elk, mule deer, white-tailed deer and pronghorn antelope.
- Water Quality—CRP—reduced sediment benefit $266 million—Swampbuster, WRP, EQIP also contribute.
- Air quality—anaerobic waste digesters supported by EQIP can help reduce odors and methane emissions; 12 million tons reduced carbon emissions expected by 2012.

Key issues: Excess nutrients in rivers/streams, hypoxia in Gulf of Mexico/Chesapeake Bay, water availability, declines in soil condition, invasive species, endangerment of native species, rising greenhouse gases, renewable energy, demands on agriculture.

NRCS offices that have landowners located within the CPNRD:

Grand Island- 2550 N Diers Ave, Ste L (308) 395-8586
Kearney- 4009 6th Ave Ste 4 (308) 237-3118
Osceola- PO Box 547 (402) 747-2461
Curtis- PO Box 47 (308) 367-4460
St. Paul- 1318 2nd St (308) 754-4462
Columbus- 3276 53rd Ave (402) 564-1802
Central City- 1708 31st St Ste 2 (308) 946-2251
Lexington- 721 E Pacific Ste 2 (308) 324-6314
Broken Bow- 2519 Heritage Dr (308) 872-6861
Aurora- 1527 3rd St (402) 694-3500
Fullerton- PO Box 398 (308) 536-2311

*The NRD's District Liaison, James Huntwork, is located in the Grand Island office.

IV. Water Quality

GOAL: To protect and enhance the quality of surface and groundwater within the District.

Groundwater Programs

Nebraska Legislation gives responsibilities to the districts for all forms of pollution. While all forms of pollution are a concern, the problem of high nitrates will remain a priority for the District during this planning period. There are 21,002 irrigation wells registered in the District. Nearly 1,000 producers participate in the Groundwater Quality Management Program. The Program's goal is to lower average nitrate levels district-wide. The Program was adopted in 1987 and started in 1988 when nitrate levels were 19.24 parts per million (ppm.) Levels have been lowered through management efforts by landowners. Although levels have decreased since 1987, the board realizes how much work remains and the years that must pass before the problem is solved. The Program has been updated from time to time and was reauthorized in 1995 and further amended in August 1998. The last changes were made in July 2003 to address the high stagnant levels of nitrates within the NRD. Another significant change was dividing the Nitrogen Management Form into two parts, one due before planting on March 1 and the final report due December 31 after harvest. This change gives the producer the opportunity to see the District's recommendations before planting time. The District will continue to work with farmers, agriculture business operators, and the general public to further reduce high nitrates in groundwater. See summary of the Rules & Regulations on the following page.

Groundwater Pollution The chief source of groundwater pollution in the District is nitrate-nitrogen in amounts greater than the maximum contaminant level of 10 ppm (parts per million) allowed by the state and federal government. High nitrates are a problem in varying degrees throughout much of the District. In the western portion of the NRD, concentrations of sulfate are not uncommon. High iron and magnesium levels, along with high total dissolved solids in many areas, have the potential for considerable problems in municipal supplies, particularly in areas where large quantities of water are used for industrial purposes. 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. The NRD's nitrogen management program was adopted in response to increasing high concentrations in large areas of nitrate-nitrogen in the groundwater and vadose zones (areas between the root zone and the top of the water table). Better management of water, effluent systems, livestock feeding systems and commercial fertilizers are the keys to reduction of nitrate in groundwater.

Quality Management Program The Groundwater Quality Management Program is having a beneficial impact on the nitrate levels in groundwater. The program is undertaking a long-term solution for the District's widespread high groundwater nitrate-nitrogen problems. Until the Program was adopted, the nitrate level in the high nitrate Area of the district had increased at a rate of about 0.5 ppm (parts per million) per year to 19.24 ppm. High groundwater nitrates in some areas of the valley were first identified in 1961. Excessively high nitrates can lead to methemoglobinemia, a condition known as "blue baby syndrome." High nitrates also are a potential hazard to livestock. Scientific studies have shown that commercial nitrogen fertilizer is the primary cause (though not the only cause) in the Central Platte Valley for high nitrates in groundwater. Many of those affected by the high nitrates in the drinking water are farmers and their families. Numerous meetings with farmers, crop consultants, fertilizer industry representatives and others were conducted in an effort to determine how best to implement solutions that were suggested by the research. Hearings, to obtain public input, were also conducted. As a result of the meetings, hearings and research, the Board of Directors adopted the necessary rules, regulations, boundaries and controls for the first quality management program, which was included in the comprehensive Groundwater Management Plan adopted by the NRD in July 1987 and became effective in August 1987.

At the end of the first crop year under the program, the level dropped by 0.3 ppm and continued to drop through the 1993 crop year. Adverse weather conditions resulted in increases during the 1994 and 1995 crop years, but, a lowering of the nitrate rate occurred again after the 1996 and 1997 crop years. Small increases occurred again in 1999-2002. Average levels have dropped to 14.24 ppm in Fall of 2014. ***See Figure 11 on page 21.** The plan uses a phased approach, with lesser restrictions in areas that are not high in nitrates with additional regulations applying to areas with higher nitrate concentrations in the groundwater. Because the phases are by area, individual wells in a Phase Area may be higher or lower than the designated range of nitrate concentrations. Other factors, including proximity to a municipal water supply and vadose zone nitrates are also used in determining the Phase Areas. A vadose zone is the area between the root zone and the water table.

In 2014, the board approved the following changes to the Program:
-Operators must submit an annual report on or before March 31.
-All crops must be reported, including corn, sorghum, potatoes, beans, alfalfa, small grains, and any other commodity crop.
-Operators must show the following data for all crops: the legal description, type of irrigation system, and number of wells if greater than 1 well, total unregulated crop acres and crop to be planted.
-Crops other than corn, sorghum or potatoes do not require soil and water tests.

FIGURE 10. Irrigation Rules and Regulations

Groundwater Quality Rules & Regulations

Rev.12-18-14

Commodity Crop Growers in the Central Platte NRD must adhere to the following regulations.

Phase I - between 0 & 7.5 ppm; Phase II - between 7.6 & 15 ppm; Phase III - 15.1 ppm or higher
Phase IV - Areas where nitrate levels are not declining at an acceptable rate

Because NRDs do not have the authority to regulate surface water, surface water irrigators are not required to take water samples or monitor water applications.

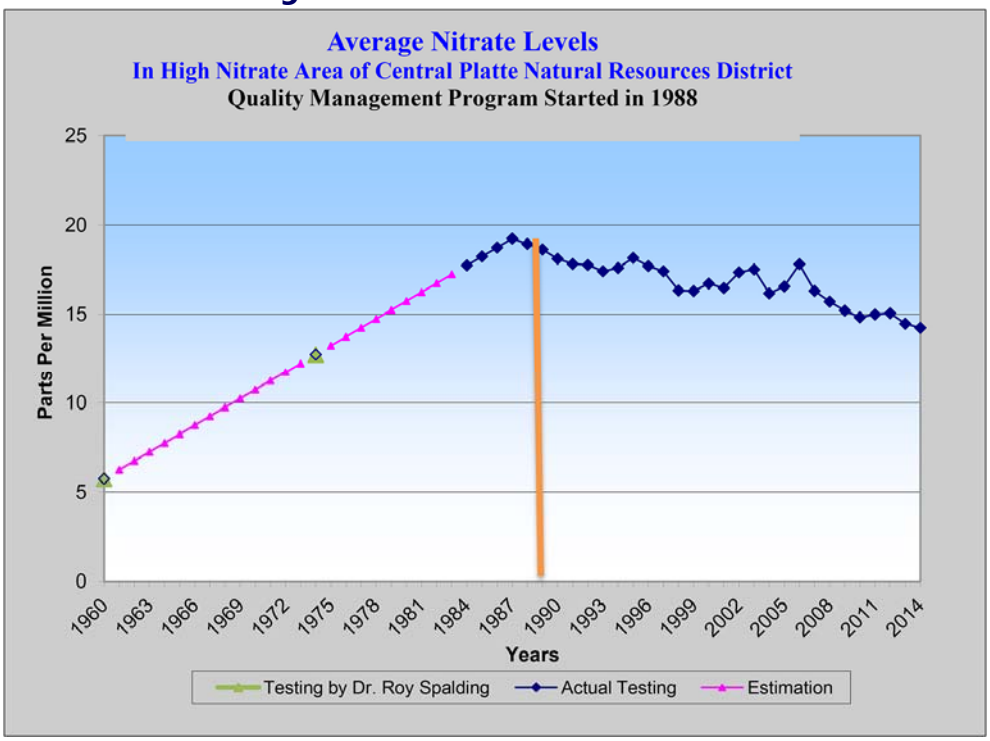
	Phase I	Phase II	Phase III	Phase IV
Fall applications of N fertilizer **on sandy soils** are prohibited.	X	X	X	X
Fall N applications **on heavy soils** are permitted after November 1.	X			
Application of commercial nitrogen fertilizer is prohibited on all soils until after March 1st.		X	X	X
Commercial nitrogen fertilizer can be applied on sandy soil **after March 1**.	X	X		
Spring application of commercial nitrogen fertilizer will **require** split application [pre-plant/pre-emergent and sidedress (post-emergent)] or the use of an approved inhibitor on corn and sorghum. Up to 80 pounds of pre-plant/pre-emergent nitrogen can be applied without an inhibitor. **Operators who pre-plant/pre-emergent apply are required** to furnish **certification** from dealer than **inhibitor** was used at the recommended rate.			X	X
All crops must be reported (including corn, sorghum, potatoes, beans, alfalfa, small grains and any other commodity crop), on District approved report forms. **Reports will be due each crop year by March 31st and include** the legal description of well(s) irrigating the crop, acres of each crop and the crop planted. Crops other than corn, sorghum and potatoes do not have to take soil and water tests.		X	X	X
In addition to the above, the report for corn, sorghum, and potatoes must list the following for the **upcoming crop year**: expected yields, water and soil test results, credits for past legume crop and manure or sludge, and the UNL's recommended nitrogen application rate. The report will also include the following for the **previous crop year:** actual yields, fertilizer applied as pre-emergent or sidedress, and irrigation water applied. **Laboratory reports for soil, water and manure analysis, and an inhibitor receipt if used, must be submitted with the annual report.**		X	X	X
An annual **deep soils analysis** for residual nitrogen (NO3-N) on each field or 80 acre tract growing corn, sorghum or potatoes, whichever is smaller, with the analysis to be conducted by a laboratory participating in the University of Nebraska Soil Testing Program. A composite sample tested must consist of a mixture from no less than one three-foot probe every five acres. **The report from the lab must be attached to the annual report**		X	X	X
A **groundwater analysis** for nitrogen (NO3-N) content on each field growing corn, grain sorghum or potatoes must be made **annually. The report from the lab must be attached to the annual report.**		X	X	X
If **manure or sludge** is used, a **credit** for the nitrogen in the manure or sludge must be **used in the calculation** for the nitrogen recommendation. A laboratory analysis must be conducted for each source of manure or sludge and attached to the report form.		X	X	X
A **credit for previous year's crop** if the previous year was in beans, alfalfa, etc., must be used in the calculation for the nitrogen recommendation on corn and sorghum.		X	X	X
The **expected yield** to be **set by District** (last 5 year average of regulated crop + 5%)				X
Nitrogen applications must not exceed UNL Recommendations with a copy of a fertilizer receipt attached to the annual report.				X
NRD Staff work with individuals on best management practices.				X
Farm operators using nitrogen fertilizer **must be certified**.		X	X	X
Operators must **monitor groundwater applications** to allow for the better management of fertilizer applications and control leaching of nitrates.		X	X	X
Phase II, III and IV areas can be established in the future based on N levels in **Madose Zone** or based upon **nitrate levels not declining** at an acceptable rate as determined by the Board of Directors.		X	X	X

- The recommended commercial nitrogen fertilizer application rate will utilize the UNL's formula for commercial nitrogen fertilizer recommendations instead of the District's formula.
-Operators growing corn, sorghum or potatoes must show the following data for the previous crop year: actual commercial nitrogen fertilizer applied per acre on each field, the timing of the application(s), and if an inhibitor was used, actual inches of groundwater applied per acre on each field, actual yield achieved per acre on each field, and certification by the operator.

Management Practices A well metering program was adopted, and later revised, that could determine how much water is being used. Wells in Phase II and Phase III must be metered/measured by the NRD. After the Phase deadline is past, flow meters are required on wells that have not been measured. To facilitate increased water management, the District developed its "Splash" program to provide one-on-one education for the producer who voluntarily participates. The producer received weekly irrigation assistance on one field and a complete evaluation of the irrigation system. In return, the producer was expected to share the experience with other producers and consider improved irrigation techniques. To supplement these education and cost-share funding portions of the program, which are voluntary and thus could be ignored to the detriment of the success of the program, the NRD adopted rules and regulations to assure that certain minimum changes would occur. The rules and regulations were amended since the Splash program was implemented. A summary of the program's rules and regulations are shown in a chart on the previous page.

Practices that impede nitrogen fertilizer from leaching into the aquifer have been successfully demonstrated throughout the District. Farmers from throughout the District with varying soils and conditions, were recruited to work with the NRD in

FIGURE 11. Average Nitrate Levels from 1962-2014



NOTE: Series 1, was the start-up of the management plan.

using the best management practices to demonstrate that nitrates can be managed efficiently and effectively while maintaining crop yields. In addition, many of the tools needed by the farmers to establish best management practices, including fertilizer calibration meters, irrigation well hour meters, surge valves, vertical dam manifolds, irrigation flow meters & reuse pits, are encouraged through the District's cost share programs. As farmers began using the new tools, word of mouth spread the story of their effectiveness.

As new technology develops to help farmers practice better management, the District's board modifies cost share programs to accommodate new tools. Initially, emphasis was given to reducing the commercial fertilizer input by counting the contribution from residual sources. However, the leaching problem has two components: fertilizer and water. Reductions in the amounts of applied water normally produce less leaching than just reduction of fertilizer inputs. The Board decided to make the practice of monitoring well outputs mandatory in Phase II and Phase III. Because research indicated that most farmers didn't know how much water they were using during irrigation.

Central Platte Demonstration Projects The Nitrogen and Irrigation Management Demonstration Project has been one of the longest existing demonstration projects in Nebraska and possibly the nation. Other state and national demonstration projects have been modeled after this educational effort that has been conducted in cooperation with the NRD. The Project was initiated in 1984 following the Hall County Water Quality Special Project. The primary financial supporter

for the project has been the NRD with grants exceeding $1.3 million since its initiation.

The Platte Valley Project includes parts of 11 counties in the central Platte Valley which includes the entire area of the CPNRD. Within these boundaries there are areas with groundwater nitrate-N concentrations in excess of 40 ppm, which are among the highest in Nebraska. Due to a combination of coarse-textured soil, shallow ground water, intense irrigation and over application of nitrogen on acres in corn production; nitrate contamination exists in a large portion of the NRD. With areas of the NRD exceeding the 10 ppm set by the EPA, the NRD was required to develop a groundwater management plan to address groundwater quality. In 1988, State of Nebraska requirements forced the NRD to develop regulations involving nitrogen application. This plan has addressed the contamination problem using a phased system based on the average nitrate-N found within the NRD.

Over 350 demo sites have been located on producers' cornfields in the project area. Randomized replicated levels of nitrogen application have been placed on most of these locations, usually in increments of 50 lbs. above and 50 lbs. below the calculated nitrogen recommendation, based on the University of Nebraska's algorithm. These plot locations have provided a point of focus for over 290 field days and winter meetings. Results from these field length, producer applied, and producer harvested plots have been instrumental in the adoption of water quality practices by the producers of the CPNRD. Producer survey results taken in 1997 showed that 54% of producers responding tested irrigation water for nitrates, 34% used a nitrification inhibitor and 70% attended a tour or meeting on best management practices to protect water quality.

The project emphasis has changed over the years, as new technology become available to the agricultural sector. Evaluation and demonstration of these technologies are incorporated within the activities of the project. Some of these technologies include use of ET Gage, watermark sensors for scheduling irrigation, soil moisture capacitance probes, application of a polymer material to an irrigated field to evaluate its effects on leaching of nitrate-nitrogen, evaluation and demonstration of slow-release or controlled release nitrogen fertilizer products, and nitrogen fixation using cover crops in seed corn. Extension and demonstration efforts in areas of irrigation management have also been a part of the project. Such things as a demonstration surge trailer have been influential in the adoption of more efficient ways of irrigation. The project coordinator, Dean Krull, has been working with the NRD since 1984 and has an office in the NRD headquarters. Krull also contributes articles in the NRD's *In Perspective* newsletter to educate producers on results of the demonstrations and on best management practices.

Crop Irrigation & Demand Network Started in 2013, this program receives data collected with the Adcon Telemetry program which provides a vast amount of real-time data. Duane Woodward, hydrologist, and Dean Krull, UNL-CPNRD demo coordinator, contact producers who may be interested in the areas targeted in the pilot program. The Program allows the NRD to view information such as water usage and soil moisture from fields where producers have installed telemetry meters. The program also allows landowners the opportunity to check their own readings such as gallons per minute used, inches applied each day and throughout the season, and soil moisture readings through a website called McCrometer Connect. This advanced program was initiated through the NRD in 2013 with $60,000 budgeted for the project. The NRD is planning the same level of funding and data collection the next 4 years with the goal to enhance and expand the program. The District applied for but did not receive a Nebraska Environmental Trust grant in the amount of $427,000 that would be used to fund an expanded program over a 3-year period. There were11 meters installed in 7 of the GMAs during the 2013 irrigation season. To date, there are 30 data collection sites established in 10 of the 24 GMAs collecting daily water pumped, rainfall, system pressure, and at some of the locations soil moisture. Partners include DNR, UNL Extension, Seim Ag Technology, CPNRD and McCrometer.

Chemigation Program This program assists irrigators that chemigate to comply with Nebraska's Chemigation Act and Regulations adopted by the Nebraska Department of Environmental Control (now Quality) and CPNRD. The Act requires any farmer applying chemicals through a closed irrigation system to have specific safety equipment, the operator be properly trained and certified, and that a permit must first be obtained from the appropriate natural resources district before chemigating. Whether or not the permit holder is certified, the person who actually applies chemicals through an irrigation system must be certified; which consists of attending a course of instruction offered through the UNL Ext Service and passing a written exam. Certification is good for four years, after which renewals are required. By state law, a chemigation permit must be obtained before any person can legally chemigate.

In 2009, the Board approved a policy change since chemigation applications had doubled and it was becoming difficult to give landowners the service that the NRD has provided in the past. To enable NRD staff to be more efficient, requirements were set for re-inspections if a system failed or if an appointment wasn't kept, and the inspector has to make a return trip: The inspector immediately issued a Suspension Order & well tagged with a Do Not Chemigate tag. When a second trip was required, the Chemigator was charged an extra fee of **$50** per system. If a third or more trip was required, the fee was an additional **$100** per system. If the appointment was not kept or not cancelled in a timely manner, the fees applied.

In 2014, LB 272 was approved by the Legislature; which changed provisions relating to chemigation permits and fees. The bill allowed each NRD to set fees for new, special, renewal and emergency permits rather than being set by the Nebraska Environmental Quality Council. The bill also clarifies that emergency permits must be approved within two working days,

FIGURE 12. 2013 Chemigation Annual Report

	New	Renewal	Total
Apps Received	171	1039	1210
Apps Approved	155	1039	1194
Fees Collected	$5,130	$10,390	$15,520

	Initial	Routine	Follow-up	Total
Inspections	**155**	**199**	**6**	**360**

Fertilizer/Pesticide Used Crop Season 2014	Total Amount Applied (Gallons)
Fertilizer	6,128,637.2
Apsa 80	24.25
Brigade 2EC	112.8
Bumper	3
Capture	40.5
Eptam	65
Headline	433.7
K Pam	3770
Parallel	635
Quilt	22
Stratego	34.2
Treflan	48.78

and emergency permits can't be issued on Saturdays, Sundays or federal or state holidays. 2014 approved changes:

Signature: The signature of the permit holder & certified applicator(s) are required on all chemigation applications.
Permit Fees: -Original application fee is $60.00. -Special permit application is $60.00. -Annual renewal is $20.00. -Emergency permit application fee is $500.00. If District Staff is required to make a second trip to complete a chemigation inspection, a $50.00 fee is charged to the permit holder/applicator. If a third trip is required, the fee is increased to $100.00.

Irrigation Run-Off In 2005, the NRD received an irrigation run-off complaint, which the Western Projects Committee decided to keep open throughout the 2005 irrigation season to see if the situation improved. The landowners worked with the NRCS to remedy the problem. The District has adopted rules and regulations designed to control groundwater irrigation runoff that have been in effect since January 1977. Periodic review during the planning period will be made to assure that the intent of the statutes is carried out.

Decommissioned Well Program No one knows for sure how many abandoned wells exist in the District, but the potential danger and the damage they can cause to the groundwater supply is a concern. Recognizing dangers posed by improperly abandoned wells, the NRD has for several years urged landowners to locate, fill and seal wells, cisterns, cesspools and other similar cavities on their property, but the problem persisted. The most dramatic danger caused by improper well abandonment is a hole into which children, animals or equipment might fall. A more likely danger, though, is the creation of a path through which contamination of the groundwater might occur. Abandoned wells that have not been properly filled and sealed can act as a direct conduit for pollutants to the water supply beneath the earth's surface.

State law requires that abandoned wells be properly sealed. NRDs, the State of Nebraska and NRCS provide well owners with financial and technical assistance to get the job done right through well decommissioning programs. In 2013, the NRD made a change to no longer providing cost share for replacement wells. Cost share is available for any old irrigation well (60%), up to $500 on any well that pumps 50 gpm or less, $750 for any well pumping over 50 gpm, and for any hand-dug well up to a $1,500 maximum. A licensed water well contractor or licensed pump installation contractor is required to abandon the well and verify that the water well was decommissioned in accordance with state law, standards, rules and regulations. The NRD budgets $35,000 each year, with the NDNR providing another $7,000 per year. There were 119 wells decommissioned in 2014, totaling 2,278 since 1991.

Buffer Strips In 1998, the Nebraska Legislature established the Nebraska Buffer Strip Program to use filter strips for reducing the amount of chemicals that run off farm fields into the streams around the state. Cost share assistance is provided under the program to landowners who replace cropland with grass buffer strips along the banks of perennial and intermittent streams or permanent bodies of water. A buffer strip traps chemicals before they reach the waterway. As a result, the chemical dissipates instead of polluting the stream.

Objectives

1. *To reduce groundwater nitrate levels in areas that exceed 10 parts per million (ppm), the amount allowed by the state and the federal government.*
2. *To maintain groundwater nitrate levels at or below the permitted levels in areas that are less than 10 ppm.*
3. *To monitor groundwater quality for other contaminates along with nitrates.*
4. *To develop necessary groundwater quality management program(s) if other non-point source contaminants show signs of approaching or exceeding maximum safe levels.*

IV. Water Quantity

GOAL: To assure an adequate supply of water for feasible and beneficial uses, through the proper management, conservation, development and utilization of the District's water resources.

Nebraska leads the nation in irrigation production with 8.3 million acres irrigated in 2014. Being in the Platte River Watershed, the District's primary surface water feature is the Platte River. However, most farmers rely on groundwater for their irrigation needs since groundwater is abundantly available across the District. Water supply is under continuous monitoring throughout the District and a groundwater supply management plan to address potential shortages has been adopted by the NRD's board of directors and has been in effect since 1987. Groundwater aquifer declines have been documented where irrigation use is the heaviest.

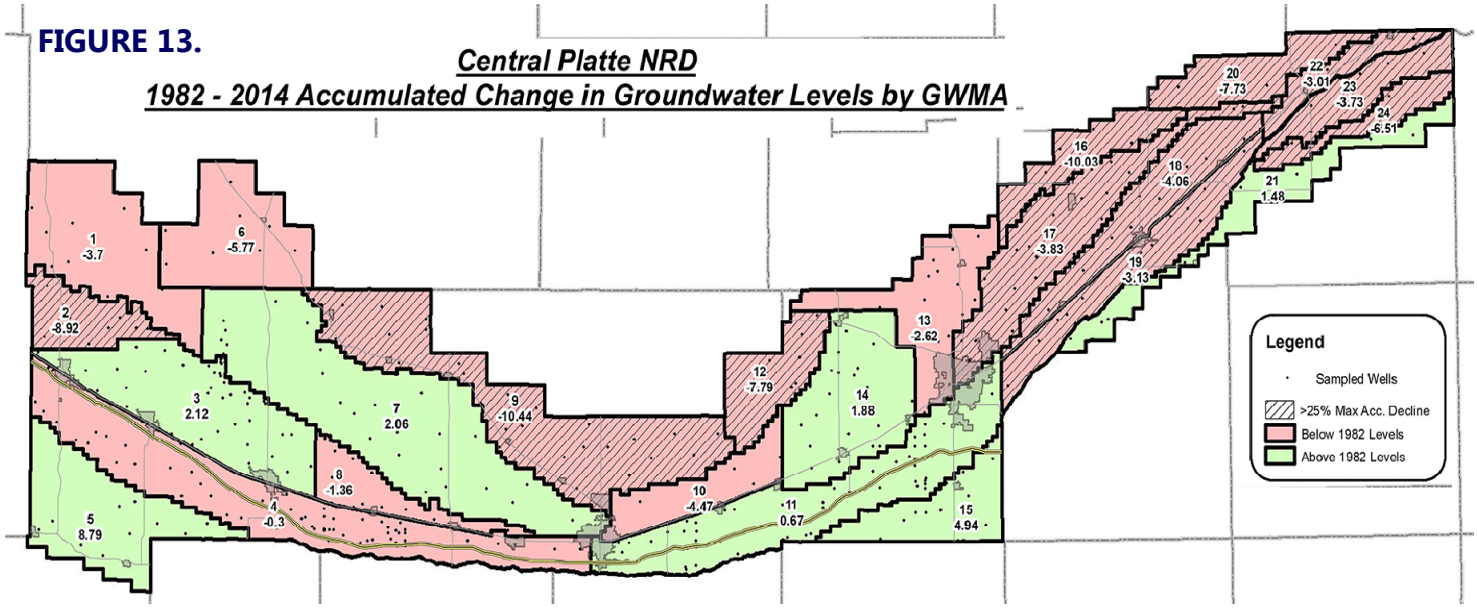
Groundwater is the District's chief source of drinking water and primary economic resource of the NRD since we depend on it for irrigation; which, in turn, enables us to have a strong economy rooted in agriculture. If there was any doubt that we need to take care of this resource, it should've been dispelled by declining water tables in the late 1970s & early 1980s. Rainfall increased in the mid-1980s/1990s, which caused water tables to rise, but the historic record suggests complete groundwater recovery from the dry periods during the wet periods does not always occur in all areas. Careful management of the resource is necessary. Aquifer thickness varies from 25-300+ feet across the district, so a drop of one foot has a more significant impact on some parts of the District than on others.

Groundwater depths and thicknesses are charted and used to help establish 24 groundwater supply management areas. Besides the aquifer conditions, the soils and topographic characteristics are similar in each management area. The 1982 groundwater levels were established as the standard for the management plan since rainfall and recharge were above average several years since 1982. The maximum acceptable decline for each of the management areas was calculated, establishing a margin of safety in each area. It was determined that as an area's average groundwater level declined through that margin of safety, certain controls ought to be mandated to slow the decline.

In 1987, the board established the Groundwater Management Plan with a phased program to implement controls when needed. The maximum acceptable decline ranges from 10' in the eastern end of the District to 30' in portions of the western end of the district. If the water table falls to 50% of that maximum decline (5 and 15 feet respectively for each of the range parameters), Phase II would go into effect for any area or areas affected, triggering mandatory reductions in irrigated acres and establishing spacing limits for new irrigation wells. Further declines to 70%, 90% & 100% of the maximum acceptable decline will trigger Phase III, IV and V controls respectively, mandating additional cutbacks in irrigated acreage and increased spacing limits for new wells. Complete details of the controls are available in district publications. Because of the differences in the aquifer depth and conditions, it is conceivable that some areas could be in the higher phases while other areas may always be in Phase I.

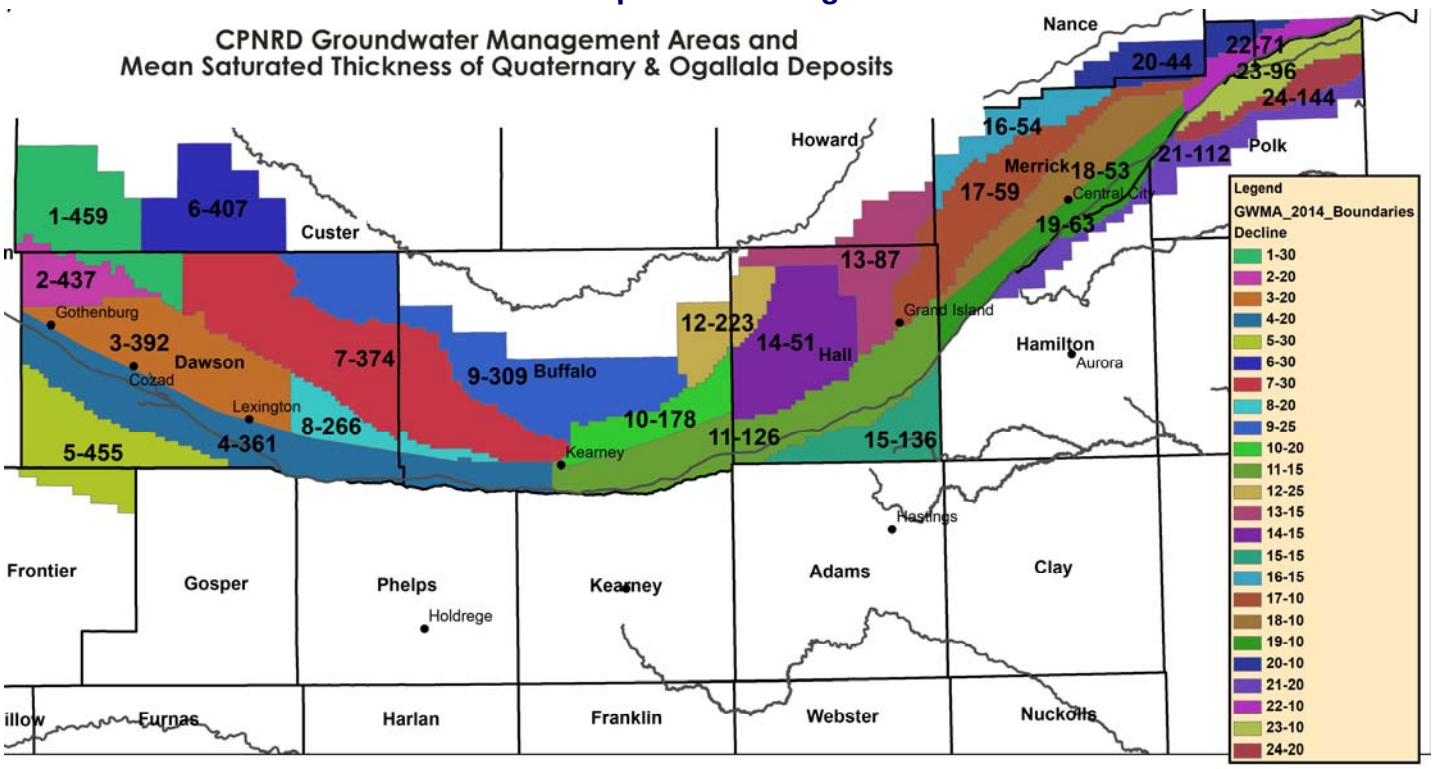
Groundwater Levels NRD staff measures 600 wells, twice a year, in conjunction with the Conservation & Survey Division, UNL and the US Geological Survey. The measurements are taken in all 11 counties served by the NRD to monitor the District's groundwater levels. The groundwater levels of 1982 are used by the district as the benchmark year to compare groundwater level changes. This was established as part of the 1987 Groundwater Management Plan. That plan established 24 sub-districts across the NRD for monitoring groundwater level changes see **Figure 13** below.

FIGURE 13.



The change in level is an average, based on the wells measured in each sub-district. In the spring of 2014, all sub-districts continue to have changes in groundwater levels above the maximum acceptable decline range so the district remains in Phase I under the Groundwater Management Plan rules for quantity. The map below shows the mean saturated thickness for Quaternary and Ogallala Deposits across the District and in each of the groundwater management areas. The average saturation zone ranged from as much as 459 feet in Custer County to a range of 44 feet in Nance County.

FIGURE 14. Mean Saturated Thickness per GW Management Area



For nearly two decades, there has been more groundwater in storage District-wide in the spring than there was in the spring of 1982, the base year. Groundwater levels vary over time based on rainfall amounts & irrigation water use. Overall that change has been less than 2.5' above or below the 1982 spring water level. The small water level change is in spite of an additional 250,000 acres of groundwater irrigation being developed between 1982-2004, the year the NRD and NDNR placed a freeze on new irrigated acres and new wells. New farming techniques & practices that conserve water and reduce consumption, like minimum tillage and a switch from high pressure to low pressure sprinkler systems, are credited with the water savings that make the aquifer report so positive despite severe drought conditions.

Several areas within the District continued to show signs of drought when 2014 spring water levels were taken in April and May. Of the 24 groundwater management areas (GMAs) in the district, 18 areas showed some signs of drought since 1982. The largest increase in groundwater levels was in Dawson and Frontier counties with 8.79' above 1982 levels. The largest deficit was in northern Dawson, Buffalo and Hall counties at -10.44' below 1982 levels. Measurements were taken prior to the precipitation received in June and July. Eleven of the 24 GMAs have reached 25% of the maximum allowable decline established by the CPNRD, and will no longer be allowed to transfer new uses or drill supplemental wells in those areas until the average water level is less than 25% of the allowable decline for two consecutive years. *(Rule 7. Transfers, Rules & Regulations for Groundwater Use in Fully & Over Appropriated Areas.)*

Cooperative Hydrology Study (COHYST) When former Nebraska Governor Ben Nelson and the governors of Wyoming and Colorado signed the Platte River Recovery Implementation Program (PRRIP) in 1997 with the U.S. Dept. of Interior, questions arose about its potential impacts on activities along the Platte. It became apparent that data wasn't available to use in evaluating proposals. With the help from the Nebraska Environmental Trust (NET) grant, the NRD and a coalition of state and local agencies; water and environmental organizations started a hydrology study of the Platte Basin known as the Cooperative Hydrology Study (COHYST).

COHYST improves the understanding of the hydrological and geological conditions in the Basin. The goal of the study is to provide scientifically supportable databases, analyses and detailed computer groundwater models to more accurately identify and quantify the relationship between the Platte River and adjacent groundwater resource. The Study also provides valuable information necessary to develop a plan to address "new depletions" to flows in the central stretch of the Platte River. The Study also assists Nebraska in several avenues: to meet its obligation under the PRRIP by helping analyze

proposed activities, assists the NRDs along the Platte River in providing appropriate regulation and management, provides a basis to develop policy and procedures related to ground & surface water, and helps analyze other programs in Nebraska.

NET awarded $500,000 for the first year and $450,000 for second and third-year intents. The groundwater models were completed in 2004 and peer reviewed by Eagle Resources of North Carolina. A team of senior hydrologists was hired to design, oversee and supervise the database that is being developed. Duane Woodward, hydrologist, is a senior member of the Technical Committee. Members of the study and other partners provided additional money and in-kind service for the study. COHYST developed computer databases that quantified existing groundwater use, and river data, and aquifer data in the Platte River Basin. The databases are used to develop regional computer models to provide a better understanding of the groundwater flow system, the inter-relationships between ground & surface water, the geology of the region, and other characteristics of the groundwater aquifer.

The models enable researchers to represent real-world features such as rivers, streams, groundwater aquifers, groundwater pumping, or canals as a set of mathematical equations, which reproduce observed water levels and stream flows. The models are used as tools to predict how changes to or "stresses" on the groundwater system may impact flows in the Platte River. Stresses are additions and subtractions of water from the groundwater system, including pumping from wells, evapotranspiration by vegetation, aquifer storage and recovery, flow to drains, groundwater recharge from precipitation, deep percolation from irrigation, enhanced recharge due to certain land uses, recharge from canal and lateral leakage, and recharge from lakes and reservoirs. The models also help predict how water supply or conservation projects proposed as part of the PRRIP affects ground water levels and river flows.

COHYST groundwater models estimated changes in stream flow as a result of new irrigated acres between 1997 and 2005. The changes in stream flow were made for reaches of the Platte River above Elm Creek, NE using a 50-year average. The reach changes were subdivided by NRD area– see Figure 14 below. These estimates are used in the Platte River Basin plan as targets for stream flow depletions that need to be offset to get back to 1997 level of development. COHYST's current annual budget is around $350,000. These funds support the senior hydrologist and sponsor staff to update database and develop new version of the groundwater models.

FIGURE 15. COHYST Reach Changes by NRD

NRD	New groundwater irrigated acres 1997-2005	Average Stream Flow Change (AF)
North Platte	15,300	8,000
South Platte	16,700	700
Twin Platte	53,500	7,700
Central Platte	74,500	3,400
Tri-Basin	33,200	5,000

Initial COHYST Sponsors: CNPPID, NDNR, NGPC, NPPD & the following NRDs: Central Platte, Little Blue, North Platte, South Platte, Tri-Basin, Twin Platte, Upper Big Blue.

Current COHYST Partners: Cities of: Grand Island, North Platte, Scottsbluff; Nebraska Audubon Society, Nebraska Farm Bureau, Nebraska Water Resources Association, Nebraska Water Users, Platte River Whooping Crane Trust

COHYST 2010 was a study effort to build on the existing COHYST databases and models. The study included new NET funding of $616,800 over two years and a smaller COHYST area that covers the Platte River from Lewellen, NE, on the North Platte and Julesburg, CO, on the South Platte downstream to Duncan, NE, on the Platte mainstream. The study included a new work plan with three phases. Phase I work completed a overall water budget for the new COHYST area. Phase II is developing water budget analysis tools to manage ground and surface water resources in the Platte Basin. Phase III will develop sub-regional models across the area as needed for focused water management areas. Sponsors of the current study include CNPPID; Central Platte, Twin Platte, Tri-Basin NRDs; Nebraska Game & Parks Commission, and NPPD.

In 2012, the Sponsors Group entered into a contract to look at updating land use acres from 2006-2010 with a GIS company called Riverside from Colorado. The basic acreage data sets are being updated through that time period so the data will be ready to move into the next step of COHYST when the sponsors start looking at such things as future depletions. The new data sets are extensive, including 27 land types and uses. Previous land use sets put together go back to the 1950s. The modeling group has completed the focus on small areas of the entire COHYST area to identify how to get the models to better match the water levels and base flow returns to the river; and are putting changes back into the entire model.

In 2013, the technical committee completed model calibration on three models and selected Mike McDonal to conduct an outside peer review. The Watershed Model (CROPSIM), the Surface Water Model (STELLA), and the Groundwater Model (MODFLOW) were integrated to simulate the hydrologic cycle. The simulation compares water budget fluxes to data-driven calibration targets. The models will be used for water management decisions for projects such as the percentage depletion maps, conjunctive water management &to determine the real effects of operating irrigation canals differently.

As of August 2014, the Integrated Model results for the watershed, surface water, and groundwater models were within 8% difference for calculated gage flows versus historic gage flows; which is positive indication that the COHYST models are

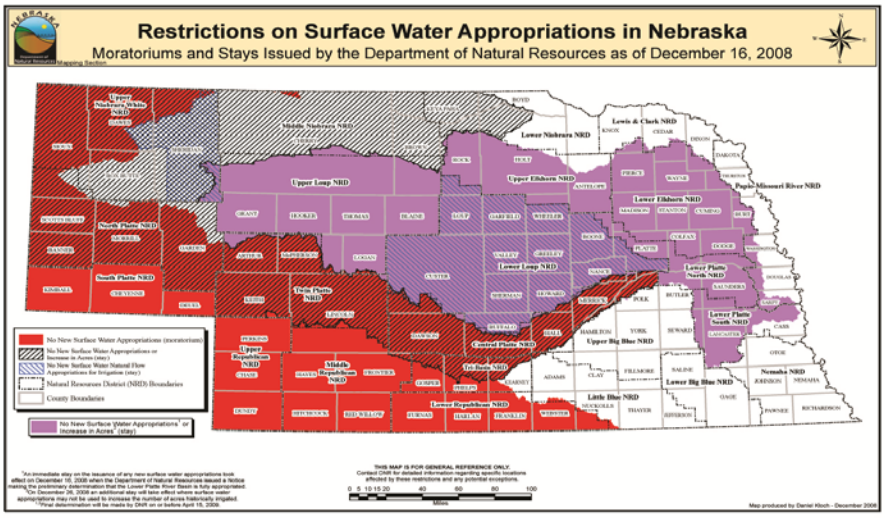
calibrated correctly. The following minor changes were made to the models:

- **Watershed:** soil information and weather data from climate stations were added.
- **Surface Water:** seepage return from Sutherland Reservoir, seepage from Lake McConaughy, addition of runoff and irrigation demands; storage/natural flow and environmental storage account.
- **Groundwater Model:** match evapotranspiration cells to expected locations, adjusted elevations, routed seepage to new discharge point, use groundwater model outputs for Lake McConaughy seepage.

Suspension on Drilling New Wells & Expansion of Irrigated Acres In February of 2006, the entire District was placed in a suspension area when the Board adopted the *Rules and Regulations For Closing the Management Area to the Issuance of New Well Permits, Preventing the Expansion of Irrigated Acres and Increased or Expanded Uses of Groundwater for Other Beneficial Purposes.* The rules were adopted after the NDNR designated the entire District as fully appropriated. The Plan has been amended several times since 2003: June 2006, November 2006, April 2007, December 2007, June 2008, July 2009, January 2013, June 2013 and most recently April 2014.

The original suspension was imposed in November 2003, when the CPNRD Board imposed a temporary suspension of drilling new wells within parts of the District. The area included in the temporary suspension runs 185 miles (length of district from Gothenburg to Columbus) and 6-8 miles either side of the Platte River. The temporary suspension was put in place to allow the board and NDNR to look over the conflicts between ground & surface water to determine if a problem exists and how bad it might be by developing a study of the district's surface and groundwater supplies. In 2004, NDNR indicated that the Platte River Basin was fully appropriated and in some places, especially upstream from Elm Creek, over-appropriated. The board made the changes since existing surface and/or groundwater users would've been faced with less water supply. Wells not subject to the suspension included: wells that pumping less than 50 gpm, replacement wells, de-watering wells pumping less than 90 days & test hole wells. Variances were granted if determined that construction of a new well was necessary to alleviate an emergency situation involving provision of water for human consumption or upon other good cause shown. Public hearings were held throughout the district in 2003 to discuss the temporary suspension. Of 450 in attendance, 237 responded to opinion surveys handed out at the hearings with 166 of those who responded were very opposed.

FIGURE 15. Restrictions for Irrigation



Three situations influenced the passing of the suspension. The first is the drought cycle that the state of Nebraska was in, which really exemplified the need to "take stock" of the water budget. The other two situations were LB962 introduced following a recommendation by the Water Policy Task Force, and unknown future requirements following the implementation of the Platte River Recovery Implementation Program. The State is to mitigate or offset any new depletions after July 1997 as part of the Program. If the State doesn't pick up their obligation, the responsibility will likely fall back to NRDs or water users who would be required to offset depletions from post-1997 wells by giving up part of their irrigated acres.

Rules & Regulation Changes Directors took action in 2012 to allow Class 4e & 6e soils to be developed as long as those acres are offset. The directors set the offsets at a one-to-one ratio and limited the number of acres that could be developed to a maximum of 15 acres. Soil classifications are a factor in what can be developed and many landowners were unable to run their pivots full circle or utilize their entire fields due to classifications established in the 1990s. New technology combined with the soil classification determinations were used in the decision to change the rule. The Plan adopted in 2009 contained changes to the way municipalities report to the NRD, what qualifies as irrigated land after January 1, 2010, and specific requirements on the land where water has been transferred for irrigation. The updates in 2013 changed the way variances are handled for small areas of Class 4e & Class 6e soils; and stated the requirements and options of the '2 & 10' Rule to preserve certification for irrigated land within the District. Below are most recent changes or additions:

Maintaining Irrigation Status After January 1, 2010, in order to maintain irrigation status the land must be: a. Irrigated at least 2 out of 10 years, or; b. Land is enrolled in a federal conservation program (CRP, CREP, etc.) or; c. Land that is growing alfalfa in the sub-irrigation areas in the District; d. Pasture or hayland that can be shown to have been irrigated at least 2 out of 10 years and will remain as irrigated pasture or irrigated hayland, unless the average annual consumptive use is

transferred to another use and/or location pursuant to the NRD's Rules & Regs. In May 2012, the Variance/Appeals Subcommittee revisited the 2&10 Rule to discuss how owners/operators would be notified to make sure their irrigation was protected. The year 2019 is the end of the first 10 years of the rule. In 2015, the NRD will send out notifications to landowners that have fields not showing irrigated proof & let them know that they have until 2019 to get water to the acres in question for two years of proof. In 2017, the NRD will again send out notifications to the landowners that have fields not showing irrigated proof through aerial photography and request that they contact the NRD. Options will include: Proof of irrigation through FSA records, their plans to irrigate marked acres over the next two years, or whether they are going to water bank with the NRD or another related water bank transaction.

Transfers for Class VI Lands The land on which the groundwater is transferred for irrigation must have a grass cover. The existing topography on the land in which the groundwater is transferred for irrigation must remain as it is without draining, dredging, filling, leveling, shaping, or land clearing (including tree stump removal).

Municipal Variances/Offsets Each year a municipality shall be responsible for reporting to the District monthly ground water pumping volumes and when available monthly wastewater discharge volumes. In addition, each year the municipality shall be responsible for reporting to the District, and offsetting to the river, any new or expanded single commercial or industrial consumptive use served by the municipal water system consuming over 25 million gallons per year. The update in 2012 allowed new acres to be irrigated for an area along the Platte River below Chapman, NE which are known as IBC- Impacts Below Chapman. The new acres that were approved (through a ranking process) didn't have to be offset as long as the NRD or NDNR determined that the new uses did not cause an adverse affect to the Platte River below Chapman. Of the 4,018 acres requested for new irrigation development, the board approved 2,486 acres. That total included 132 applications and 206 acre-feet of water impact to the river. Average size of the approved applications was 25 acres. In August 2013 & 2014, the board voted not to allow any new irrigated acres in the IBC area due to the 2012 drought and current groundwater level measurements in the area. A change to address groundwater declines in the Rules & Regs, states that transfers and supplemental wells will not be allowed into any sub-area if the groundwater declines are 25% or more of the acceptable decline.

In April 2014, the board approved updates to the *Rules & Regulations for Groundwater Use in Fully & Over Appropriated Areas*. The approved changes: December 31, 2014 deadline to certify irrigated acres; allowances for limited transfers on Class VIIe soils; and transfers of groundwater for irrigation of cropland on Class Vw, VIw, VIs, VIIw, VIIs, VIIIw, or VIIIs soils if approved by the Corps of Engineers & NRCS. To address groundwater declines, transfers and supplemental wells will not be allowed into any sub-area if the groundwater declines are 25% or more of the acceptable decline.

2013 Summary: In 2013, CPNRD allowed 339 transfers resulting in 2,020.1 acres of new irrigated lands; with 1,461.4 acres used to offset the new uses. Each transfer resulted in no net increase in stream depletions when computed using the CIR offset calculator developed from COHYST.

Water Policy & Funding Task Forces In 2002, LB 1003 established the Task Force to address the management and use of Nebraska's surface and groundwater. CPNRD had two appointed representatives: Ron Bishop, general manager, representing the NRDs; and Dick Mercer, director-representing the Middle Platte Basin. The Task Force presented its report to Governor Johanns in 2003, recommending that basic components of existing surface and groundwater law be left in place; but that Nebraska adopt a stronger, more proactive approach to the integrated management of surface water and hydrologically connected groundwater.

Key goals were to address potential problems between groundwater and surface water users before conflicts arise and to manage the water resources of the State to sustain a balance between hydrologically connected water uses and water supplies. The Nebraska Legislature then adopted LB 962 which makes the state and the 23 NRDs more proactive in anticipating and/or preventing conflicts between groundwater and surface water users. In July of 2004, the NDNR declared that all or portions of 9 NRDs were considered "fully appropriated." In addition, the Platte River Basin, above the Kearney Canal Diversion, the North Platte River Basin and the South Platte River Basin were designated as over-appropriated.

Nebraska is also trying to comply with the Republican River Compact, a 1943 agreement with Colorado & Kansas overwater use in the river's basin. The agreement allocates 49% of the Republican River's water to Nebraska, 40% to Kansas and 11% to Colorado. Kansas long-accused Nebraska of violating the compact by allowing farmers to divert more than their legal share of the river's water for private use. The case went before Special Master William J. Kayatta in August of 2012. The State of Kansas sued Nebraska asking for up to 300,000 acres permanently retired from irrigation and up to $80 million in damages for water use in 2006. In December 2013, Kayatta instead recommended Nebraska pay $5.5 million in damages. He didn't recommend a massive shutdown as Kansas had requested, which is a victory worth more than $100 million annually to Nebraska's economy. The U.S. Supreme Court is currently hearing this case.

In 2004, conclusions reached by the Governor's Water Policy Task Force led to the passage of LB 962 and set the stage for a water management policy based on sustainability. The legislation was a success, with one exception: it fell short due to lack of funding. LB 517 was approved to fill that gap by creating a Water Funding Task Force. The Task Force included 16 mem-

bers of the Nebraska Natural Resources Commission, 11 citizens appointed by Governor Heineman, 6 state senators and director of the NDNR. CPNRD board members Dick Mercer and Mick Reynolds served as Task Force members.

In December 2013, the Task Force submitted its recommendations to the Nebraska Legislature for a strategic, long-term funding plan for Nebraska's water projects. The Nebraska Legislature and Governor Heineman approved funding to establish a permanent, stable funding source to ensure that Nebraska's water resources are managed effectively and efficiently.

The Bill includes creating a two-step application process for water projects, allocating an annual funding amount of $50 million & expanding the Natural Resources Commission to oversee the allocation of funds. The members spent 5 months conducting education sessions/tours and holding public meetings across the state. During the tours, Task Force members gathered input and learned of the water issues/funding challenges facing water users in Nebraska. The information gathered at the meetings helped the group prioritize the goals that led to the five recommendations. The Task Force reached consensus in early December and all 34 members supported the recommendations presented in their report. Their top priorities for water programs, projects and activities included :

- Ensuring that water projects funded through the new Water Sustainability Fund demonstrate their ability to contribute to the goals of water sustainability for the state by protecting the ability of future generations to meet their needs through various methods. These include increasing aquifer recharge, reducing aquifer depletion, increasing stream flow and remediating threats to drinking water
- Contributing to multiple water supply management goals, such as flood control, agricultural use, municipal and industrial uses, recreational benefits, wildlife habitat, conservation and preservation of water resources
- Providing increased water productivity and enhancing water quality
- Using the most cost-effective solutions available
- Complying with compacts, decrees, and other state contracts and agreements

On April 10, 2014 Senators passed a bill (48-0 vote) creating the Water Sustainability Fund (WSF) and restructuring of the Nebraska Natural Resources Commission, to better emphasize water sustainability. LB1098, introduced by Senator Tom Carlson, requires that the WSF be used to contribute to multiple water supply management goals, fund municipal sewer infrastructure projects, increase water productivity, enhance water quality & comply with interstate compacts or other agreements. Funds will be distributed equitably throughout the state with no more than 10% dedicated annually to sewer infrastructure projects.

Three state Natural Resources Commission members were appointed by the governor and 13 elected to represent river basins across the state. LB 1098 added 11 members to the commission who were appointed by the governor, representing these interests: agribusiness,; agriculture; groundwater irrigators; irrigation districts; manufacturing; metropolitan utilities districts; municipal water users; outdoor recreation users; public power districts; range livestock owners; surface water irrigators; and wildlife conservation.

The bill also requires basins including three or more NRDs operating under an integrated management plan to develop a basin-wide plan for any areas with hydrologically connected water supplies. The Legislature's Appropriations Committee will conduct a biennial analysis of the WSF, beginning in the 2019-2021 biennium. Provisions of several additional bills were incorporated into LB1098 including:

• LB391 adds "downstream" to statute to prohibit storing water in reservoirs when water is required for direct irrigation;
• LB710 requires NRDs to hold public hearings before entering into a water augmentation project outside NRD boundaries;
• LB723 creates subclasses of irrigated cropland for use in the sales comparison approach of land valuation;
• LB686 extends annual deadline from March 1 to June 1 for irrigators to file for irrigated land occupation tax exemption.

Fully & Over Appropriated Designations A basin is determined to be fully appropriated if further development were to occur, the balance between water use and water supplies could not be sustained. An over-appropriated basin is one where the extent of development is not sustainable over the long term, or that the already permitted uses are in excess of what can be supported by the water supply over the long term. As a result of the designations, DNR placed the following stays on new uses of surface and groundwater: immediate stay on any new natural-flow, storage, or storage-use appropriations in the whole of the over-appropriated basins, and a stay on new water well construction permits in all of the geographic area within which surface water and groundwater are hydrologically connected. Stays are also imposed on the construction of certain new water wells unless such construction has commenced prior to the effective date of that stay or a still valid construction permit for such water well has been previously obtained from an NRD; and on the use of an existing water well to increase the number of acres historically irrigated. DNR placed stays on any increase, through use of an existing surface water right, of the number of acres historically irrigated.

All additional stays became effective September 2004 and remain in effect until NDNR determines that the affected basins are not over-appropriated, or the stays expire pursuant to the provisions of LB 962. In 2006, NDNR started making annual determinations of basins not previously designated as fully appropriated or over-appropriated to see if they had become fully appropriated. CPNRD was designated as over-appropriated from Elm Creek west and the rest of the District was desig-

nated as fully appropriated. NRD directors, staff and DNR worked with Stakeholders to develop an Integrated Management Plan for the NRD. CPNRD also participated in the development of a basin-wide plan for the Platte Basin. In 2013, the board approved an agreement to allow Twin Platte NRD and Tri-Basin NRD to purchase water from CPNRD annually to provide flows back to the Platte River. The agreement states that if Central Platte has excess flows available, the TPNRD may purchase up to 1,500 ac/ft of water until 2019; and Tri-Basin NRD may purchase up to 2,000 ac/ft until 2019. Any remaining flows would be sold to the Platte River Recovery Implementation Program. It was estimated that CPNRD would have between 3,000-4,000 ac/ft of excess flows once the canal rehabilitations in Dawson County are completed.

Certification of Irrigated Acres All irrigated acres are certified, including variances & water bank transactions. In April 2006, the NRD began the process of certifying irrigated acres by mailing out packets to landowners who live in Custer, Dawson & Frontier counties. To ensure accounting of irrigated acres was accurate, landowners were provided with aerial maps and the number of acres the NRD had on record as irrigated that was taken from infrared imagery. If a landowner disagreed with the number of acres provided, they were required to show CPNRD proof of their claims by obtaining records from their local FSA office; including an aerial photo and a printout of their irrigated land. Landowners then made an appointment with the NRD staff on location. Most of the changes made were less than 10 acres while about 1/3 of the fields that the NRD determined as irrigated needed no changes at all.

In January 2007, the NRD launched the first irrigation certification website in the state, developed by GIS Workshop of Lincoln. It allows public access to scanned documents that show proof of the number of irrigated acres for all landowners in the District, infrared imagery taken by the NRD & all registered wells. Users may search information for specific parcels of land by using the clickable map interface or by searching the site by landowner or tenant name, legal description or field ID number. The site also allows landowners to view and print aerial photos taken by the District to show how their land has developed since 2003 and view any improvements that have been made. The NRD's cost was $5,000 to build the website and $1,500 per year to update and maintain it. The website was overhauled in 2011: **http://cpnrd.giworkshop.com.** The board set a deadline of December 31, 2014 to certify irrigated acres.

2013 Water Use Update: CPNRD has 1,025,466 irrigated acres of which 932,826 acres are groundwater only; 14,590 acres are surface water only, and 78,050 acres are co-mingled use. The crops being irrigated in the District include corn, soybeans, sorghum, potatoes, alfalfa, small grains and sunflowers.

Integrated Management Plans CPNRD and NDNR began working on the Integrated Management Plan for the NRD in 2005. The NRD began meeting with Stakeholders in December 2005 to begin educating them on the requirements set by DNR and the issues that would need to be considered in developing the Plan. The members included both surface and groundwater interests such as irrigators, city utilities, power districts, economic development and banking representatives. In June 2006, the Group finished a draft plan including one goal and 11 objectives. Originally the Plan was to be in place within 3-5 years, however, an extension to complete the Plan set the deadline for 2009 to allow NRDs to wait for the basin-wide plans to be completed. The IMP was approved in May of 2009, with public hearings held in July 2009 in Lexington and Grand Island. In connection with the IMPs, the NRD also revised the Rules & Regs to correlate with the requirements in the IMP. In 2010, the NDNR held an open comment period for the annual review of the basin IMPs. On March 22, 2012 the revised IMP was adopted and became effective on May 21, 2012.

Irrigation Violations In 2012, staff found 204 violations totaling 1,032 acres throughout the District; with 70% of those being less than 5 acres. Most of the violations are acres that need to be certified.

Irrigation Well Registration A free service to landowners is available from the NRD to verify and correct registrations of wells across the District. Wells currently registered with the DNR often list the wrong owners and some didn't have an accurate location. Some registered wells have been decommissioned and other wells that exist are not registered. Under state law, wells that are not properly registered are considered to be "illegal wells," which is considered a Class 4 criminal misdemeanor violation of the law. The penalty for such a violation is a fine of $100 (minimum) to $500 (maximum) per conviction. Another possible consequence of such a violation is a court order to discontinue pumping from the illegal wells. Often wells are part of the property inventory when the ownership changes hands. There is no automatic procedure for correcting the well registration when this happens so it becomes the new property owner's responsibility to verify the registration. There is no charge by the NRD to help verify the registration of an irrigation well. However, DNR charges a fee of $110 to register each well, whether it is newly dug or is an existing well that has never been previously registered. There is no charge from either the NRD or the state to correct the location or change the ownership information.

Water Well Permits Permits from the NRD are required before water wells are drilled. In 1986, state law was created to require the District to have a permit program for new wells that are drilled or existing wells that are modified in control or management areas, such as those created when the District adopted its Groundwater Management Plan. The NRD began issuing permits in July 1988. These permits assure landowners and the District that spacing requirements for such management areas are being maintained. State law provides that a new irrigation well cannot be drilled within 600 feet of an existing irrigation well not owned or controlled by the applicant. A new irrigation well cannot be placed within 1,000 feet of an industrial or municipal well and no industrial or municipal well can be drilled within 1,000 feet of any registered irrigation

well. Districts can increase the spacing requirements between wells in management areas, and the NRD's plan calls for a 900-foot spacing if groundwater declines trigger a Phase II designation in a given management area. The plan calls for a 1,200-foot spacing in Phase III, a 1,500-foot spacing in Phase IV and an 1,800-foot spacing in Phase V. Following a change in state law, NRDs are now given authority to provide a permit and define what a replacement well is. The NRD does require a permit to drill replacement wells. The NRD's permit requirement is in addition to well registration requirements of the state that still apply. Replacement wells must be registered the same as any other water well, except that the timing may be different. Applications for the permits to drill wells in the District can be obtained from the NRD office. The permit fee is $50 and expires one year from the date of approval. In 2013, there were 308 well permits issued with 8 permits voided and one not approved due to spacing requirements.

Water Storage Programs The CPNRD is currently involved in the following projects that provide more accurate measurement of water storage and availability of water use in the present and future. The NRD is also purchasing water rights through a water banking program to reduce the possibility of allocations.

J-2 Regulating Reservoirs In July 2013, the board approved participation in Central Nebraska Public Power & Irrigation District's (CNPPID) proposed J2 Regulating Reservoirs. CPNRD will pay approximately 2% of the $75 million project. Benefits to the NRD include: opportunities to get the Platte River back to the 1997 water level and getting the over-appropriated area of the District back to fully appropriated; the ability to provide municipal offsets if needed; and receiving 2,040 ac/ft of water back to the river without having to retire any irrigated acres. When the cost is spread out for 50 years and with the partnerships in place, the cost is $40 per ac/ft. Partners include: PRRIP, CNPPID, CPNRD, Tri-Basin NRD, TPNRD and NDNR.

Improving Groundwater Data Collecting The NET supported a 3-year project using a Magnetic Resonance Sounding (MRS) to gather information on groundwater without drilling holes. MRS is a quick, non-invasive surface geophysical technique that directly measures groundwater and is used in place of test holes and aquifer pump tests that are sparse, time-consuming & expensive. The MRS technology is being collected and tested by the USGS Water Service Center in Lincoln. Data collection and study findings are published in a Scientific Investigation Report. Use of MRS parameters improves the accuracy of groundwater models and enable water resource managers to make more informed decisions.

Water Banking Program The NRD Water Banking Policy was approved in May 2007, which defines the process of a how a water bank works. Through the water banking program, the NRD acquires water rights from landowners. For every acre/foot of water that impacts the river that the NRD can acquire, there's that much less regulation & cutback the NRD would have to impose. In January 2007, the board approved the first water bank transaction in the district by approving a variance request & the deposit of 2.4 ac/ft per year into the District's water bank. Jim Bendfeldt, director, made the donation of the offset water.

In November 2012, the board increased the rate to pay for water rights to $8,000 per acre-foot of depletion to the river; which is up from $3,750 because of the market value for water rights. The water rights purchased by the NRD are deposited into the NRD's Water Bank and used to help get water levels back to what they were in 1997; which is required by the NDNR and other water management plans. So far, the NRD has purchased 3,000 ac/ft of water and another 200 ac/ft are in planning to be purchased from landowners who have expressed interest. The COHYST model has been useful in determining the amount of ac/ft needed to bring the Platte River back to 1997 levels. As of now, it looks like the NRD will need to reduce river depletions by 3,400 ac/ft to bring the Platte River back to 1997 levels. After reaching the 1997 level, the over-appropriated area west of Elm Creek will need additional water added to the Platte in order to bring it back to a 'fully' appropriated condition. The NRD is currently 15 years ahead of the schedule approved in the Integrated Management Plan.

CPNRD acquired perpetual conservation easements on water rights in Dawson County, and the estimated accretion to the Platte River from groundwater retirements using the latest COHYST offset calculator was 10.57 ac/ft, amounting to 19 acres. By the close of 2013, the CPNRD Water Bank had a balance of 2,464 ac/ft of water rights available for offset in the over-appropriated area.

Conjunctive Management CPNRD partnered with four canal companies in Dawson County with agreements to buy out one canal and totally rehabilitate the other three canals. As a Platte Basin Habitat Enhancement/Coalition Program projects, grants from the Nebraska Department of Natural Resources (40%) and the Nebraska Environmental Trust (20%), paid 60% of the project costs. CPNRD shared the remaining 40% of project costs with the canal companies. Benefits provided by the rehabilitation projects:

- Groundwater recharge that enhances surface water and groundwater supplies.
- Protects water quality.
- Help the CPNRD get closer to a fully appropriated status.
- Enhanced flows to the Platte River by diverting and retiming excess flows to the river; and by returning natural flow irrigation rights to the river.
- Helps meet requirements of:
  - -Platte River Recovery Implementation Program (PRRIP) agreement between Colorado, Wyoming, Nebraska, and the U.S. government.
  - -LB 962 to return the Platte River to its 1997 level of use of 3,400 acre-feet.

Six Mile Canal In 2010, the NRD purchased the Six Mile Canal Company in Gothenburg, which was the first-ever buyout of a surface water irrigation canal in Nebraska. The purchase agreement provided funding for farmers to convert to more efficient groundwater irrigation and increase Platte River flows. The project also allowed the NRD to return water to the river to protect endangered species, make irrigation more efficient for farmers, put more land into crop production and improve public safety. COHYST data shows that the closure of the ditch and elimination of direct river diversions resulted in an annual savings of 130 ac/ft of water to the river, even with the same acres irrigated with groundwater. CPNRD deposited the water rights in the Water Bank to use for the Integrated Management Plan schedule to bring the over-appropriated area back to a fully appropriated status sooner. The water rights were also used as part of the NRD's responsibility to the Platte River Recovery Plan. The Six Mile Canal had been in operation since 1894 and diverting Platte River water since 1894, withdrawing an average of 2,377 ac/ft of water annually.

Cozad Canal The canal has been in place diverting Platte River water since its water right was approved in 1894; with water rights to irrigate over 25,000 acres of land in the area between Gothenburg and Lexington in Dawson County. In 2012, the NRD partnered with Cozad Ditch Company to manage the canal and to lease surface water. Construction began in late September 2013. The massive rehabilitation was completed in 3 phases and included Completed in three phases and only two years, this massive project included: 152 acres of clearing & grubbing, which equals 27 miles; 21 miles of grading;13 new structures: included 4 farm crossings, 6 check structures, 1 underdrain structure, 1 siphon, and 1 county road wing wall replacement; River Return Structure which included Spring Creek Wasteway Structure: excavation of Spring Creek Channel (1,415 LF), 22 walkway modifications/extensions, and a SCADA automated monitoring system of the Rubicon Gates with 4 flume gates and 7 slip meters. Total project cost was$6,596,860.08 with project loans provided by Five Points Bank of Grand Island, NE. Olsson Associates of Grand Island, NE was the engineering Firm. Cozad canal has the potential to provide 7,000 to 18,000 ac/ft of water savings annually.

Thirty Mile Canal Thirty Mile was originally constructed in 1927 and dedicated on July 13, 1928 with water rights for 15,000 acres. In 2012, CPNRD partnered with the Thirty Mile Canal Company to pay $1.9 million for half interest in the irrigation system; which includes half of the irrigation canal company's water rights and the value of buildings & equipment. The rehabilitation included replacement or installation of 8 bridges, 8 check structures, 9 drop structures, 3 pipe roadway crossings, 2 pipe laterals, 4 miscellaneous structures, 5 flow measurement devices/structures and installation of rip rap. The canal company became the Thirty Mile Irrigation District on September 16, 2013 and is now a political subdivision of the State of Nebraska. An interlocal agreement was signed in February 2014, creating the CPNRD-TMID Stream Flow Enhancement Alliance. The agreement outlines the continued maintenance and delivery of surface water for both irrigation & groundwater recharge. Total project cost was $5,018,982.01 million with project loans provided by Five Points Bank of Grand Island, NE. Miller & Associates of Kearney, NE was the engineering Firm. The Thirty Mile canal has the potential to provide 8,000 to 13,000 ac/ft of water savings annually.

Orchard Alfalfa Canal The Orchard Alfalfa Canal has been in place since its water right was approved in 1898; with water rights to irrigate 4,326 acres of land. The Central Platte NRD and Southside Irrigation Company signed a management-lease agreement in 2012. As part of the agreement, the CPNRD assists in operations for all of the irrigation district's benefits, pays half of operations & maintenance costs, and receives half of the revenues. Construction began in 2013 and included: Phase I- replacement of 7 county road box culverts; Phase II: 51 acres of clearing & grubbing; 60,200 LF of grading; irrigation turnout structure; replacement of 13 canal structures; removal of 3 farm crossings; Phase III- replacement of diversion structure; installation of slide gate with electric actuators on existing overflow structure; rip rap overflow structure for high flows. The Southside Irrigation Company is currently taking steps to become an irrigation district. Total project cost was $4,691,588.72 million with project loans provided by Five Points Bank of Grand Island, NE. Olsson Associates of Kearney, NE was the engineering Firm. The canal has the potential to provide 2,500 to 9,900 ac/ft of water savings annually.

Conjunctive Water Management Study The Platte River Conjunctive Water Management study has been underway for some time to look at water management options for the Dawson County canals. The study is to look at tools to better manage ground & surface water in the Central Platte Valley by collecting and evaluating data to develop a hydrologic budget with the COHYST modeling tools. Some of the components included in the budget are rainfall, pumping, surface water applied, total evapotranspiration, recharge, runoff and acreage. Developing plans to manage the hydrologic budget will result in better utilization of both resources. After developing management plans, an implementation phase will be needed. This past year, partners have met several times with consultants to review water budgets for each of the canal systems and develop an updated scope of work to run management scenarios when final updates are completed on the COHYST tools. Current partners include CPNRD, NDNR, & NPPD.

CPNRD's hydrologist provides technical assistance in the development and evaluation of conjunctive management scenarios for portions of Dawson and Buffalo counties in the central Platte Valley. The team is developing a conjunctive water resource management plan to optimize the availability of water to groundwater and surface water users who are within both the boundaries of the CPNRD and the area within which NPPD delivers natural flow and storage water for surface water irrigation systems. The plan will be consistent with Nebraska statutes regarding the management of integrated surface water and groundwater. The modeling approach uses existing tools and data in combination with the development of

new tools and information. The existing tools will include the COHYST and CropSIM models. New tools will consist of a surface water operations model, GIS analysis tools, an aquifer water quality module, and an economic impacts module.

Platte Basin Water Project Coalition In June 2012, the board approved this Interlocal Cooperation Agreement with NDNR and the following NRDs: South Platte, Twin Platte, North Platte, Tri-Basin & Central Platte. The agreement allows utilization of the new Water Cash Fund through the Nebraska Environmental Trust and the Legislature for Platte Basin water management activities. It will take the place of the Platte Basin Habitat Enhancement Project. Lyndon Vogt is the NRD's representative, Mark Czaplewski and Duane Woodward are alternates.

CNPPID Conjunctive Management Offer A joint Middle Platte Basin Water Resources subcommittee developed a surface water model, requesting that CPNRD participate in a public opinion survey to understand the public's attitude and perceptions about water usage in Nebraska. In September 2011, the board approved spending up to $28,000 for CPNRD and Twin Platte NRD (TPNRD) to hire a consultant, on a 50/50 basis, to conduct a survey on attitudes and perceptions in order to design an effective information and education program. The survey area was from the Lake McConaughy area to Chapman, NE. The overall goal of the effort was to provide water to all water users.

In 2012, a special joint board meeting was held with the TPNRD. Both boards voted unanimously to approve an offer to the Central Nebraska Public Power & Irrigation District (CNPPID) to assist them financially at converting their surface water irrigation project to a groundwater irrigation project and recharge program. In June 2012, CPNRD & TPNRD offered the CNPPID board financial assistance for future conjunctive management studies and financial assistance to landowners to switch to groundwater use. Since 75% of the users in that system already have irrigation wells that are used during drought conditions, the proposal would take it a step further and allow landowners to rely totally on groundwater and use the surface water for recharge. CNPP&ID's board took the proposal under advisement.

In September 2013, Brown & Caldwell presented updated findings of the pre-feasibility study on the proposed recharge project with the CNPPID at the NARD's annual meeting in Kearney. The additional modeling analysis used the OPSTUDY model to address concerns identified by the CNPPID staff. This project would provide beneficial flows for water management plans including the Platte River Recovery Program between Colorado, Wyoming, Nebraska and the federal government. It would also help meet the requirements of LB 962 to return the Platte River to its 1997 level of use; and the additional requirement to return the area between Lake McConaughy and Elm Creek to a "fully appropriated" condition from the current "over-appropriated" condition.

Other concerns that the study addressed were how providing groundwater recharge protects water supplies and water quality. The findings show that water supplies would increase hydroelectric power generation on the NPPD and CNPPID systems in central Nebraska. CNPPID would also see recreational benefits for Lake McConaughy as well as other lakes in the canal system. The NRDs' next step is to sit down with the CNPPID staff and work with them to address a more in-depth study of this concept and continue to work towards solutions for all water users in Nebraska.

NRD Objectives

1. *To establish irrigation management practices and techniques on the irrigated lands in order to properly conserve and efficiently utilize the water.*
2. *To discourage the development of those water-using projects (irrigation) on any lands on which such development is not within the capabilities of the land.*
3. *To help secure any water supply project that is shown to be feasible, beneficial and desirable.*
4. *To develop plans and programs that will strive for a balance between water use and water availability.*
5. *To develop plans and programs that will strive for a balance between the rights of all individuals utilizing the groundwater aquifer.*
6. *To work toward balancing the needs of wildlife with needs of people in utilization of the water resources in the District.*
7. *To balance the needs of endangered and other species on the Platte River and its tributaries with the needs and rights of human users.*

VI. Fish and Wildlife Habitat

GOAL: The conservation and enhancement of fish and wildlife resources for the benefit of the people.

The NRD encompasses an important wildlife resource area. The central Platte River region supports wildlife resources referred to by some as having national and international significance. Residents of the NRD and people from across the state enjoy the fish, wildlife and other natural resources within the District. The Platte River and its adjacent wet meadows, forests, grasslands and croplands provide habitat for millions of migratory birds. Hundreds of thousands of sandhill cranes utilize the area for spring staging. Each spring, roughly 80 percent of the continent's sandhill cranes use the central Platte and lower North Platte Rivers as they traverse from wintering areas to their nesting habitats. Waterfowl make extensive use of area habitats, particularly during spring migration and diverse assemblages of songbirds make significant use of riparian forests and grasslands across the District. Resident upland game birds and big game provide area hunters with many sporting opportunities. Mammal, fish, reptile & amphibian species, typical of the northern Great Plains, are also abundant in the District.

Prior to settlement, vegetation across the District consisted of tallgrass prairies and wet meadows in lowlands, and on the Platte River terrace and mixed grass prairies on the uplands with fingers of riparian forest. Today the area is a matrix of grassland remnants, cropland and expanded riparian forest. Human activity has significantly modified native vegetation and therefore, wildlife habitat across the District. While some of these effects have had positive results on wildlife resources, others have been detrimental. The District is known to contain several federally listed endangered & threatened species including the whooping crane, least tern, piping plover, the American burying beetle and the western prairie fringed orchid. Areas that have been designated as critical habitat by the U.S. Fish & Wildlife Service for the whooping crane exists in the District. Some previously listed species have shown signs of recovery, for example the bald eagle and the peregrine falcon have been removed from the federal listing. A series of instream flow water rights on portions of the Platte River have been obtained by the NRD to protect minimum flows for fish and wildlife resources. Wet meadows along the Platte River are an important habitat resource to a diversity of wildlife including migratory birds. Working with the NPPD, CNPPID & NGPC; the NRD has completed a demonstration project to enhance and maintain wet meadows along the Platte. With a grant from the NET, the project has developed alternative methods to manage for these valuable habitats.

Large populations of wildlife can reduce crop yields. For example, deer and waterfowl utilize agricultural crops and residues as a substantial part of their diets. Their attraction to wheat fields and alfalfa can lead to damage considered excessive by farmers and ranchers. In support of the goal of conserving and enhancing fish and wildlife for the benefit of people, the District has continued to provide better and safer areas for viewing sandhill cranes and other species with the ongoing development of facilities along the Platte River. Two viewing decks and other parking areas have been provided to date. The coexistence of wildlife and people can be achieved with a minimum of disruption to the natural balance of nature by using planning and management.

Farmers and ranchers are encouraged to establish more native wildlife habitat, to carefully plan any conversion of rangeland or other native vegetation types to agriculture and to return land with marginal or poor production capabilities to habitat. Surface water, natural wetlands and wet meadows should be maintained whenever possible and enhancements to these resources should be considered in the planning for District projects. The District's prescribed burn program and education programs further support and enhance wildlife resources.

The practical application of effective habitat enhancement efforts reflect the District's commitment to protecting wildlife resources. The NRD supports planning, permitting and environmental assessment activities relating to existing and proposed District projects. WILD Nebraska brings to fruition many of those strategies by providing tools for landowners and partners to resolve habitat limitations and seize opportunities that exist on natural landscapes and in the policy arena. Annual applications for grant money from the NET by Pheasants Forever are anticipated to continue the "Corners for Wildlife" program statewide; which had a successful start in 1994 as a pilot project in the CPNRD. Incentives are provided to landowners for converting irrigation pivot corners from cropland to wildlife habitat. NDNR administers the instream flow water rights on the Platte River obtained by CPNRD and NGPC to protect minimum flows in the river for fish and wildlife purposes. The District will continue participation in endangered and threatened programs including the Platte River Program, the Nebraska Habitat Conservation Coalition and the Platte Basin Water Project Coalition. Additional opportunities will also be explored as needed.

Platte River Recovery Implementation Program The Platte River Recovery Implementation Program (PRRIP), also known as the Platte River Program, was developed by the federal government along with the basin states of Nebraska, Colorado and Wyoming and signed in 2006. Local, state and federal government agencies are working with groups from throughout the basin to build a framework for a long-term Program that will satisfy Endangered Species Act (ESA) requirements for water users in the basin.

The first PRRIP increment, planned to last 13 years, includes completion of water projects expected to improve flows in the

central Platte by an average of 130,000-150,000 ac/ft annually. A second Program element is the protection and maintenance of 10,000 acres of habitat during the first increment, ultimately working toward a 29,000-acre goal. The specifics of subsequent increments will be planned as more information is developed. Through an adaptive management process, the Program goals may be modified as appropriate.

The NRD has a big stake in the Program attempting to improve and conserve habitat for three threatened and endangered species on the central Platte (the whooping crane, piping plover and least tern) and the endangered pallid sturgeon on the lower Platte. The Program was developed as the states and federal governments face stiff challenges to protect threatened and endangered species using the Platte River and their habitats. The signatories to the Program hope to equitably provide greater certainty for water users facing ESA requirements. The U.S. FWS plays a major role in enforcing the ESA. Authorization legislation for federal funding was passed by Congress in 2008 and associated appropriations will be addressed in an ongoing process. District board members, management, and staff are actively involved in Program Governance and Advisory committees.

The Technical & Independent Science Advisory Committees worked with the Executive Director Office to develop a "2013 State of the Platte" report that summarized what has been learned so far about the whooping crane, least terns, piping plovers and pallid sturgeon, as well as all the "big science questions" facing the Program. Channel restrictions related to a "choke point" in the lower North Platte River near North Platte continue to hamper the passage of flows the U.S. Fish & Wildlife Service hope to deliver from their environmental account in Lake McConaughy to the central Platte for endangered species. The Program continues to work on how to deal with the choke point issue.

As of September 2014, the Program's first increment 10,000 acre goal of land acquisition had been met and exceeded. The Program owns or has specified land rights on approximately 10,150 acres and is in active negotiations on another 900 acres between Lexington and Chapman. They are looking to sell or trade a few parcels and will continue to seek tracts to acquire in prioritized reaches of the river. The Program will pay property taxes of roughly $149,000 in 2014.

The Program is starting to develop a plan for the review of the US Fish & Wildlife Service's target flows for the Platte River. Ongoing research and monitoring on the Platte is showing the Service's current target flows to be ineffective in accomplishing the objectives they have set out. One possible approach discussed is an "effects analysis" being used by biologists working on other river systems including the Missouri River.

The Program's Land Advisory Committee includes a member and alternate from Central Platte NRD, a member and alternate from Tri-Basin NRD and a joint member and alternate. The current CPNRD representatives are Mark Czaplewski and Bob Schanou (alternate). The board appointed joint NRD representatives John Thorburn (as member) and Jim Bendfeldt (as alternate) for three-year terms. The Program's Water Action Committee is looking at intentional groundwater recharge through diversions through the canal systems. One of the projects that was done in fall and winter 2011, was to study recharge in the Phelps Canal, one of CNPPID canals just below the J-2 Return. The committee is now running a groundwater model of the whole area to look at how that water returns back to the Platte River, over what time period, then estimate a score for it, not too dissimilar to what needs to be done with some of the canal systems for recharge. Monitoring will continue into 2014 on how the water comes through area drains. The NDNR is working with other canal companies to put together temporary contracts for more groundwater recharge through canal systems. The Program Governance Committee is considering leases with CPNRD and NPPD for both surface & groundwater that can be provided for Program purposes. In 2013, the Program's Governance Committee & CNPPID independently agreed to fund and develop the J2 Regulating Reservoirs at a cost of $13 million for five years. As of September 2014, CNPPID is continuing to work on the Project. NDNR approved their petition for the Project's extension of the Phelps Canal.

Platte Basin Habitat Enhancement Project CPNRD, working with co-sponsors including four other NRDs and two state agencies, received grants from the Nebraska Environmental Trust for the Platte Basin Habitat Enhancement Project for $3,000,000. The remaining funding requirements are $6,000,000 from the NRDs and $6,000,000 from the NDNR for a total of $15,000,000. The projects and activities funded by the PBHEP Sponsors with grants from the Nebraska Environmental Trust Fund have resulted in enhanced Platte River stream flows, reduced consumptive uses of water, recharged groundwater, and supported wildlife. Projects included the Cozad Canal Rehab Conjunctive Management Project, Thirty-Mile Canal Rehabilitation Conjunctive Management Project, the acquisition of dozens of conservation easements retiring irrigated acres across the Platte River basin, the Nebraska Cooperative Republican Platte Enhancement Project, North Dry Creek Augmentation Project, the Re-use Pit Recharge Demonstration Project, & Ground Water Recharge Demonstration Projects. PBHEP concluded its activities in late 2014.

Nebraska Habitat Conservation Coalition The piping plover, a small shorebird that nests in the Northern Great Plains, Great Lakes and along the Atlantic Coast was designated as a threatened species under the ESA in 1985. The FWS proposed designation of critical habitat for the Great Plains population in 2001 in 5 states: Nebraska, North Dakota, South Dakota, Minnesota and Montana. Critical habitat was formally designated by the FWS in 2002. In Nebraska, critical habitat was designated along 440 miles of the Platte, Loup, Niobrara Rivers and 120 miles of the Missouri River adjacent to Nebraska. In response to this designation, the Nebraska Habitat Conservation Coalition (NHCC) was formed in 2001.

The NRD joined the NHCC in November 2001. The Coalition, comprised of 23 members and eight partners from across the

state, was formed in response to the federal designation of critical habitat for the piping plover in Nebraska. The designation of critical habitat gives the FWS an additional instrument to evaluate activity that could impact the Platte River or it's flow, which puts groundwater pumping at a greater risk of being construed as a "take" by the FWS. Section 9 of the ESA makes it unlawful to adversely modify critical habitat, or for a person to "take" a listed species, which has been defined to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or attempt to engage in any such conduct.

On February 14, 2003, the NHCC filed a lawsuit in Federal District Court in Nebraska. The lawsuit stated that the FWS used inadequate science in their designation of critical habitat, the designation provided questionable benefits to the species, that there were legal inadequacies in the designation process and the FWS failed to assess the economic impact of the designation. The NHCC won its case in District Court against the FWS in October 2005. The judge ordered the FWS to redo their economic analysis and re-do their critical habitat designation in Nebraska. NHCC plans to stay closely involved in re-designation of critical habitat as ordered by the District Court. **Federally threatened and endangered species in CPNRD:** American burying beetle, whooping crane, Eskimo curlew, piping plover, interior least tern, western prairie fringed orchid.

In 2014, a new rule was proposed by the US FWS regarding critical habitat designated in association with the ESA. Of concern is that the proposed rulemakings would significantly change the agencies approach to critical habitat designation and lead to over-regulation. In an effort to respond to the proposed changes, the NHCC Executive Committee and the Legal Advisory Committee submitted comments in September 2014 in opposition of the proposed rule.

CPNRD Instream Flow Rights CPNRD has instream flow water rights on the Platte River to protect and enhance wildlife; with the original flow water rights having a priority date of July 25, 1990, the date of the application. In 2009, the NRD complied with the required 15-year review in 2009 and was granted instream flow rights until the next review in 2024. A series of instream flow water rights on portions of the Platte River to protect minimum flows in the river for fish and wildlife purposes was approved on July 2, 1992, by the director of the DWR (now NDNR) based on applications by the NRD.

The flows specified by the instream flow water rights are a factor in providing bird habitat on the Platte as well as habitat for food sources consumed by those birds. The rights have no effect on levels in upstream storage reservoirs such as Lake McConaughy nor do they take water away from existing irrigators. Other water rights already existing on the river are senior to the rights; but the flows specified by the instream flow water rights must be met before any future project could take water from the Platte. The NRD's application came after extensive study by the NRD in response to concerns about low flows in the Platte, especially during dry summer periods, which are dangerous to the fish and wildlife that depend on the river. The study indicated that the instream flow water rights wouldn't solve the existing low flow problems, but could be effective in preventing some additional low flow periods by assuring that minimum flows are met before future projects could withdraw water from the Platte.

A public hearing was held by the NRD in March 1989 on proposed instream flow rates, timing, segments and uses for a proposed water right. While there was considerable testimony applauding the NRD for seeking the instream flow water right, there was a division of opinion about the flow rates, dates and river segments proposed. The NRD Board studied the testimony that was presented, then waited for other studies to be completed and met with interested parties to arrive at the series of flow regimes on which the application is based. The NGPC rejected the NRD's offer to join in making its application to the DWR. Because of insufficient detailed data available to make a determination of water and habitat needs for selection and nesting by the least tern/piping plover and stopover by ducks and geese, the Board didn't make its applications for water rights for those purposes. The District filed six applications on July 25, 1990, for Platte River instream flow water rights to benefit wildlife.

Together, the applications sought to protect flows varying from 500 to 1,500 cfs at specified time periods in certain reaches of the river, generally extending from near Lexington to near Columbus. These applications were filed to benefit sandhill cranes, bald eagles and three species designated as threatened or endangered: least terns, piping plovers and whooping cranes. The DWR conducted a hearing on the six applications from July 1-Sept. 25, 1991. Eighteen parties filed as objectors including: State of Wyoming, several environmental organizations, power and irrigation interests & several NRDs. The Audubon Society and Sierra Club changed their status to proponents during the hearing, two objectors withdrew and four parties were dismissed before the conclusion of the hearing. The DWR issued a ruling on July 2, 1992, that three of the water right applications be granted outright and a fourth be modified from the NRD's request. Two applications with flows for the bald eagle were denied.

APPLICATIONS GRANTED

(1) Flow of 500 cfs from Jan. 1-June 23 and from Aug. 23 - Dec. 31 from the mouth of the J-2 return, southeast of Lexington to Columbus, to maintain fish and macroinvertibrates as food sources for terns and plovers. Also a flow of 600 cfs from June 24 to Aug. 22 for the same purpose.

(2) Flow of 1,300 cfs from April 1-14 to maintain staging and roosting stopover habitat for whooping cranes and sandhill cranes for the reach of the river from the J-2 mouth to Grand Island. Increased to 1,500 cfs for the period of April 15- May 3 and from Oct.12-Nov.10.

(3) Flow of 1,100 cfs from Grand Island to Chapman during the period of April 1-14 to maintain staging and roosting habitat for sandhill cranes.

NGPC Appropriation The Nebraska Game & Parks Commission submitted five applications on November 30, 1993 seeking instream flow water rights for particular time periods with corresponding flow quantities for specified reaches of the river and for specified fish and wildlife. Some of the applications sought flow quantities during times and at locations that coincided with the instream flow water rights granted to the NRD. One of the applications was approved and two other applications modified for maintenance of fish communities. Another application to maintain whooping crane roost habitat was modified, and the application for flows to maintain wet meadows along the river was denied. Under Nebraska law, surface water rights are given priority on a seniority basis. Thus, the flows granted for NGPC are junior to and in addition to the NRD's instream flow water rights. The river must have flows that exceed the total of all senior water rights before a junior water right can be obtained by a potential developer. Objectors to the NGPC application formed the Nebraska Water Conservation Cooperative to provide opposition jointly in order to save time and money. Eventually, 51 local governmental subdivisions and water users organizations joined the Cooperative.

July 1996- NGPC reduced its flow requests for several applications, but the Cooperative continued its opposition. DWR opened a hearing on the applications on September 25, 1996. The hearing concluded on April 8, 1997. After the hearing, retroactive changes in state law applying to instream flow water rights were adopted by the Nebraska Legislature and both parties were allowed to submit briefs and additional exhibits in reaction to the newly amended statutes. The DWR examined the briefs, the transcribed testimony that is nearly 7,700 pages in length, and the 200-plus exhibits that are part of the hearing record, and issued the order on June 26, 1998; denying the application for a water right to maintain flows to manipulate the water table underlying nearby wet meadows. The DWR said NGPC failed to satisfactorily show a river-aquifer linkage and that he agreed with the opponents' claim that, as a matter of law, an instream flow for wet meadows is not permitted by state statute. Listed below are NGPC applications to maintain fish communities:

1st (of 3) NGPC Application Instream flow for 1,000 cfs on a year-round basis for the reach of the river between Johnson Power Plant near Lexington and Loup Power Canal return near Columbus. The reach of the water right was shortened to stretch between the Kearney Canal diversion dam near Elm Creek and the Loup Power Canal return and provided for the appropriation to be in effect only in June, July and August. Because the NRD already has a water right for 600 cfs, DWR provided for varying rates between 200-500 cfs during the three-month period. In the NRD's water right, a maintenance flow of 500 cfs will be protected to benefit the fish community from the J-2 return near Lexington to the Loup Power return from January 1-June 23. NRD's water rights protect a rate of 600 cfs from June 24-Aug. 22, then returns the rate to 500 cfs during the rest of the year. Thus, varying flows will be protected in different reaches of the Platte with 500-600 cfs protected above the Kearney Canal diversion dam; 1,000 cfs protected between the dam and Columbus from June 1-July 31; and 800-900 cfs, depending on the measuring station, from August 1-August 31.

2nd Application Each between Loup Power Canal return and confluence of Platte River and Elkhorn River near Waterloo by appropriating 1,800 cfs on a year-round basis. DWR approved the application.

3rd Application NGPC sought water right for 3,700 cfs on year-round basis between confluence of the Platte/Elkhorn rivers and confluence of Platte/Missouri rivers near Plattsmouth. DWR approved a maximum rate of 3,100 cfs in January; 3,700 cfs in February through July and October-December; 3,500 cfs in August and 3,200 cfs in September.

Application to Maintain Whooping Crane Roost Habitat during spring and fall migration seasons was modified. The water right sought for 2,400 cfs from April 1-May 10 and for 2,000 cfs from Oct. 1-Nov. 10, on the stretch of the Platte from the J-2 return to Grand Island, was shortened to the portion of the river affected to the stretch between the Kearney Canal diversion dam and Hwy 281 bridge south of Grand Island. The Order provides a flow of 50 cfs for April 1-14, increasing it to 1,350 cfs from May 4-10. Fall rate in the shorter stretch of 1,350 cfs for only the Oct. 1-11 time period.

Objectives

1. *Maintain wetlands for wildlife habitat.*
2. *Supplement existing fish and wildlife habitat areas that are sufficient in both size and number to provide reasonable public hunting and fishing opportunities for the people of the District.*
3. *Consider potential damage to or potential for enhancement of, fish and wildlife habitat in the evaluation of District projects.*
4. *Provide, as available and appropriate, assistance to private landowners and state and federal agencies in the management of fish and wildlife habitat programs.*

VII. Forestry Management

GOAL: To develop and manage trees/shrubs for the production of raw material for wood products; to reduce wind velocities; to conserve moisture; and to reduce wind erosion for the comfort of the people, livestock and wildlife; and for environmental recreation and aesthetic benefits.

Other than isolated trees or wooded areas along rivers and streams, most of the land now encompassed by the NRD was void of woodlands when this region was first settled. One of the primary reasons for so few trees was the semiarid climate of the region. Prairie fires, which periodically swept across the area, also contributed to a general lack of trees. Since European settlement of the area, trees have become more abundant. Farmers and ranchers of the area have made a concerted effort to establish trees for farmstead, feedlot and field windbreaks; livestock shelterbelts and wildlife planting.

The NRD has provided a complete tree planting service since the District was established including purchase, distribution and planting. About 50,000 trees per year are planted by landowners in the District. The NRD reached a milestone when the aggregate sale of trees exceeded three million trees in 2006. Although the Nebraska Conservation Tree Program provides large numbers of seedling trees for planting, there are barriers to survival that must be overcome including a semiarid climate. In some parts of the District trees are being planted to serve as living snow fences to protect roads in the NRD. Many such plantings occur on hilltops where the availability of a ready water supply is poor, resulting in decreased survival that has sometimes required a frequent replanting of new trees to do the job. Weed control is another problem that must be faced. The NRD offers a fabric mulch weed barrier that is used throughout the District to protect seedling trees from competing with weeds for the sunlight and moisture that is necessary for survival.

Forest resources are valued higher for environmental benefits than for commercial purposes. Environmental benefits include wildlife habitat, conservation, watershed protection, recreation uses and scenic values. In more recent years, drought, tree disease, damage from winds, development, and other factors have been challenging for trees in the cities and towns of the NRD. The NRD has developed an urban forestry program to provide monetary incentives for community groups to plant and maintain more trees in parks, on school lands and on other public property. The need for improved forestry practices remains important throughout the District.

Landowners are encouraged to prepare their planting sites beforehand and to properly maintain their trees after planting. Forestry maintenance should include weed control, proper watering and replacement of stock that does not survive, and prescribed burns for volunteer cedar trees. Tree sales have been declining the past decade with sales at 77,975 trees in 2003; to 57,225 in 2008; down to 37,716 in 2013. With the drought conditions improving, sales were up to 54,175 in 2014.

The weed barrier (conservation mulch) program is expected to remain the same during the planning period. The District will continue to evaluate the programs to assure that the NRD meets its customers' needs and makes the changes that are required. Weed barrier sales vary from year to year with sales at 36.80 miles in 2003; 26.24 miles in 2008; and 17.38 miles in 2014.

In 2012, new package options were designed for landowners who don't want to plant 25 of the same type of seedling. The Small Acreage Packages available are Eastern Nebraska, Western Nebraska, Wildlife and Flowering. They sell for $40, which includes five species of trees or seedlings --10 of each species. These packages sold well throughout the District in 2014. Bessey Nursery plans to offer the packages again.

Cost share incentives for tree planting and maintenance are provided for communities as well as the rural area. Tree planting during the planning period is anticipated at a level of 40,000 trees each year. A 10% early ordering incentive, paid advertising, and promotional items will be used. Alternative sources of tree stock have been added to meet customer needs and provide diversity for the program.

The NRD will continue to provide landowners with a complete tree planting service including purchase, distribution and planting. The District will also work with foresters to ensure that its customers receive high quality seedlings. The weed barrier and urban forestry programs will continue this fiscal year. Advertising changes may be considered as an attempt to increase sales.

See Figure 17 on following page for Tree and Weed Barrier Sales.

FIGURE 17. Trees and Weed Barrier Sales

YEAR	TREES	WEED BARRIER (in miles)
2014	**54,175**	**17.38**
2013	37,716	18.86
2012	48,025	14.91
2011	54,275	28.25
2010	57,175	16.41
2009	68,703	19.71
2008	57,225	26.24
2007	44,950	13.35
2006	61,125	27.23
	Total since 1973: 3,561,272	**Total since 1991: 539.33**

Objectives

1. *Reinforcement of under-stocked windbreaks and tree lots through inter-planting with high value species.*
2. *Woodland improvement by thinning to achieve proper spacing.*
3. *To develop more optimum growing conditions through livestock exclusion.*
4. *To provide adequate wind and snow protection for farmsteads, feedlots, roads and fields through windbreak planting.*
5. *To provide benefits to wildlife, aesthetics, recreation and forestry management.*

VIII. Range Management

GOAL: To have rangelands in the District in a "high good" or "low excellent" condition.

Rangeland makes up approximately 36.5% of the NRD's land area; thus, it is an important aspect of the District's land use. Most of the rangeland is unsuitable for using as cropland, due to sandy soils or steep slopes. Sandy land areas were often plowed when the area was first settled, but it was soon discovered that the land was unproductive when it lost its grass cover. If steep slopes are not kept under a permanent grass cover, the runoff potential from rains and snows is increased. Large amounts of sediment may be carried by the runoff which results in deep ravines and gullies being cut into the slopes.

Rangeland can become unproductive if it's not properly managed and overgrazing can cause severe damage by its effects on individual plants and the effects on the plant communities themselves. Concern has grown in recent years because of an influx of trees on pasture land. These trees, mostly cedars, diminish the natural water supply for desirable vegetation in the immediate area of the tree. Another major concern is the encroachment of weeds that can choke out desirable vegetation. Drought years also produce concerns for range managers. Often, landowners must construct a well to provide a dependable water source for livestock. Land that is not suitable for growing crops, usually as a result of sandy soils or steep slopes, will benefit from being managed as grass to prevent erosion. If these lands are not kept under permanent cover, they can become an area of blowouts, sand dunes or gullies. Land on steep slopes is especially susceptible to water erosion. Of the rangeland needing improvement, a majority could be treated by using better management techniques to eliminate overgrazing.

Planned grazing, pasture rotation and prescribed burning are encouraged. Because of location or economics, it may not be feasible to treat some of the rangeland that is in need of improvement. The damage caused by overgrazing needs to be emphasized to owners of rangeland. In some cases, if the range is not too severely damaged, eliminating the overgrazing may restore the vegetation in a few years. In other cases, reseeding or inter-seeding will be necessary, after which grazing must be deferred for 1-3 years before the grasses are established enough to be grazed lightly again. Cost-share to encourage better management of rangeland is made available through the NRD from the Nebraska Soil and Water Conservation Program. Chemical control is being replaced by the removal of trees and shrubs using mechanical methods. This has been most successful in areas where the number of undesirable woody plants is small. As the number of such plants grows beyond the capability of mechanical control, the use of a prescribed burn is often recommended to remove the unwanted trees and shrubs. Landowners are also encouraged to eliminate undesirable vegetation and other noxious weeds.

Rangeland Programs Landowners are encouraged to review their rangeland needs with the NRCS, which has a variety of tools available to help manage rangeland in a cost-effective way. The Nebraska Soil and Water Conservation Program (NSWCP) provides limited amounts of cost share for a variety of conservation practices, including grazing land (rangeland) management. This state program is administered through the NRDs. Components such as pipeline, tanks, wells and cross-fence are used to complete a planned grazing system to distribute grazing more evenly over the pasture. With management of intensive grazing, pastures may be grazed for longer seasons. Dugouts are funded to provide storage for runoff water that can provide a supplemental source of water. Livestock windbreaks can provide protection from winter weather and protection for calving.

The NSWCP Fund provides cost share to landowners in the District for planned grazing systems, one of the practices that has beneficial effects on rangeland. The District encourages landowner management practices through the NRCS to improve and, where required, to re-establish range areas. Such practices will have to be completed by individual landowners. Although the NRDs are not responsible for weed control, the District will continue to work with those units of government that are responsible under state law and with private agricultural groups to develop effective controls that will improve rangeland and cropland.

Prescribed Fire Program Prescribed fire can be a valuable tool in the maintenance and improvement of native grasslands. Rangeland areas devoid of fire occurrence are often sites of problems involving invasive Species. These invasive species such as Eastern Red Cedar can take away natural grassland acres that is necessary for grazing as well as for wildlife. In addition, rangelands that are always grazed in the fall or winter with no spring treatment may become areas dominated by native & non-native cool season grasses and invasive weeds. These areas offer a reduced food value to livestock and are of reduced value to native wildlife.

When prescribed fire is used along with appropriate grazing practices, the result is increased economic output and wildlife benefit. The NRD implemented the Prescribed Fire Program in 2004 and developed a cost share program to help landowners treat their rangelands with the implementation of burns. Since the inception of the program, the NRD Fire Crew has conducted 174 burns for a total of 17,676 acres.

Cost Share Program Cost share is available for costs incurred while directly implementing prescribed fire by a contractor. CPNRD reimburses at a rate of 50% of actual costs & up to a maximum of $2,500/cooperator/lifetime. The actual burn and claim for payment must be made within 9 months of the date the application is approved by the NRD. If the NRD burn

crew does the burn, then cost share is not used, as the NRD reduces the cost for landowners. Landowner cost is $10 per acre for the first 40 acres, $5 per acre for anything over 40 acres. The NRD has set a minimum charge of $300 per burn.

Partners CPNRD conducts and assists with prescribed burns in conjunction with federal, state and local agencies. In 2012, the NRD provided necessary equipment & manpower to help complete a 2,200 acre prescribed burn near Gothenburg. This burn project was a joint effort by several agencies participating in the "Fire Learning Network." CPNRD also completed 2 demonstration burns for local participants- one was done in conjunction with the Clarks fire department; and the other burn was a cedar pasture southeast of Cozad and included 13 burn school participants who were completing their training conducted by the Prescribed Burn Taskforce in Lexington.

Training Program The NRD range management specialist does training events and outreach with landowners, other NRDs, the agencies listed above, firefighters and fire marshals. By providing the training and assistance, Central Platte NRD is helping to prevent costly accidents while at the same time enhancing grasslands for economic return and habitat. There are many fields in poor condition needing a burn, and Central Platte helps to facilitate that project safely and professionally. Fields which are moderately grazed and periodically burned are: more drought tolerant, more diverse in plant and wildlife species, more productive in late summer, less at risk for devastating summer wildfire, and less at risk for runoff and erosion. The CPNRD has conducted over 40 training events with over 600 students trained.

Some other successes:

- Managed Prescribed Fire grant projects totaling $827,907.34.
- Assisted with the formation of Landowner Prescribed Burn Associations.
- Built 7 firefighting pumper units and distributed them to local burn associations.
- Assisted with Fire Learning Network program to help train firefighters from around the world.
- Created in-roads in Nebraska for liability insurance coverage for prescribed burning.

Native Prairie Outreach Project In 2008, CPNRD began conducting the Native Prairie Outreach Project at Husker Harvest days, distributing native prairie seed packets and educational materials to approximately 1,500 people annually. In 2014, approximately 275 packets of seed totaling 8 acres worth of restored prairie were handed out. Visitors to the booth were also given information on native plant propagation and patch burn grazing systems. The event was sponsored by Central Platte NRD, Prairie Plains Resource Institute, Nemaha NRD, Tri Basin NRD, Lower Platte South NRD, and the USDA Natural Resources Conservation Service.

Dawson County Project CPNRD is partnering with NRCS, NGPC & the Nebraska Forest Service to reduce invasive cedar trees and improve rangeland in Dawson County and along the Platte River. Rangelands are being improved through grazing deferment, EQIP approved conservation practices, mechanical cedar reduction and prescribed burning. If successful in the loess canyons of Dawson County, this project may be applied to other rangelands in the District. In 2013, the board approved a new "Grazing Deferment" cost share program. The program provides $15 per acre for landowners to defer grazing on a pasture for one year. The goal of the program is to allow a prescribed burn to be successfully applied the following year to help in cedar reduction. There is a limit of one application per landowner/year. The maximum amount a landowner is eligible for is $30,000.

In August 2014, the board approved sponsorship for submission of a Cedar Control Grant through the Nebraska Environmental Trust in the amount of $864,150 for this project. The project goals are to reclaim & protect 12,000 acres from cedar tree encroachment and wildfire through mechanical removal & prescribed burning.

CPNRD would provide $237,000 through in-kind services, with additional funding from the following partners: NRCS-$1 million; NGPC-$90,000; and landowner contribution of $531,822. Cedar encroachment in the proposed area has affected land and grazing values, wildlife habitat and has the potential for a massive wildfire.

Objectives

1. *To establish adequate permanent cover on all Class VII land, with minor exceptions in accordance with NRD Rules and Regulations.*
2. *To establish approved cultural management practices, vegetative practices or structural improvements.*

IX. Outdoor Recreation

GOAL: To assist in meeting the parks and recreation needs of the District.

Possibilities for developing outdoor recreation resources in the District are limited only by the willingness of the people to support a program. Development of parks & recreation facilities is an expensive endeavor and the pace of development is highly dependent upon the public value and priorities for the tax dollars that are needed. Water harnessed under flood control projects and other multipurpose reservoirs can and does serve recreation needs.

Trails The NRD has been involved in the following trails to some degree:

-Kearney In 2005, the Board approved NRD funds to support a 13-mile trail system for the Kearney Area Trail System. The NRD funded $60,000 in 2007 for Phase IV and $50,000 in 2008 for Phase V. Partners include the Nebraska Department of Roads, Kearney Recreation Department, NGPC & CPNRD. The original completion date was set for 2009, however, construction is behind schedule due to a fire that burned a bridge over the Platte River. The overall federal trail program is going through some major changes and timing of new trail projects is going to be extended significantly. The NRD will keep the original funds agreed upon in the budget this fiscal year to provide assistance to rebuild the bridge. In October 2014, it was announced that construction would begin in November 2014 to build a new bridge, pave the entire 1.7 mile trail and make repairs to the main channel bridge.

-Grand Island A hike & bike trail was established by the city of Grand Island on the projects levee system. The western portion of the trail is either completed or under construction with future plans extending the length of the entire project.

-Central City/Marquette In 2006, a request was made by Pat Carlson of Central City for the NRD to take ownership of a proposed Central City to Marquette Trail. The board of directors agreed to investigate the possibility of entering into a Joint Action Agency to help develop a plan for a Central City/Marquette Hike and Bike Trail. Staff and directors began working with the cities of Central City and Marquette, and potentially others, to put a plan together regarding an agreement for a Joint Action Agency to outline how ISTEA funding, maintenance, etc. would be handled. In 2011, the Nebraska Trails Foundation agreed to ownership of the trail and it has since repaired a bridge and opened the trail. The bridge over the river is 2 miles south of Central City and about 1/4 mile east of Nebraska 14. The NRD has no involvement in the trail at this time.

Crane Meadows Stabilization In 2001, the Crane Meadows Nature Center received $2,600 for bank stabilization erosion control for Phase I of the trail stabilization. The board approved assistance for the 200 feet of bank stabilization; 10,000 square feet of wetland restoration and reseeding; and erosion control of an island.

Archway Stabilization In 2002, the Great Platte River Road Archway Monument received assistance for a streambank stabilization project just west of the Archway in Kearney. The North Channel of the Platte River and Turkey Creek eroded to within 5' of a local sandpit. The Corps of Engineers surveyed the erosion & provided an Emergency 404 permit to the NRD. The City of Kearney provided 25% of the cost of the repair and the NRD's cost was $13,500.

Crane Viewing Sites In 1993, a task force of various governmental & private agency representatives was brought together by CPNRD to develop ideas in response to concern about safety for local residents, farmers and crane watchers in the Central Platte valley, especially during early morning and late afternoon hours on local roads. The Task Force developed a comprehensive plan known as the Central Platte Historic, Scenic & Trails Project to be completed in phases. Approval was granted in 1994 by the Nebraska Department of Roads under the federal Intermodal Surface Transportation Efficiency Act (ISTEA) for Phase I of the comprehensive plan developed by the task force. According to the grant application, the multi-year project promoted awareness of the historic importance of the Central Platte Valley as a transportation corridor dating from the early 1800s. The corridor was used by explorers such as Stephen H. Long and John Charles Fremont and by fur traders who passed back and forth on and along the Platte River. In the period from the 1840s-1860s, the Platte River Valley was a virtual "superhighway" as the major transcontinental route of the covered wagon migration; it became known as "The Great Platte River Road."

Three roadside turnout areas between Doniphan and Shelton on the road along the south side of the Platte were developed in Phase I. A portion of the cost was paid under the ISTEA and the remaining cost was contributed by the NRD and participating counties-Hall and Buffalo. The Audubon Society provided land for a roadside turnout near Shelton. Use of the Platte River for recreational purposes occurs now, but it is restricted by accessibility and use of the river by endangered and protected wildlife species. The public viewing decks provide free crane/waterfowl viewing and provide a safe and bird-friendly way to view cranes throughout the day. Parking is available at each deck. Locations: Richard Plautz Crane Viewing Site is1.5 miles south of 1-80 Exit 285 (Gibbon), Alda Crane Viewing Site is 2 miles south of 1-80 Exit 305 (Alda), three additional roadside turnouts are located south and east of the Alda interchange on Platte River Drive, and west of the Rowe Sanctuary office on Elm Island Road. Kiosks at the viewing decks will be updated in the spring of 2015.

Because safety was the original purpose of the task force, a top priority for Phase I was given to getting people off roads and bridges during the crane viewing season. The plan includes parking areas, access to the river for canoeists, scenic roads, viewing decks and turnouts, historic trail designations and proposed recreational trails. The NRD's crane viewing site near Alda was designated as a "green site" by the Groundwater Foundation in 2010.

B-1 Reservoir The B-1 Reservoir northwest of Lexington was constructed in the 1980s for flood control purposes, with the secondary purpose of providing groundwater recharge. A parking area and access area were constructed by the NRD. Also, in cooperation with the NGPC, the reservoir was stocked with game fish. The District opened the reservoir for day fishing in 1987. In 1995, petitioners from Dawson County cited high groundwater levels and objected to the recharge purpose for the reservoir. The board of directors responded to the petition by agreeing to stop storing water annually.

In March of 2013, the board approved a motion to start filling the reservoir every year and to get it back to its original concept. The NRD will receive 4,000 ac/ft of water per year from NPPD to fill the reservoir and there are plans to have the NGPC begin stocking the reservoir within this planning period.

The NRD will continue to review its current programs to determine their effectiveness and consider sponsoring new programs that would help to meet its goals for soil conservation and erosion control with the possibility of developing outdoor recreation with the project. The District will continue to work with related agencies at the federal and state levels to assure that we strive toward our objectives. In addition, local governments can apply for assistance through other programs, such as land treatment, flood control and water quality.

Other potential park and recreation projects will be evaluated as received.

Objectives

1. *To incorporate, wherever feasible and desirable, park and/or recreation features into other District programs.*
2. *To assist, as time and funds permit, other organizations, individuals, groups and government agencies in developing facilities to meet park and/or recreation needs of the District.*

X. Pollution Control and Solid Waste Disposal

GOAL: To protect & enhance the quality of land, air, surface water and groundwater within the District.

Pollution control, solid waste disposal and sanitary drainage have been addressed by CPNRD, although federal and state governments have taken most of the responsibility for all of these. Additionally, municipalities and county government are mandated by state law to share the responsibility. The biggest role for NRDs appears to be in the area of non-point source groundwater pollution, although the NRDs have responsibilities for all forms of pollution.

Air Quality Air quality across the District is excellent. Complaints are sometimes received by the District, but they are generally handled by local health departments, the NDEQ or the US EPA. Complaints sometimes develop when farmers cause smoke by burning residue in their fields. Other common complaints involve odors from feedlots. These conditions are generally of short duration and can usually be settled on a local basis. Industrial air pollution is limited in its extent since there are no metropolitan-size industrial cities in the District, and most plants make an effort to comply with industry and government regulations that prevent major problems. During certain times of the year, when the combination of dry weather, strong winds and open fields are all present, the air quality is poor due to blowing dust. Tree planting is encouraged by the NRD to reduce this problem.

Land Improper disposal of solid waste, petroleum products, chemicals and other waste products may cause land pollution and contribute also to water quality concerns. The NRD will continue to play a minor role in the area of solid waste management, providing technical information/expertise for disposal studies and working within a multi-government framework to meet regional needs. The NRD will work in urban areas to study and implement suitable programs for recycling waste products and to educate urban and rural residents about the merits of such programs and plans.

In 1992, the Nebraska Legislature adopted LB 1257 to address solid waste disposal problems. The law, known as the Integrated Solid Waste Management Act, requires municipalities and counties to provide for solid waste management services. Many communities already had sites for disposal of solid wastes, however, most dumps and landfills did not meet the Act's regulatory requirements and needed to be improved or relocated in order to meet those standards. Counties were required to file a solid waste disposal plan in 1994 including a 25% waste reduction goal for July 1, 1996; and a 40% waste reduction goal was set for July 1, 1999. The goal was 50% for July 1, 2002. To help meet those goals, the Act banned disposal of yard waste into landfills from April 1-November 30 of each year. Lead-acid batteries, waste oil, waste tires and household appliances are also banned from disposal into landfills. In September 1996, the landfill ban was extended to all unregulated hazardous waste. Waste tires in any form were banned as of July 1, 1998. The NRD will continue to monitor the quality of natural resources and will initiate or update current programs as necessary.

CPNRD has provided $2,500 annually to the Grand Island Area Clean Community System for educational programs and cleanup events. In September 2014, the board approved a request to provide $2,000 towards the City of Kearney's Household Hazardous Waste Program.

Objectives

1. *To establish irrigation water management techniques on all irrigated land to properly conserve and efficiently utilize soil, water and fertility.*
2. *To protect and preserve the quality of ground and surface waters that presently meet acceptable standards as adopted by the US Public Health Service and the Nebraska Department of Environmental Quality.*
3. *To improve the quality of groundwater and surface water not presently meeting the standard to such a level as to at least meet water quality criteria contained in the standards.*
4. *To establish adequate permanent cover on all Class VI & VII lands and re-establish cover on those range and pasture sites classified in "poor" condition in order to reduce erosion and sedimentation in surface waters.*
5. *To establish approved cultural management practices, vegetative practices and structural measures, as needed, on all land to prevent wind and water erosion, in order to reduce erosion and sedimentation in surface waters.*
6. *To establish erosion control measures as needed, on all industrial development sites, residential development sites, road construction sites & other non-agricultural sites; in order to reduce erosion and sedimentation in surface waters.*

XI. Information and Education

GOAL: That the public will develop a connection with natural resources conservation and management through accurate knowledge and understanding of the District's objectives.

Because the Natural Resources District is a unit of local government, the board of directors depends on the public to be informed about the projects and programs of their NRD. Also, the Nebraska Legislature has given the NRDs a larger regulatory role, providing the NRDs with an increased need to keep the public informed about its programs and requirements. With a District that stretches some 175 miles from west to east and serving a population of over 114,000 people, the logistics of offering information and education is a challenge; however, information and education are key objectives of the NRD. An immediate priority is to make landowners, operators, other citizens and taxpayers understand complicated natural resources issues.

CPNRD is responsible for: responding to issues that the public is focused on, recognizing constituents' priorities and expectations, and to provide factual information relating to the issues. At the same time, the District must provide constituents with the necessary understanding of those issues. Adults are an important audience in the District's education efforts. The main focus of adult education is water issues, both groundwater quality and quantity. High nitrate areas, Rules & Regulations, management plans, conjunctive management, and research studies are examples of issues the public needs to be informed about. Efforts are made to provide materials for educational programs to all age levels, including schools and other organizations on natural resources issues. Staff members address civic organizations and other groups as requested.

Information Brochures are available for all NRD programs. The NRD's website at www.cpnrd.org was overhauled in 2010 and is updated weekly, providing up-to-date information on all programs and projects. Publication of the "In Perspective" bi-monthly newsletter is sent to over 6,200 landowners, state agencies, public officials and cooperating organizations. Displays providing information about NRD programs are also provided at local conferences, agricultural trade shows and workshops. In 2008, the Nebraska Association of Resources Districts (NARD) adopted a new message that is being used by the NRDs in all public outreach efforts— 'Protecting Lives, Protecting Property, Protecting the Future.'

Education The NRD provides avenues of natural resources education for both educators and students. Staff helps coordinate competitions for high school students through the regional Envirothon, land judging and range judging contests and serves on the steering committees for each of the contests. NRCS and UNL Extension also help coordinate the land and range judging contests. Staff provides presentations to classrooms as requested including: SOAR Summer Camp, Nebraska Children's Groundwater Festival, high schools, middle schools, and several elementary schools. Programs are added as requested including:

2004: The programs coordinator and information/education specialist began coordinating the Nebraska Children's Groundwater Festival held for 4th-5th grade students at the Central Community College and College Park in Grand Island after the Groundwater Foundation requested that CPNRD take over coordination of the program. CPNRD is the main sponsor of the festival, providing $10,000 towards the festival. Donations through the Grand Island Community Foundation from local businesses and residents allow schools to attend at no cost. Nearly 1,000 students attend annually from across the state and around 300 presenters and volunteers help with the event.

2007: The NRD began providing scholarships for high school students to further their natural resources education, funding 10 students at $1,000 per year.

2010: The outdoor classroom program was changed to provide more education opportunities for classrooms. In June 2014, Grand Island Senior High was awarded $2,500 to convert an existing courtyard area into an outdoor learning area.

2010: The Groundwater Guardians (I&E staff is a member) received a grant to implement an Outdoor Learning Area (OLA) at the Nebraska State Fair. The GWG team received over $47,500 in grant monies to start the project in 2011-2012. A groundbreaking ceremony was held in October 2011 and an unveiling of the first phase of the project was held on August 31, 2012. NRD staff has been active in the continued development, labor and publicity of the OLA.

2010: CPNRD started coordinating two booths at the Nebraska State Fair for all 23 NRDs to participate in. An education game at the booths allowed participants of all ages to learn about natural resources in Nebraska. In 2014, CPNRD staff helped provide and develop concepts and information that was included in several displays in the new Nebraska Experience Building for the Nebraska Department of Agriculture.

2013: Great Western Bank approached the NRD to partner in recognizing landowners in the District who use conservation practices. Two winners were selected the first year. In 2014, the board approved a recommendation to increase the awards to three categories for the CPNRD Conservation Awards Program including cropland, grassland and community. Nominations are accepted through the first week in November and presented at a ceremony following the December board of directors meeting. CPNRD is responsible for advertising and promoting the program. Great Western Bank provides a $100 gift card and a sign to the winner, as well as paying for refreshments at the presentation of awards.

Educational Materials Educational materials are provided to instructors through: Project Wild, Project Wet, Project Learning Tree, Outdoor Classrooms, Arbor Day, UNL and other credible sources of natural resources education.

Media Relations News releases, print advertising, radio advertising and the NRD's website all provide information to the public through the media. News releases are emailed and faxed to all newspapers and radio stations in the District at least twice a month. This typically includes 15 radio stations, three television stations and 27 newspapers. The media is contacted through email, fax, mail and occasional telephone correspondence. CPNRD also participates in a radio talk show (along with other NRDs) for KRVN radio station in an effort to enhance the knowledge and understanding of the District's projects and programs. In October 2014, the board approved inserting the newsletter in local newspapers. Previously, it was mailed/emailed to landowners in the Phase II & III groundwater management areas and other agencies reaching 6,500 households.

Co-Sponsored Events Along with educational contests, the NRD participates with the following: Grand Island Groundwater Guardian Program, Husker Harvest Days, SOAR-Summer Orientation About Rivers, NARD Foundation, NRCS Extension Programs, Nebraska Association of Resources District's Wellness Program, and Prescribed Burn Schools.

Wellness Program In 2010, the I&E staff began coordinating wellness activities for staff members including fitness and nutrition challenges and quizzes, as well as providing wellness tips by email and posters. NARD initiated an effort with all NRDs to start wellness programs because there is significant data that shows that employee health management initiatives bring value to employees and performance in a multitude of ways including:

- Higher well-being is correlated with better job performance, higher employee engagement, team effectiveness, leadership effectiveness and performance.
- Employees are more effective by being highly present while at work & serving customers more effectively.
- Helps create a more productive culture where people care about each other & do their best work.
- People who have healthy lifestyles are more likely to avoid or delay chronic illness. On average, healthy people are more productive and cost less to employ.

In October 2013, the CPNRD formed a Wellness Committee. The first action of the committee was to develop an anonymous Worksite Wellness Employee Interest Survey to determine the employees interests in health promotion and health-related activities. In 2014, the committee implemented a weekly email rotation to educate staff about many types of health-related topics, implemented a walking program during morning break, participated in National Walk @ Lunch Day, held two lunch & learns, and held a Team Weight Loss Challenge with board and staff members. Staff annually participates in health screenings and CPR/AED/First Aid trainings.

The I&E Program will continue to implement the current activities during this planning period. Additional brochures may be developed for programs and projects requiring greater visibility. The NRD will continue to develop information/education programs through the various organizations to which the District belongs and continue to support the educational efforts of other environmental programs that offer a similar message, such as NARD, GMDA & NWRA. The NRD will also evaluate its program in terms of marketing in an effort to improve the ability of citizens to identify and respond to natural resources issues.

Objectives

1. *Establish & implement I&E programs for the general public about NRD's duties, responsibilities and objectives.*
2. *Establish & implement I&E programs for those people with direct interests in the District, specific projects and programs.*
3. *Work with the news media in order to improve the understanding of the general public about the District and its projects and programs.*
4. *Assist in developing curricula for use in educating elementary, secondary and post-secondary students about natural resources, conservation and environmental issues.*
5. *Assist in training teachers and leaders of educational organizations to maximize the use of the curricula that have been developed.*
6. *Promote communications program designed to enhance the knowledge and understanding of the District's directors and staff about the priorities and expectations of the citizens of the District.*

APPENDICE

Summary of Projected Needs -*Annual Work Hours Required*

PROGRAM/PROJECT	STAFF	2014	2015	2016	2017	2018
ADMINISTRATION						
General Manager	Lyndon Vogt	1,000	1,000	1,000	1,000	1,000
Administrative Director	Dianne Miller	2,000	2,000	2,000	2,000	2,000
Projects Director	Jesse Mintken	100	100	180	180	180
Biologist	Mark Czaplewski	200	200	200	200	200
Data Compliance Officer	Sandy Noecker	200	200	200	200	200
Hydrologist	Duane Woodward	100	100	100	100	100
Info/Education Specialist	Marcia Lee	300	300	300	300	300
Programs Coordinator	Kelly Cole	220	220	220	220	220
Projects Assistant	Tom Backer	200	200	200	200	200
Secretary/Receptionist	Deb Jarzynka	1,800	1,800	1,800	1,800	1,800
Water Resources Specialist	Dan Clement	60	60	60	60	60
Range Management Specialist	Dave Carr	200	200	200	200	200
GIS Image Analyst	Luke Zakrzewski	60	60	60	60	60
GIS Coordinator	Angela Warner	60	60	60	60	60
Resources Conservationist	Shane Max	40	40	40	40	40
OPERATIONS AND MAINTENANCE						
General Manager	Lyndon Vogt	40	40	40	40	40
Projects Director	Jesse Mintken	160	160	300	300	300
Biologist	Mark Czaplewski	100	100	100	100	100
Projects Assistant	Tom Backer	500	500	500	500	500
Secretary/Receptionist	Deb Jarzynka	20	20	20	20	20
Water Resources Specialist	Dan Clement	80	80	80	80	80
Range Management Specialist	Dave Carr	200	200	200	200	200
GIS Image Analyst	Luke Zakrzewski	40	40	40	40	40
GIS Coordinator	Angela Warner	60	60	60	60	60
Resources Conservationist	Shane Max	40	40	40	40	40
PLANNING						
General Manager	Lyndon Vogt	240	240	240	240	240
Administrative Director	Dianne Miller	20	20	20	20	20
Projects Director	Jesse Mintken	100	100	180	180	180
Biologist	Mark Czaplewski	200	200	200	200	200
Hydrologist	Duane Woodward	200	200	200	200	200
Info/Education Specialist	Marcia Lee	400	400	360	360	360
Programs Coordinator	Kelly Cole	120	120	120	120	120
Projects Assistant	Tom Backer	100	100	100	100	100
Secretary/Receptionist	Deb Jarzynka	5	5	5	5	5
Range Management Specialist	Dave Carr	400	400	400	400	400
GIS Image Analyst	Luke Zakrzewski	40	40	40	40	40
GIS Coordinator	Angela Warner	40	40	40	40	40
Resources Conservationist	Shane Max	40	40	40	40	40
RANGE MANAGEMENT						
General Manager	Lyndon Vogt	10	10	10	10	10
Range Management Specialist	Dave Carr	1,080	1,080	1,080	1,080	1,080

(continued)

Summary of Projected Needs *(continued)*

PROGRAM/PROJECT	STAFF	2014	2015	2016	2017	2018
INFORMATION & EDUCATION						
General Manager	Lyndon Vogt	40	40	40	40	40
Projects Director	Jesse Mintken	50	50	80	80	80
Biologist	Mark Czaplewski	200	200	200	200	200
Info/Education Specialist	Marcia Lee	1,600	1,600	1,640	1,640	1,640
Programs Coordinator	Kelly Cole	400	400	360	360	360
Secretary/Receptionist	Deb Jarzynka	15	15	15	15	15
Water Resources Specialist	Dan Clement	80	80	80	80	80
Range Management Specialist	Dave Carr	200	200	200	200	200
GIS Image Analyst	Luke Zakrzewski	40	40	40	40	40
GIS Coordinator	Angela Warner	60	60	60	60	60
Resources Conservationist	Shane Max	20	20	20	20	20
GROUNDWATER, SURFACE WATER & WATER SUPPLY						
General Manager	Lyndon Vogt	800	800	800	800	800
Administrative Director	Dianne Miller	15	15	15	15	15
Projects Director	Jesse Mintken	75	75	150	150	150
Data Compliance Officer	Sandy Noecker	400	600	600	600	600
Hydrologist	Duane Woodward	1,800	1,900	1,900	1,900	1,900
Programs Coordinator	Kelly Cole	220	220	220	220	220
Projects Assistant	Tom Backer	200	200	200	200	200
Secretary/Receptionist	Deb Jarzynka	110	110	110	110	110
Water Resources Specialist	Dan Clement	800	800	800	800	800
GIS Image Analyst	Luke Zakrzewski	1,860	1,860	1,860	1,860	1,860
GIS Coordinator	Angela Warner	1,800	1,800	1,800	1,800	1,800
Resources Conservationist	Shane Max	1,325	1,325	1,325	1,325	1,325
Thirty Mile Canal	Jim Harris	1,800	1,800	1,800	1,800	1,800
Thirty Mile Canal	Mike Ostergard	1,800	1,800	1,800	1,800	1,800
Thirty Mile Canal	Marci Ostergard	380	380	380	380	380
Cozad Canal	Tom Laird	1,900	1,900	1,900	1,900	1,900
WATER QUALITY, POLLUTION CONTROL, SOLID WASTE DISPOSAL, ETC.						
General Manager	Lyndon Vogt	180	180	200	200	200
Administrative Director	Dianne Miller	10	10	10	10	10
Projects Director	Jesse Mintken	250	250	320	320	320
Biologist	Mark Czaplewski	400	400	400	400	400
Data Compliance Officer	Sandy Noecker	1,110	1,110	1,200	1,200	1,200
Programs Coordinator	Kelly Cole	170	170	170	170	170
Projects Assistant	Tom Backer	730	730	730	730	730
Secretary/Receptionist	Deb Jarzynka	25	25	25	25	25
Water Resources Specialist	Dan Clement	880	880	900	900	900
GIS Image Analyst	Luke Zakrzewski	40	40	40	40	40
GIS Coordinator	Angela Warner	40	40	40	40	40
Resources Conservationist	Shane Max	200	200	200	200	200

(continued)

Summary of Projected Needs *(continued)*

PROGRAM/PROJECT	STAFF	2014	2015	2016	2017	2018
FLOOD PREVENTION, CONTROL & CHANNEL RECTIFICATION						
General Manager	Lyndon Vogt	100	100	100	100	100
Administrative Director	Dianne Miller	50	50	50	50	50
Projects Director	Jesse Mintken	300	300	600	600	600
Data Compliance Officer	Sandy Noecker	180	180	180	180	180
Hydrologist	Duane Woodward	300	300	300	300	300
Secretary/Receptionist	Deb Jarzynka	20	20	20	20	20
Resources Conservationist	Shane Max	200	200	200	200	200
DRAINAGE						
General Manager	Lyndon Vogt	240	240	240	240	240
Administrative Director	Dianne Miller	5	5	5	5	5
Projects Director	Jesse Mintken	300	300	500	500	500
Biologist	Mark Czaplewski	100	100	100	100	100
Data Compliance Officer	Sandy Noecker	100	100	100	100	100
Secretary/Receptionist	Deb Jarzynka	15	15	15	15	15
Resources Conservationist	Shane Max	200	200	200	200	200
SOIL CONSERVATION & EROSION CONTROL						
General Manager	Lyndon Vogt	40	40	40	40	40
Administrative Director	Dianne Miller	5	5	5	5	5
Projects Director	Jesse Mintken	20	20	40	40	40
Field Personnel	Secretaries	7,800	7,800	7,800	7,800	7,800
Programs Coordinator	Kelly Cole	400	400	400	400	400
Secretary/Receptionist	Deb Jarzynka	20	20	20	20	20
Water Resources Specialist	Dan Clement	100	100	100	100	100
Resources Conservationist	Shane Max	200	200	200	200	200
FORESTRY MANAGEMENT						
General Manager	Lyndon Vogt	20	20	20	20	20
Programs Coordinator	Kelly Cole	350	350	350	350	350
Projects Assistant	Tom Backer	650	650	650	650	650
Secretary/Receptionist	Deb Jarzynka	25	25	25	25	25
FISH & WILDLIFE HABITAT						
General Manager	Lyndon Vogt	40	40	40	40	40
Projects Director	Jesse Mintken	50	50	100	100	100
Biologist	Mark Czaplewski	1,000	1,000	1,000	1,000	1,000
Data Compliance Officer	Sandy Noecker	100	100	100	100	100
Programs Coordinator	Kelly Cole	300	300	300	300	300
Secretary/Receptionist	Deb Jarzynka	15	15	15	15	15
RECREATION & PARKS						
General Manager	Lyndon Vogt	20	20	20	20	20
Projects Director	Jesse Mintken	100	100	200	200	200
Biologist	Mark Czaplewski	200	200	200	200	200
Projects Assistant	Tom Backer	50	50	50	50	50
Secretary/Receptionist	Deb Jarzynka	10	10	10	10	10
Water Resources Specialist	Dan Clement	100	100	100	100	100

2014 & 2015 Fiscal Budgets

Below are the FY 2014 and 2015 Fiscal Budgets that were adopted by the Central Platte NRD Board of Directors, in accordance with state statutes.

The money that the NRD receives from local property taxes provides funding for flood control, water quality and water quantity programs, tree planting, wildlife restoration areas, and many other natural resources benefits. The NRD strives to conserve and preserve natural resources for the residents of central Nebraska. Major projects and expenditures include: J-2 Regulating Reservoirs, rehabilitation of Dawson County canals, and the Upper Prairie Silver Moores Flood Control Project.

GENERAL & SINKING FUNDS	ADOPTED FISCAL 2014	ADOPTED FISCAL 2015
Cash, Investments & Co. Treasurer	$8,762,840.41	$8,392,320.60
Revenue	$15,662,910.08	$11,039,989.88
Total Balances on Hand & Revenue	$24,425,750.49	$19,432,310.48
General Fund Requirements	$24,511,860.88	$19,268,608.49
County Treasurer Commission	$41,555.27	$38,851.04
Delinquent Tax	$75,000.000	$75,000.00
Sinking Fund Requirements	$4,963,667.73	$5,763,692.12
County Treasurer Commission	$8,942.51	$17,148.86
Total Requirements-Both Funds	$29,601,026.39	$25,163,300.51
Property Tax Required		
General Fund	$4,272,082.31	$3,998,955.49
Sinking Fund	$903,193.59	$1,732,034.54
Total Both Funds	$5,175,275.90	$5,730,990.03
The proposed Property Tax for both funds for Fiscal 2015 is up $555,714.13 from last year.		

Fiscal 2014 Levy	General Fund	0.03479	Total Both Funds
	Sinking Fund	0.00736	0.04215
Fiscal 2015 Levy	General Fund	0.02836	Total Both Funds
	Sinking Fund	0.01228	0.04064

Central Platte Natural Resources District

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