

**PAPIO-MISSOURI RIVER  
NATURAL  
RESOURCES  
DISTRICT**



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June 16, 2021

Natural Resources Committee  
Nebraska Legislature  
Nebraska State Capitol  
Room 117  
Lincoln, NE 68508

Dear Ms. Lamm and Members of the Natural Resources Committee:

Please find enclosed the LR 23 Report/Questionnaire for the Papio Missouri River Natural Resources District that you requested on June 1, 2021.

On behalf of the Directors of the Papio Missouri River NRD I would like to invite the Natural Resources Committee to hold any scheduled hearings on LR 23 at our Omaha Office at Wehrspann Lake/Chalco Hills Recreation Area. Furthermore, I would like to invite you, members of the committee and any interested State Senator to take a personal tour of the District in order to get a first-hand boots on the ground look of the explosive urban development of our area and the unique challenges facing the only Natural Resource District in the state with a city of the metropolitan class.

The Papio Missouri River NRD Directors, management and staff are extremely proud of the extensive, unprecedented, and impactful work that we do day in and day out and we stand ready to address any question or issue that you or the Natural Resources Committee may have.

If you should have any further questions after reviewing the document, please do not hesitate to contact me at your earliest convenience. Thank you for your time and support of the vital work performed by the State of Nebraska's Natural Resource Districts.

Highest Personal Regards,

John Winkler  
General Manager



# **PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT**

**LR 23 Report  
NRD Project/Progress  
June 2021**



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## **A. Natural Resources District Authorities**

In July of 1972, over 150 special purpose districts, each dealing with a variety of different and in some cases overlapping responsibilities, merged to form 24 Natural Resources Districts.

On January 5, 1989, the Papio Natural Resources District and the Middle Missouri Tribes Natural Resources District were merged to form the Papio-Missouri River Natural Resources District. The current 23 Natural Resources Districts are shown in Figure 1 in the Appendix.

Under Nebraska State Law, the Natural Resources Districts have been given specific authority and powers as described in Chapter 2-3229 of the Statutes relating to the Nebraska Natural Resources Commission:

“The purpose of the Natural Resources Districts shall be to develop and execute, through the exercise of powers and authorities contained in this act, plans, facilities, works, and programs relating to:

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

When NRDs were created, they were given the authority to levy a property tax to finance District programs and projects. Property taxes are still the primary source of revenue; however, the District can receive funds from other state, federal, and private sources for specific projects.

In 2009, the District was granted the authority to issue general obligation bonds to finance flood control and water quality enhancement projects including, but not limited to dams, levees, reservoir basins, floodplain buyouts, and low impact development best management practices. In 2019, the state legislature extended the authority through December 31, 2024.

## **B. Papio-Missouri River Natural Resources District**

The Papio-Missouri River Natural Resources District (District) encompasses approximately 1,790 square miles within seven counties of eastern Nebraska (see Figure 2 in the Appendix). The District includes all of Washington, Douglas, and Sarpy Counties, most of Dakota County, and the eastern

60% of Thurston County, the eastern 55% of Burt County, and a small portion of southeast Dodge County.

The District is the most populous district containing over 41% of Nebraska's total population, or approximately 812,969 people (2019 estimate). It also has the highest tax base of \$70.56 billion (2019), or approximately 27.7% of the total taxable real estate base of Nebraska. It is the only district that contains a metropolitan class city (Omaha).

Portions of three major river basins are contained within the District: The Missouri, the Platte, and the Elkhorn. The District is bounded by the Missouri River on the east and north, by the Platte on the south and west, and by tributaries to both on the west.

To facilitate the implementation of the twelve legislative authorities listed in Part A, the District combined the authorities into the following seven general resource management needs:

1. Reduce flood damages.
2. Maintain water quality and quantity.
3. Reduce soil erosion and sedimentation damages.
4. Provide outdoor recreation facilities.
5. Provide domestic water supply.
6. Develop and improve fish and wildlife habitat and forest resources.
7. Participate in solid waste management and recycling efforts.

The District is governed by an elected Board of Directors. There are currently eleven (11) subdistricts, each representing approximately the same number of people.

## **#2 and #3**

### **Surface Water**

1. Missouri River – The Missouri River forms the eastern boundary of the District and lies in a broad, flat valley which averages about five miles in width. The channel averages 700 feet wide and 8.5 feet deep with an average daily discharge of 30,140 cubic feet per second (cfs) at Omaha, Nebraska. The river gradient averages one foot per mile. During major spring flooding periods, the Missouri River has reached 250,000 cfs. Major uses of the river are domestic water supply, recreation, wildlife habitat, and commercial barge traffic. The District contains 140 miles of Missouri River frontage. The Missouri River saw record high stages in 2011 and 2019.
2. Platte River – The Platte River is a major right bank tributary of the Missouri River and is the principal river in Nebraska. It drains an area of 89,100 square miles which includes the more populous and highly developed areas of Colorado, Wyoming, and Nebraska. The Platte is the western boundary of the District in Douglas County, and the western and southern boundary in Sarpy County. The channel capacity of the Platte ranges from 40,000 cfs to 44,000 cfs, and the riverbank ranges from four to eight feet in height. The river gradient averages 4.6 feet per mile. Major uses of the river are recreation, irrigation, wildlife habitat, and groundwater recharge. The District contains the lower 50 miles of the Platte River. The Platte River saw a record high stage in 2019 reaching 250,000 cfs.
3. Elkhorn River – The Elkhorn River is a major left bank tributary of the Platte River. The Elkhorn drains about 6,960 square miles and joins the Platte at the western edge of Sarpy County. The channel capacity ranges from 30,000 cfs to 35,000 cfs, with banks typically 10-15 feet in height. The river gradient averages two feet per mile. The major uses of the river are recreation, wildlife habitat, and irrigation. The District contains the lower 35 miles of the Elkhorn River. The Elkhorn River saw a record high stage in 2019 reaching 117,000 cfs.
4. Lakes – There are many small lakes and farm ponds in the District. The largest lakes were constructed as flood control reservoirs surrounding Omaha. These are Cunningham Lake, Standing Bear Lake, Wehrspann Lake, Zorinsky Lake, Candlewood Lake, Walnut Creek Lake, Newport Landing Lake, Shadow Lake, and Youngman Lake, Prairie Queen, Flanagan Lake, Big Elk Lake and Portal Recreation Area. Summit Lake, located west of Tekamah, was built as a part of the Tekamah-Mud Watershed Project. Kramper Lake located near Hubbard, was built as part of the Pigeon-Jones Watershed Project.

Other lakes formed as the result of sand and gravel quarry excavation. These include Hansen Lakes, Chris Lake, Ginger Cove, Ginger Woods, Hawaiian Village, Villa Springs, Riverside Lakes, and Grey's Lake. The predominant use of these lakes is for private recreation.

## Groundwater

Groundwater quantities in the District are extremely diverse in nature (see Figures 9, 10, 11, and 12 in the Appendix). Wells located in the floodplains of the Missouri, Platte, and Elkhorn Rivers produce large quantities of water. Groundwater supplies in the upland areas are scattered with many wells drilled into perched or confined aquifers. Some wells in the upland area can produce for only short periods of time, while others produce a constant supply of water. Figure 13 in the Appendix shows the locations of the District's water level monitoring wells.

In 2012, the District prepared a voluntary Integrated Management Plan (IMP) in cooperation with the Nebraska Department of Natural Resources (NDNR) for the Lower Platte River Basin. The IMP was adopted by the District and NDNR in August 2014. The IMP includes all surface water drainage area to the Platte or Elkhorn River and the hydrologically connected groundwater to both rivers as of 2014. The plan limits the amount of new groundwater and surface water use, including new irrigated acres, developed each year.

The District joined the Lower Platte River Basin Water Management Plan Coalition in 2013 along with NDNR and six other NRD's within the Lower Platte Basin, including Lower Platte South, Lower Platte North, Lower Elkhorn, Upper Elkhorn, Lower Loup and Upper Loup. The objective of the Coalition was to develop a Basin Water Management Plan (BWMP) which evaluated existing water demands and available water supplies to determine allowable new water development which could be cooperatively managed by each NRD and NDNR. This BWMP was completed in October 2017 and subsequently adopted by all NRDs and DNR. Annual reporting for the Basin Water Management Plan ensures that each NRD is not actively developing more than its share of depletions to streams or rivers.

Groundwater quality is generally good throughout the District. Historically, groundwater in the Missouri River Valley is high in dissolved solids, particularly iron and manganese, which produce taste and odor problems in the water. Following the adoption of a newly revised Groundwater Management Plan in 2018, the District created two new Phase II Groundwater Quality Management Areas near Tekamah and Springfield to better address moderate nitrate contamination issues in these areas (Figure 14).

The District has installed dedicated monitoring "well nests" as shown in Figure 14 in the Appendix. Eleven of these fifteen sets of monitoring wells are located within community Wellhead Protection Areas and can provide early warning of water quality changes to municipal groundwater supplies. Each dedicated monitoring well is sampled every two years and reported to the Nebraska Dept. of Environment and Energy as part of their state-wide groundwater quality monitoring network.

Wells in the Platte Valley produce large amounts of good quality groundwater. The Cities of Omaha, Papillion, Valley, Lincoln and Fremont maintain municipal well fields in the Platte Valley. However, the District joined NDNR, Lower Platte South, Lower Platte North, Lincoln Water, and Metropolitan Utilities District (Omaha Metro) in a collaborative effort to develop a Drought Contingency Plan for the Lower Platte River (with funding from the US Bureau of Reclamation). This plan is now available online.

The District's Groundwater Management Plan (GMP) was newly adopted in March 2018. Data collection is a major component of the plan. The new GMP include "triggers" for additional action by the District should groundwater quality or quantity levels meet these specified levels. New groundwater management regulations associated with the revised GMP impose new non-organic fertilizer application restrictions in certain areas of the District and require wells permits for all new wells pumping over 50 gpm.

## **Recreational Facilities**

The District has significant diversity of land use and population distribution, including sparsely populated rural areas and the highly urbanized areas of metropolitan Omaha. A variety of recreation opportunities are available across the District, from passive natural areas to highly organized sports. The latest Nebraska State Comprehensive Outdoor Recreation Plan (SCORP) from 2020 indicates that there is a need for more facilities to meet existing demand.

Over the past 10-15 years, the types of recreation activities which the majority of the population is involved with have not changed significantly. Those activities which provide the ability to be outside, closer to a more natural environment, are generally preferred.

Trails, picnic areas, camping, boat launch facilities, and fishing appear to be the most appropriate recreational activities for large resource areas. They are an integral part of these resources and provide the facilities which are participated in by the largest part of the population.

A particularly high priority for recreational opportunities is multi-use trails. Trails provide recreation, active transportation, and access to natural resources for people across the District. Newly constructed recreation areas provide a variety of experiences, and the trail network provides connection from neighborhoods to recreation areas, as well as places where people work, play, shops, and meet with other members of the community. The District has either constructed or provided cost share to support over 130 miles of trails in the Omaha area alone. Other communities have established similar trail networks serving the same purposes.

## **Resource Management Needs**

The District has combined the twelve authorities into seven resource management needs. These needs are prioritized by the District's Board of Directors from time to time to meet current issues and needs of the District.

Based on current needs, the District's Board of Directors have prioritized these resource management needs as follows:

1. Reduce flood damages.
2. Maintain water quality and quantity.
3. Reduce soil erosion and sedimentation damages.
4. Provide outdoor recreation facilities.
5. Provide domestic water supply.



6. Develop and improve fish and wildlife habitat and forest resources.
7. Participate in solid waste management and recycling.

Each of these needs will be discussed in more detail below.

### **A. Reduce flood damages.**

Flood control is a major function of the District, especially in the Papillion Creek Watershed. The District has sponsored numerous channel, reservoir, and levee projects in the area, and will continue to operate and maintain these projects into the future.

In response to the 1987 Water Quality Amendments to the Clean Water Act, EPA published the rules for Phase I of the National Pollutant Discharge Elimination System (NPDES) stormwater program in 1990. The Phase I program requires municipalities with populations of 100,000 or greater to implement a stormwater management program as a means to control discharges from the “Municipal Separate Storm Sewer System” (MS4). The NPDES stormwater program is a permit-based program that established requirements that municipalities must meet to discharge storm water from MS4s to the nation's surface waters. The City of Omaha is operating under a Phase I permit issued April 1, 2018.

In March 2003, EPA initiated the Phase II program, which required smaller MS4s located in urbanized areas to implement a stormwater management program. Douglas County, Sarpy County, La Vista, Ralston, Bellevue, Papillion, Boys Town, and Gretna are operating under a Phase II permit issued July 1, 2017.

Storm water management programs for both Phase I and Phase II, require that communities reduce the discharge of pollutants to the “maximum extent practicable”. The regulations require that the management program address (at a minimum) six elements, that when implemented are expected to result in significant water quality benefits.

In response to this requirement, the Cities of Omaha, LaVista, Ralston, Papillion, Bellevue, Bennington, Boys Town, and Gretna, plus Douglas and Sarpy Counties formed the Papillion Creek Watershed Partnership (PCWP). In 2009, Douglas County and Bennington decided not to remain in the PCWP. Although each member of the partnership is required to have its own NPDES Stormwater permit, the partnership provided a means to standardize the requirements for the whole area. The District is included in the partnership due to its jurisdiction over the entire Papillion Creek Watershed, and for its authorities in flood control and water quality. The interlocal agreement that forms the PCWP was renewed in 2014 and 2019.

In 2019, the District adopted the recommended PCWP Stormwater Policies (included in the appendix). The six policy areas address both stormwater quantity and quality and are listed below:

1. Water Quality
2. Peak Flow Reduction
3. Landscape Preservation, Restoration, and Conservation
4. Erosion and Sediment Control and Other BMPs
5. Floodplain Management

## 6. Stormwater Financing

The policies aim to reduce stormwater quantity and to improve water quality. To address quantity, fifteen regional stormwater detention basins have been proposed for implementation (See Figure 15 in the Appendix). Additionally, PCWP members are requiring a no net increase in runoff from the 2-year storms.

Additionally, PCWP partners added a requirement that the first ½ inch of runoff from all new developments and significant re-development in the watershed be controlled on site. In many cases, the ½ inch retention can be accomplished using Low Impact Development techniques and include practices such as rain gardens and bio-swales.

As development in the urbanized area of Sarpy County has grown, the District worked with municipalities south of the Papio Watershed to develop similar standards and policies. In 2016, the Southern Sarpy Watershed Partnership (SSWP) was formed by an interlocal agreement among the cities of Bellevue, Gretna, Papillion, Springfield, Sarpy County, and the District. This interlocal agreement was renewed in 2019. The SSWP is in the process of developing a watershed management plan to address water quality and quantity issues before the area is fully developed. The plan will be completed in late 2021 or early 2022.

The following programs and projects address flood control in the District.

1. Channel Maintenance Program (CMP) – The District maintains channels and levees along the Papillion Creeks in Douglas and Sarpy Counties.
2. Missouri River R-613 Levee – The District, as local sponsor, maintains this Corps of Engineers levee along the Platte and Missouri Rivers, and the lower Papillion Creek in Sarpy County. This project is being upgraded/modified in 2019-2022 to allow for the project to be certified by FEMA.
3. Missouri River R-616 Levee – The District, as local sponsor, maintains this Corps of Engineers levee along the Missouri River north of the Papillion Creek outlet. This project is being upgraded/modified in 2019-2022 to allow for the project to be certified by FEMA.
4. Union Dike and No Name Dike – The District maintains this levee along the left bank (north side) of the Platte River between Valley and Fremont.
5. Papio Reservoirs and Water Quality Basins – The District has constructed several of the Corps' original 21 flood control structures in the Papillion Creek Watershed. These include Newport Landing (Site 6), Walnut Creek (Site 21), Youngman (Site 13) and Flanagan Lake (Site 15A). Operation and maintenance will continue on these structures. In addition, the District has constructed Shadow Lake, Prairie Queen (WP-5), Portal Recreation Area (WP-6) and Big Elk Lake (WP-7) which are part of the Papillion Creek Watershed Management Plan. Currently regional detention basins WP-1, WP-2, WP-4, DS-7, DS-12, and DS-19 are in the planning stages. The PCWP updates the Implementation Plan for the Papillion Creek Watershed Management Plan every five years and prioritizes projects for the next five years.

6. Little Papillion Creek Channel Project – The District maintains the channel improvement project along the Little Papillion Creek between Boyd and Q Streets in Douglas County. Douglas County was the original sponsor of this Corps of Engineers project.
7. Floodplain Management Program – The District provides technical assistance to communities, developers, and individuals concerning the wise use of designated floodplains in the District.
8. Western Sarpy/Clear Creek Levee Project – The District merged with the Western Sarpy Drainage District in 1999. Following the severe flooding in 1993, the District, along with the Lower Platte South NRD and the Lower Platte North NRD sponsored a levee improvement project with the Corps of Engineers. Western Sarpy Levee is in Sarpy County. Construction of the overall project was completed in 2018. The District will maintain the Western Sarpy Levee into the future. This project is in southwest Sarpy County along the Platte and Elkhorn Rivers.
9. Floodplain Purchase Program – The District participates in the buyout of structures in the floodplain to lessen flood damages and prevent loss of life during flood events.
10. Flood Mitigation Planning and Mapping Assistance Program – The District maintains and updates a Multi-Jurisdictional Multi-Hazard Mitigation Plan every five years. The District also provides funding assistance to communities for preparation of, or revisions to, NFIP Flood Hazard studies and maps.
11. Pigeon/Elk Creek Improvement Project Area – The District merged with Drainage District #5 in Dakota County encompassing the Elk Creek and Pigeon Creek Watersheds. The project includes levee improvement and maintenance, plus measures to reduce sedimentation. Grade stabilization structures are planned for the area.
12. Pigeon/Jones Site 15 – This is a multi-purpose flood control, sediment retention, and recreation facility in Dakota County. This project was completed in 2015 and is now managed as the Danish Alps Recreation Area at Kramper Lake by the Nebraska Game and Parks Commission (NGPC).
13. Small Flood Control Program – This program provides technical and financial assistance to landowners for the installation of small flood control structures in the Papillion Creek Watershed. One structure, Sachs Palmer Dam has been built in Papillion Creek Watershed. The program was updated in 2021.
14. Urban Stormwater Program – This program encourages wise management of stormwater in urbanized and developing areas in the District. The PCWP was an outgrowth of this program.

15. Bellevue/Offutt Drainageway Project – The District, in cooperation with the City of Bellevue and Offutt Air Force Base, improved a drainage channel from the base to Missouri River Levee R-616 in Sarpy County. The District maintains the project.
16. Flood Mitigation Assistance Program – The District provides technical and financial assistance to municipalities and other units of government to mitigate flood losses through structure flood control projects in developed, urban areas.
17. Elkhorn River Breakout Improvement Project Area – The District is cooperating with the Lower Platte North NRD on this flood control project. The project itself is along the Elkhorn River in Dodge County, but a portion of the benefited area is in Douglas County. The Lower Platte North is the lead agency on this project.
18. Western Sarpy Drainage Improvement Project Area – The District merged with the Western Sarpy Drainage District in 1999 and acquired this project and will maintain it into the future. The Western Sarpy Drainage Project extends from Schram Road to I-80 in Western Sarpy County, west of Gretna, Nebraska. The District maintenance of this improvement project area drainage main ditch and lateral ditches is funded via annual drainage assessments on benefited land parcels.

## **B. Maintain Water Quality and Quantity**

Groundwater and surface water quality serve as an important natural resource. The District plans to ensure that an adequate and high-quality supply of both surface and groundwater remains available for all beneficial uses.

The District's Groundwater Management Plan (GMP) was newly adopted in March of 2018. This plan includes "triggers" for additional action by the District if groundwater quality declines. New groundwater management regulations associated with the revised GMP impose new non-organic fertilizer application restrictions in certain areas of the District and require wells permits for all new wells pumping over 50 gpm.

The interconnectedness between surface and groundwater, called conjunctive use, must be considered in water planning efforts. The Legislature directed the Nebraska Department of Natural Resources to conduct evaluations of the state's major river basins to determine if the water resources are either "not fully appropriated", "fully appropriated", or "over appropriated" based on the impacts of continued pumping of groundwater on stream flow.

Currently, there are no fully or over appropriated basins in the District. However, the lower Platte River Basin is currently of concern. Should any basin be declared fully or over appropriated, an integrated water management plan must be developed.

The following programs and projects address water quality and quantity issues.

1. Groundwater Monitoring Program – As required in the Groundwater Management Plan, the District gathers monitoring data, for both quantity and quality, on over 100 wells in the district in five groundwater areas: Missouri, Platte, Elkhorn, Dakota, and Upland areas.
2. Eastern Nebraska Water Resources Assessment Project (ENWRA) – The District is cooperating with five other NRD's (Lower Platte South, Lower Platte North, Lower Elkhorn, Lewis and Clark, and Nemaha NRD's) to assess the groundwater resources in Eastern Nebraska. This long-term project will characterize the geology and water bearing formations to assist the NRD's in implementing their GWMP's.
3. Chemigation Certification Program – Center pivot irrigators who apply chemicals through these systems are required to obtain an annual permit from the District. In order to obtain the permit, operators must demonstrate that the required safety equipment has been installed and is operational, and they must complete individual education and certification requirements every 4 years.
4. Well Abandonment Program – The District cost-shares with landowners to properly decommission any well that is no longer in use.
5. Water Quality Management Plans – 319 Water Quality Management Plans for the District were recently developed and adopted through coordination with the Nebraska Department of Environment and Energy. One plan covers the Platte River watershed portion of the District, and the other plan covers the remainder of the District.
6. Papillion Creek 319 Watershed Program – The District is the local sponsor of the Papillion Creek 319 Watershed Program located in Douglas and Washington County. The District received grant funding from the Nebraska Department of Environment and Energy to offer incentive programs to address the e coli loading in the Papillion Creek Watershed.
7. Lake Dredging Program – The District cost-shares with units of government to dredge sediment basins in watersheds above recreation lakes.
8. Lower Platte River Corridor Alliance – The Lower Platte River Corridor Alliance (LPRCA) was formed in 1996 between the District, the Lower Platte South, the Lower Platte North NRD's and the Nebraska Departments of Natural Resources, Environmental Quality, Game and Parks Commission, and the Health and Human Services. The LPRCA attempts to coordinate the development of land and water resources in the Lower Platte River Basin. The efforts are primarily aimed at protecting the natural resource base in the corridor.
9. Stormwater BMP Program – This District program provides technical and financial assistance to communities for the installation of innovative best management practices to control stormwater and to improve water quality.

### **C. Reduce Soil Erosion and Sedimentation Damages**

One of the most visible detriments to water quality is erosion following heavy rain events. Erosion transports sediment making the water murky. Sediment carried by stormwater is deposited in lakes, streams, roadside ditches, city streets, and many other places.

Control at the source is the most economical means to control erosion and reduce sedimentation.

The following District programs and projects address erosion and sedimentation:

1. Conservation Assistance Program (CAP) – The District cost-shares with landowners on agricultural best management practices to control erosion. In addition, certain watershed areas are designated for special land treatment, including terraces, waterways, and grade stabilization structures. Silver Creek Watershed in Burt County and Pigeon/Jones Watershed in Dakota County are two examples.
2. Nebraska Soil and Water Conservation Program – The District administers this state cost-share program on the local level. Agricultural best management practices, including terraces and waterways are the primary practices.
3. NRCS Assistance Program – The District provides staff to the Natural Resources Conservation Service to provide technical assistance to landowners in the installation of best management practices, and to help administer District programs.
4. Urban Conservation Program – The District provides technical assistance to units of government in the review of new developments for erosion and sedimentation issues, drainageway concerns, and floodplain considerations.
5. Urban Conservation Assistance Program – The District cost-shares with units of government to install urban best management practices for erosion and stormwater management.
6. Urban Drainageway Program – The District provides technical and financial assistance to units of government to solve major erosion and stabilization concerns on drainageways in urban areas.
7. Papillion Creek P.L. 566 Watershed Project – The District is local sponsor of this special project to address grade control (gully erosion) problems in the Papillion Creek Watershed in Douglas, Washington, and Sarpy Counties. Twenty-eight of fifty-two structures have been constructed. The District operates and maintains twenty-five of the completed structures. The District is currently in the planning stage on the remaining seven viable sites in the PL 566 Watershed Plan.
8. Tekamah-Mud P.L. 566 Watershed Project – The District is the local sponsor of this special project to provide grade stabilization in the Tekamah and Mud Creek Watersheds in Burt County. All fifteen structures have been installed and are operated and maintained by the District. Site 5A is the Summit Lake Recreation Area which is managed by NGPC.

9. Turtle Creek P.L. 566 Watershed Project – The District is the local sponsor for this special project to provide grade stabilization in the Turtle Creek watershed in Sarpy County. Both structures have been installed and are operated and maintained by the District.
10. Buffalo Creek Watershed – This special watershed project in Sarpy County addressed grade stabilization problems. All ten structures have been installed and are operated and maintained by the District.
11. Elkhorn River Improvement Project Area – Landowners along the Elkhorn River in Douglas County petitioned the District to help solve a severe streambank erosion problem in the reach between King Lake and Highway 36. Financial assistance was obtained from the Nebraska Natural Resources Commission (75%). The District contributed 15% and the landowners contributed the remaining 10%. The project was completed in 1999. The District operates and maintains the project, with the costs paid by the landowners through a special assessment.
12. Erosion and Sediment Control Program – The Nebraska Erosion and Sediment Control Act of 1986 provides for a complaint system whereby landowners whose property is damaged by sediment from soil erosion on adjacent lands, can get this erosion controlled. The District administers this program on the local level.
13. Silver Creek Watershed Project: The District is the local sponsor of this special project to provide grade stabilization in the Silver Creek Watershed in Burt County. All twenty-two structures have been installed and are operated and maintained by the District.
14. Pigeon Jones Creek Watershed Project: The District is the local sponsor of this special project to provide grade stabilization in the Pigeon Jones Creek Watershed in Dakota County. All twelve structures have been installed and are operated and maintained by the District.

#### **D. Provide Outdoor Recreation Facilities**

The majority of recreational facilities built, operated, and/or maintained by the District are part of a larger project, usually a flood control facility, or habitat restoration project. Recreational facilities usually include trails, camping, boating, and picnicking.

The District also encourages other units of government to install and maintain recreational facilities through cost share programs.

The following programs and projects involve outdoor recreation.

1. Chalco Hills Recreation Area – The District is the recreation sponsor of this Corps of Engineers flood control project. The recreation area surrounds Wehrspann Lake in Sarpy County and was originally referred to Dam Site 20. The dam is maintained by the Corps while the recreation facilities are operated and maintained by the District.

2. Elkhorn Crossing Recreation Area – This area was built as a part of the Elkhorn Riverbank Stabilization Project. It contains a boat ramp for canoes and airboats and provides space for primitive camping along with RV pad sites, playground and other amenities.
3. Platte River Landing Recreation Area – This relatively small recreation area is located west of Valley on the Platte River to provide a public access to the river.
4. Prairie View Recreation Area – The reservoir for this area was built by a private developer as a water quality basin above Newport Landing (Dam Site 6). The district constructed recreational facilities, including a trail and a boat ramp.
5. West Maple Elkhorn River Access Area – The District built the canoe launch site in 2006. The site provides a public access to the Elkhorn River at Waterloo, Nebraska. The Village of Waterloo operates and maintains the site.
6. Elkhorn River Access at Graske Crossing – The District built, operates and maintains this canoe access site on the Elkhorn River at West Dodge Road.
7. Papio Trails Project – The District has added a recreational trail to some of the levee projects. Trails are planned, designed, and constructed under this program.
8. Trails Assistance Program – The District cost shares with communities to construct trails within communities.
9. Recreation Area Development Program – The District cost shares with communities to acquire, develop, and improve recreational facilities in local jurisdictions.

## **E. Provide Domestic Water Supply**

The legislation that created natural resources districts allowed existing rural water districts to be included or not. The legislation also noted that any future rural water districts had to be formed by NRD's. Those rural water districts that chose to remain independent are still operational in the state.

The district operates four rural water districts: Dakota County, Thurston County, Washington County #1, and Washington County #2. These projects are operated separately and independently with no District funds.

The following projects address this resource management need.

1. Washington County Rural Water Project #1 – The District has operated this project since 1980 in southeast Washington County. The project purchases treated water from the Metropolitan Utilities District. The City of Fort Calhoun and 664 rural water customers are served by the project.



2. Washington County Rural Water Project #2 – This system located between Blair and Fort Calhoun was established in 2005. Treated water is purchased from Blair and serves 404 rural households and Lakeland Estates. In addition, this system was designed to connect the municipal water systems of Blair and Omaha such that could provide water to the other in the event of a catastrophe.
3. Dakota County Rural Water Project – This system purchases treated water from Dakota City and serves 706 rural households. Key system upgrades to the pump house, standpipe and 18 miles of water lines are being made to increase water capacity and supply for customers and the Danish Alps Recreation Area. An interconnection exists between the municipal systems of Dakota City and South Sioux City such that could provide water to the other in the event of a catastrophe.
4. Thurston County Rural Water Project – This system, located in central Thurston County, purchases treated water from Pender and serves 158 rural customers and the Village of Rosalie.

## **F. Develop and Improve Fish and Wildlife Habitat and Forest Resources**

Fish and wildlife habitat is a natural outcome of many District programs and projects. It may not even be the primary purpose of the project. Grass cover on a levee, windbreak trees, permanent water in a reservoir, and water quality wetlands all create habitat for wildlife.

The following programs and projects address habitat and forest resources.

1. Missouri River Corridor Project – Approximately 140 miles of the Missouri River borders the District. This project was started to acquire and/or restore, renovate, and create wetland habitat along the river, as well as reconnecting oxbow lakes and other backwater areas. Additionally, cultural and historic resources are also identified and restored where practical. The District works with various agencies such as the Corps of Engineers, Ducks Unlimited, Back to the River, Inc. and the Fish and Wildlife Service, tribes, and other private entities on these projects.
2. Back to the River– This was originally an outgrowth of the Missouri River Corridor Project and is aimed at getting people “back to the river”. Back to the River, Inc. has since formed as its own non-profit organization made up of individuals representing a multitude of Missouri River related issues and has been focused on both the acquisition and restoration of Missouri River habitat, planning, environmental education. Many recreational measures have been planned and installed under this program, including trails and cultural resource facilities.
3. Rumsey Station Wetland – The District acquired this property as a part of the West Branch Channel Improvement Project. The wetland area has been enhanced to provide mitigation for the channel project, as well as the establishment of a wetland bank to offset wetland losses on other District projects.

4. Heron Haven Wetland – The District cooperated with the Omaha Chapter of the Audubon Society to acquire and develop this wetland in west central Omaha. Currently, the Friends of Heron Haven, Inc. operate and maintain the site as an educational center.
5. Wetland Mitigation Bank – The District established its first wetland bank at Rumsey Station. This program identifies and constructs wetland and channel mitigation banks for use on District projects or providing units for sale to others as mitigation sites.
6. Conservation Easement Program – Under this program, the District can acquire a conservation easement over a piece of property protecting natural resources on the site from destruction, or development. The District works closely with the Nebraska Land Trust on Conservation Easements throughout the state.
7. Wildlife Habitat Improvement Program – This project works to create and improve wildlife habitat on private lands.
8. Tree Planting Program – The District works with individual landowners to plant trees for windbreaks, shelterbelts, and/or wildlife habitat. This program is also used in urban areas.

## **G. Participate Solid Waste Management and Pollution Control**

The District's involvement with solid waste is limited to household hazardous waste and the use of recycled products. The following program addresses this need.

1. Solid Waste and Recycling Program – The District cooperates with the Nebraska Recycling Association, MAPA, and other agencies to develop markets for recycled products and alternative means to disposal of solid waste.

## **I. The Future Plan**

The district plan for the next ten-year period sets a direction for the future but does not address the specifics of day-to-day operations.

Currently:

- Concern for the environment and related natural resources issues are a high priority for the general public.
- Conversion of agricultural lands to urban uses continues to be a challenge for resource management.
- NRDs address a wide variety of natural resources issues and concerns.
- Since NRDs are formed along hydrologic boundaries, they are not limited by jurisdictional boundaries.

Given the specific issues related to the District, the following goals and objectives represent the master plan through the year 2030. While goals are listed according to the priorities established by the Board of Directors, the objectives for each goal are not listed in any particular order.

### **A. Reduce flood damages.**

The District will reduce losses due to flooding through the following measures:

- Watershed planning and management.
- Construction of structural measures such as levees, dams, and/or channels to contain flood waters.
- Promote sound floodplain management and implement other non-structural measures such as floodway/floodplain buy-outs.

#### **Objectives:**

1. In cooperation with the Papillion Creek Watershed Partnership (PCWP), construct regional flood control reservoirs.
  - a. 2021-2024 – Structures West Papillion #4 (WP-4), West Papillion #1 (WP-1), and West Papillion #2 (WP-2)
  - b. 2024-2031 – Structures Dam Site 19
2. Develop, maintain, and improve flood control levees and channels in the Papillion Creek Watershed.
  - a. Locally coordinate a US Army Corps of Engineers Reevaluation of the Papillion Creek Watershed and facilitate planned implementation.
3. Certify and obtain accreditation by FEMA of the following flood control levees:
  - a. Missouri River Levee R-613
  - b. Missouri River Levee R-616
  - c. West Papillion Creek (42<sup>nd</sup> to 90<sup>th</sup> Streets)
  - d. Other priority projects that may be identified.
4. Cooperate with communities to certify and obtain FEMA accreditation of flood control levees meeting 44 CFR 65.10 criteria.
5. Operate, maintain, and repair flood control levees and channels on the Papillion Creek System:
  - a. Big Papillion Creek (Capehart Road to Blondo Street)
  - b. West Papillion Creek (36<sup>th</sup> Street to Giles Road, 144<sup>th</sup> to 153<sup>rd</sup> Street, W. Center Rd. to Frances Circle)
  - c. Little Papillion Creek (Q to Pratt Streets)
  - d. Other priority projects that may be identified.
6. Operate, maintain, and repair flood control levees along the Platte River.
  - a. Union and No Name Dike

- b. Western Sarpy Levee
  - c. Other priority projects that may be identified.
7. Explore feasibility of legislative authorities to create stormwater utilities or other stormwater management entities.
  8. Implement removal of structures within the floodway/floodplain through voluntary purchase programs.
  9. Provide technical assistance to individuals and units of government for sound floodplain management.
  10. Provide technical and financial assistance to units of government for the installation of structural flood control measures.
  11. Provide technical and financial assistance to units of government for the installation of non-structural flood control measures.
  12. Continue to coordinate a Multi-Jurisdictional Multi-Hazard Mitigation Plan open to participation for all eligible communities within the District.
  13. Continue to re-evaluate and update flood insurance studies for creeks, streams, and rivers in the District.
  14. Merge with existing drainage districts upon request.

## **B. Maintain water quality and quantity.**

The District will implement programs and projects designed to protect and improve surface and ground water, so that water is available for all beneficial uses through the following measures:

- Watershed planning in cooperation with other local, state, and federal agencies.
- Promotion of low impact development techniques in developed and developing areas for water quality improvement.
- Establish groundwater management areas, as needed, to protect groundwater.
- Establish programs and projects to address non-point sources of pollution.
- Provide technical and financial assistance to individuals, groups, and units of government to improve water quality.

### **Objectives:**

1. In cooperation with the PCWP, construct regional water quality basins.
2. Fully implement the District's Groundwater Management Plan, including updating the plan as necessary. Improve monitoring of groundwater quality and quantity as necessary to better access groundwater "triggers" and drought.

3. Continue to provide technical and financial assistance toward the protection of drinking water sources through active management of wellhead protection areas surrounding municipal well fields.
4. Continue to provide technical and financial assistance in the proper decommissioning of abandoned wells.
5. Continue co-sponsorship of the Eastern Nebraska Water Resources Assessment (ENWRA) Project with the Lower Platte South, Lower Platte North, Nemaha, Lower Elkhorn, and Lewis and Clark NRDs.
6. Take an active role in the development and implementation of the Environmental Element of the City of Omaha's Master Plan.
7. Work with sponsors of publicly owned recreational lakes and reservoirs to install water quality basins and other measures to improve and protect water quality.
8. Continue to participate in the Lower Platte River Corridor Alliance and its various programs and projects.
9. Implement and update the 319 Water Quality Management Plans for the Papio-Missouri River NRD.

### **C. Reduce soil erosion and sedimentation damages.**

The District will promote programs and projects to control erosion and sedimentation in the District through the following measures:

- Reduce soil erosion and sedimentation on agricultural lands.
- Control gully and ephemeral erosion.
- Reduce sedimentation from developed and developing areas.
- Control streambank erosion.

#### **Objectives:**

1. Provide technical and financial assistance to rural landowners for the installation of best management practices for erosion and sediment control, including terraces, waterways, and conservation tillage.
2. Assist units of government with the implementation of NPDES (National Pollutant Discharge Elimination System) permit requirements on developing urban areas.
3. Provide accelerated technical and financial assistance to units of government in the restoration of urban streams to a more natural configuration and function to control erosion and improve water quality.

4. Provide accelerated technical and financial assistance in priority watershed areas including but not limited to the following:
  - a. Blackbird Creek
  - b. Silver Creek
  - c. Omaha Creek
  - d. Pigeon/Jones
  - e. Papillion Creek
  - f. Davis-Hill Creek
5. Administer the Nebraska Erosion and Sediment Control Program.
6. Provide technical assistance to landowners to address streambank erosion.
7. Continue to cooperate with USDA agencies, such as the Natural Resources Conservation Service and Farm Services Agency, in the development and implementation of soil conservation programs and projects.

**D. Provide outdoor recreation facilities.**

The District will continue to provide outdoor recreational opportunities through the following measures:

- Construction of recreational trails throughout the District.
- Continue to construct multi-purpose projects that include recreation as an equal purpose.

**Objectives:**

1. Operate, maintain, and repair the following public recreation projects:
  - a. Chalco Hills Recreation Area
  - b. Elkhorn Crossing Recreation Area
  - c. Platte River Landing Recreation Area
  - d. Prairie View Recreation Area
  - e. Elkhorn River Access at Graske Crossing
  - f. West Maple Elkhorn River Access Area
  - g. Danish Alps Recreation Area
  - h. Summit Lake Recreation Area
2. In cooperation with other units of government, continue the implementation of the Metropolitan Area Trails Plan, updating the plan as necessary. New projects to provide additional access to the existing trails will be investigated, with a priority on increased connectivity for recreation, active transportation, and access to natural resources.
3. Establish a third canoe access point along the Elkhorn River in southwestern Douglas County or northwestern Sarpy County.

4. Monitor status of railroad abandonments in the District for acquisition and possible conversion to recreational trails.
5. Provide technical and financial assistance to units of government in the development and improvement of public recreation areas.

#### **E. Provide domestic water supply.**

The District will continue to investigate, develop, operate and maintain potable water supply systems for areas within the District upon request.

##### **Objectives:**

1. Continue to operate and maintain the following rural water projects:
  - a. Washington County Rural Water Project
  - b. Dakota County Rural Water Project, including expansion to the Danish Alps Recreation Area
  - c. Thurston County Rural Water Project
2. Evaluate requests from groups and communities to provide a dependable source of potable water and implement feasible water supply systems.
3. Cooperate with other entities to provide water service in rural areas.

#### **F. Develop and improve fish and wildlife habitat and forest resources.**

The District will continue to promote best management practices that will:

- Provide adequate habitat for wildlife, including food and shelter.
- Establish and maintain woodland areas in both rural and urban areas.
- Preserve, protect, and enhance wetlands and other natural features.

##### **Objectives:**

1. Continue the implementation of the Missouri River Corridor Project, to acquire and restore various habitat and wetlands areas. One such area is an approximately 540-acre site at the confluence of the Platte/Missouri River in Sarpy County. The District is attempting to secure partial funding to acquire this area from a private entity and is working with the City of Bellevue, Sarpy County, the Nebraska Environmental Trust and others on this habitat/economic development project.
2. Continue as a member of "Back to the River, Inc."
3. Continue as a member and sponsor of the Nebraska Land Trust.
4. Identify, develop, operate, and maintain wetland mitigation banks in the District.

5. Identify, develop, operate, and maintain urban forests for air quality purposes.
6. Evaluate areas proposed for conservation easements in the District, particularly along the Platte, Elkhorn and Missouri Rivers.
7. Provide technical and financial assistance to landowners, both rural and urban, in the establishment and management of woodland areas.
8. Provide technical and financial assistance to landowners in the establishment, improvement, and management of wildlife habitat areas.
9. Cooperate with other federal, state, and local agencies to prepare a detailed natural resources inventory of the District to identify ecologically unique areas.

#### **G. Participate in solid waste management and pollution control.**

The District will continue to assist other units of government with:

- pollution control
- the proper disposal of solid, household, and hazardous wastes

Objectives:

1. Establish a carbon sequestration bank to store and dispense credits for air quality.
2. Cooperate with other local, state and federal agencies to address and contain pollution from point sources.
3. Evaluate requests for assistance from communities desiring to participate in regional wastewater treatment operations.
4. Promote proper disposal of solid wastes, including sponsoring recycling events.
5. Promote expanded development of markets for recycled products.

#### **H. Develop programs, policies, and other resources to implement the Master Plan.**

The District will continue to develop innovative programs and policies to help the District implement this Master Plan.

Objectives:

1. Continue to pursue a vigorous public information and education program about natural resources conservation and the various NRD programs and projects.



2. Continue to evaluate personnel needs to fully implement the master plan.
3. Continue to seek outside funding sources, such as the Nebraska Environmental Trust, the Nebraska Department of Natural Resources' Water Sustainability Fund, and the Nebraska Department of Environment and Energy non-point source pollution control funds (Section 319 Program) for various programs and projects.
4. Pursue funding from private foundations.
5. Continue to utilize public-private partnerships in the development of major projects.

#### **#4 Other Engineering and Development Studies**

1. The Papio NRD is working on two major studies in cooperation and coordination with the U.S. Army Corps of Engineers. The first study is a General Investigation, re-evaluation, of the Papillion Creek Watershed and its myriad of flood control needs. This study is a 3 year, 3-million-dollar (50-50) cost share with the federal government and has been completed and sent to USACE HQ for a chief's report and subsequent recommendation for funding from Congress. The study results identified two reservoir projects, channel and levee improvements as well as federal funding for non-structural flood proofing projects for area homes and businesses. If approved by Corps HQ and Congress the study results would provide a 65% cost share from the federal government to implement and construct the approved plan.
2. The Papio NRD has been working with the U.S. Army Corps of Engineers on a Section 22 study regarding streambank degradation in the Papillion Creek Watershed. This study is ongoing and will result in a watershed wide plan to address streambank degradation which is causing widespread property damage to public and private property and infrastructure.

#### **#5 Financial**

##### **Annual Budget**

2018-2019	\$72,235,027
2019-2020	\$119,985,575 (includes bond refinancing and flood repairs of \$35M)
2020-2021	\$110,873,773 (includes bond refinancing and flood repairs of \$25M)

*\*Note without bond re-financing and recovery from the historic 2019 flood the average annual budget for 2019-2021 would be 85 million dollars both fiscal years.*

**Current Sources of Revenue**

Property taxes	59.5%
Special Assessment on Property (IPA)	0.2%
Watershed Fees (paid by development)	7.5%
Federal Grants and Cost Shares	14.0%
State Grants and Cost Shares	10.0%
Local Grants and Cost Shares	7.5%
Rental Income (office space)	0.5%
Misc. Services	0.5%
Interest Income (checking/CD's)	0.2%

**Potential Sources of Revenue**

Federal Infrastructure Earmark	\$87,000,000
Federal Water Infrastructure Investment and Financing Funds	\$60,000,000
Federal U.S.A.C.E. Programmatic Funds	\$90,000,000
Federal NRCS/USDA Funds	\$15,000,000

**Note: Please see Attachment 1- Assessment of Current Needs and Projected Needs**

## **Attachment 1**

### **ASSESSMENT OF CURRENT NEEDS**

To implement the FY 2021 programs and projects as explained on the previous pages, the District has budgeted to provide the necessary financial and personnel resources. Tables 1 through 3 have been prepared to present this information in a simple manner.

Land rights needs for FY 2021 are presented in Table 1. Each project for which land rights are budgeted, the type of right to be acquired, and the estimated cost are listed. Easements are acquired by negotiated donation, with the budgeted amount used for associated expenses including title searches, recording fees, and filing fees.

Personnel needs have been estimated for FY 2021 and the following four budget years, shown in Table 2. Time requirements are projected in work-months. Although not specifically designated as “Program/Project Areas”, two additional headings, “Information and Education” and “General Administration”, have also been included to incorporate staff time not directly assigned to a specific program or project.

Table 3 reflects all expenditures contained in the FY 2021 Budget. Expenditures for FY 2021 and the following four budget years are shown in Table 4. Revenues for FY 2021 and the following four budget years are shown in Table 5.

### **PROJECTED NEEDS**

The District has included projected personnel requirements (Table 2), projected expenditures (Table 4), and projected revenues (Table 5) for the next five fiscal years. Projected expenditures and revenues shown are with consideration for current bonding authority.

This material has been developed in an attempt to project activities of the District over the coming years. Undoubtedly, many new program ideas will be presented in this time frame through specific requests to the Board, new state or federal cost sharing programs, or other methods, which will result in new activities not presently anticipated.

As shown in Table 5, it is anticipated that general property tax will continue to be the primary source of revenues for District programs and projects. It is projected that property tax revenues will increase each year reflective of changes in property values in the District.

The information presented in these tables does not reflect budgetary obligations of the District. It is presented as a means to quantify District involvement with various programs and projects.

Table 1. Land Rights Needs, FY 2021 (x \$1,000)

Program/Project	Type	Estimated Cost
Project Maintenance - Channels & Levees	Easement	\$7.0
Project Maintenance - Dams	Easement	\$2.0
WP-6	Fee Title	\$0.0
Big Elk Lake	Fee Title	\$0.0
WP-1	Fee Title	\$4,500.0
WP-2	Fee Title	\$3,550.0
WP-4	Fee Title	\$337.0
DS-19	Fee Title	\$525.0
Missouri River Levee Certification	Fee Title	\$0.0
Floodway Purchase Program	Fee Title	\$2,013.0
Elk/Pigeon Creek Drainage Project	Fee Title/Easement	\$200.0
Western Sarpy/Clear Creek Levee Project	Fee Title/Easement	\$0.0
NRD Recreation Areas	Fee Title/Easement	\$0.0
Missouri River Projects	Fee Title/Easement	\$250.0
Washington Country Rural Water	Easement	\$0.2
Dakota Country Rural Water	Easement	\$1.5
<b>Total</b>		<b>\$11,385.7</b>

Past projects from which have no expected land rights costs are reflected in this table

Table 2. Personnel Needs (work months)

Program/Project		2011	2012	2013	2014	2015
1	Project Maintenance - Channels & Levees	43.0	43.0	44.0	46.0	48.0
2	Project Maintenance - Dams	8.0	8.0	9.0	9.0	9.0
3	Papillion Creek and Tributaries Project	18.0	20.0	20.0	18.0	19.0
4	Flanagan Lake	0.5	0.0	0.0	0.0	0.0
5	WP-6	1.0	0.5	0.0	0.0	0.0
6	Big Elk Lake	1.0	0.5	0.0	0.0	0.0
7	Zorinsky Basin #2	2.0	1.0	0.0	0.0	0.0
8	Missouri River Levee Certification	8.0	4.0	1.0	0.5	0.0
9	Omaha Levee Certification	1.0	1.0	1.0	1.0	1.0
10	Floodplain Management Program	4.0	4.0	4.0	4.0	4.0
11	Floodway Purchase Program	1.5	1.5	1.5	1.5	1.5
12	Flood Mitigation Program	0.6	0.6	0.6	0.6	0.6
13	Elk/Pigeon Creek Project	6.0	2.0	1.0	1.0	1.0
14	Pigeon-Jones Site 15 Project	1.0	1.0	1.0	1.0	1.0
15	Urban Stormwater Program	2.0	2.0	2.0	2.0	2.0
16	Stormwater BMP Program	0.1	0.1	0.1	0.1	0.1
17	Urban Drainage Program	2.0	2.0	2.0	2.0	2.0
18	Flood Preparedness/Ice Jam Removal	7.5	7.5	7.5	7.5	7.5
19	Conservation Assistance Program	28.0	30.0	30.0	30.0	30.0
20	Pigeon Creek Special Watershed	4.0	4.0	1.0	1.0	1.0
21	Nebraska Soil & Water Conservation Prog.	0.2	0.2	0.2	0.2	0.2
22	NRCS Assistance	46.0	50.0	50.0	50.0	50.0
23	Road Structure Program	0.5	0.5	0.5	0.5	0.5
24	Urban Conservation Assistance Program	1.5	1.5	1.5	1.5	1.5
25	Elkhorn River 240th Street	1.0	0.5	0.0	0.0	0.0
26	Erosion & Sediment Control Program	0.1	0.1	0.1	0.1	0.1
27	Groundwater Management Program	6.0	6.0	6.0	6.0	6.0
28	Eastern Nebraska Water Resources Assess.	1.0	1.0	1.0	1.0	1.0
29	Chemigation Certification Program	0.5	0.5	0.5	0.5	0.5
30	Well Abandonment Program	1.0	1.0	1.0	1.0	1.0

Table 2. Personnel Needs (work months)

31	Lake Dredging Program	0.1	0.1	0.1	0.1	0.1
32	Lower Platte River Corridor Alliance	0.2	0.2	0.2	0.2	0.2
33	Lower Platte River Vegetation Management	1.0	1.0	1.0	1.0	1.0
34	NRD Recreation Areas	78.0	80.0	80.0	80.0	80.0
35	Missouri River Projects	8.0	8.0	8.0	8.0	8.0
36	Rumsey Station Wetland	0.5	0.5	0.5	0.5	0.5
37	Heron Haven Wetland	1.0	1.0	1.0	1.0	1.0
38	Wetlands Mitigation Bank	1.3	1.3	1.3	1.3	1.3
39	Conservation Easement Program	0.5	0.5	0.5	0.5	0.5
40	Papio Trails System	6.0	6.0	6.0	6.0	6.0
41	Trails Assistance Program	0.5	0.5	0.5	0.5	0.5
42	Recreation Area Development Program	0.2	0.2	0.2	0.2	0.2
43	Wildlife Habitat Program	0.5	0.5	0.5	0.5	0.5
44	Tree Planting Program	6.0	6.0	6.0	6.0	6.0
45	Western Sarpy Drainage Project	4.5	4.5	4.5	4.5	4.5
46	Elk/Pigeon Creek Drainage IPA	0.7	0.7	0.7	0.7	0.7
47	Elkhorn River Breakout	0.1	0.1	0.1	0.1	0.1
48	Elkhorn River Stabilization Project	1.0	1.0	1.0	1.0	1.0
49	Washington County Rural Water	34.0	34.0	34.0	34.0	34.0
50	Dakota County Rural Water	37.0	37.0	37.0	37.0	37.0
51	Thurston County Rural Water	6.0	6.0	6.0	6.0	6.0
52	Solid Waste/Recycling Program	1.5	1.5	1.5	1.5	1.5
53	Information/Education Programs	35.0	35.0	35.0	35.0	35.0
54	General Administration	230.0	230.0	230.0	230.0	230.0

Table 3. Fiscal Year 2021 Projected Expenditures by Program or Project (x \$1,000).

	Program/Project	Personnel Costs	Operating Costs	Professional Services	Land Rights	Construction & Cost Share	Totals
1	Project Maintenance - Channels & Levees	\$504.0	\$721.0	\$562.0	\$7.0	\$3,025.0	\$4,819.0
2	Project Maintenance - Dams	\$143.5	\$100.5	\$100.0	\$2.0	\$321.0	\$667.0
3	Papillion Creek and Tributaries Project	\$32.0	\$2,668.3	\$735.0	\$8,912.0		\$12,347.3
4	Flanagan Lake			\$103.5		\$0.0	\$103.5
5	WP-6			\$105.0		\$2,300.0	\$2,405.0
6	Big Elk Lake			\$105.0		\$2,700.0	\$2,805.0
7	Zorinsky Basin #2			\$310.0		\$850.0	\$1,160.0
8	Missouri River Levee Certification			\$1,000.0		\$16,665.0	\$17,665.0
9	Omaha Levee Certification					\$323.0	\$323.0
10	Floodplain Management Program	\$25.6					\$25.6
11	Floodway Purchase Program			\$134.6		\$897.5	\$1,032.1
12	Flood Mitigation Program			\$155.0			\$155.0
13	Elk/Pigeon Creek Project	\$50.0		\$200.0	\$200.0	\$2,025.6	\$2,475.6
14	Pigeon-Jones Site 15 Project		\$7.5	\$102.5		\$200.0	\$310.0
15	Urban Stormwater Program		\$465.0				\$465.0
16	Stormwater BMP Program					\$5.0	\$5.0
17	Urban Drainage Program					\$737.8	\$737.8
18	Flood Preparedness/Ice Jam Removal			\$218.0		\$6.0	\$224.0
19	Conservation Assistance Program					\$612.0	\$612.0
20	Pigeon Creek Special Watershed			\$82.0		\$1,500.0	\$1,582.0
21	Nebraska Soil & Water Conservation Prog.	\$1.5					\$1.5
22	NRCS Assistance	\$375.0					\$375.0
23	Road Structure Program						\$0.0
24	Urban Conservation Assistance Program						\$0.0
25	Elkhorn River 240th Street			\$12.0			\$12.0
26	Erosion & Sediment Control Program	\$1.0					\$1.0
27	Groundwater Management Program					\$100.0	\$458.2
28	Eastern Nebraska Water Resources Assess.			\$358.2		\$840.0	\$1,125.0
29	Chemigation Certification Program		\$0.3	\$285.0			\$0.3
30	Well Abandonment Program					\$30.0	\$30.0

Table 3. Fiscal Year 2021 Projected Expenditures by Program or Project (x \$1,000).

Program/Project	Personnel Costs	Operating Costs	Professional Services	Land Rights	Construction & Cost Share	Totals
31 Lake Dredging Program					\$100.0	\$100.0
32 Lower Platte River Corridor Alliance		\$51.0				\$51.0
33 Lower Platte River Vegetation Management					\$30.0	\$30.0
34 NRD Recreation Areas		\$1,687.8				\$1,687.8
35 Missouri River Projects		\$10.0	\$10.0	\$250.0	\$30.0	\$300.0
36 Rumsey Station Wetland			\$12.0		\$250.0	\$262.0
37 Heron Haven Wetland					\$18.0	\$18.0
38 Wetlands Mitigation Bank		\$5.5	\$121.0		\$1,900.0	\$2,026.5
39 Conservation Easement Program					\$30.0	\$30.0
40 Papio Trails System			\$194.0		\$1,446.5	\$1,640.5
41 Trails Assistance Program					\$1,190.0	\$1,190.0
42 Recreation Area Development Program					\$359.2	\$359.2
43 Wildlife Habitat Program					\$60.0	\$60.0
44 Tree Planting Program		\$4.5			\$75.0	\$79.5
45 Western Sarpy Drainage Project	\$10.0	\$34.6	\$5.0		\$5.0	\$54.6
46 Elk/Pigeon Creek Drainage IPA	\$5.0	\$63.5			\$1.0	\$69.5
47 Elkhorn River Breakout		\$6.6				\$6.6
48 Elkhorn River Stabilization Project	\$5.0	\$11.0				\$16.0
49 Washington County Rural Water	\$228.0	\$1,609.3	\$10.0	\$0.2	\$0.2	\$1,847.5
50 Dakota County Rural Water	\$180.0	\$795.2	\$5.0	\$1.5	\$3,336.7	\$4,318.4
51 Thurston County Rural Water	\$34.0	\$268.0	\$1.8		\$5.0	\$308.7
52 Solid Waste/Recycling Program	\$12.0					\$12.0
53 Information/Education Programs		\$227.5				\$227.5
54 General Administration	\$3,632.0	\$35,293.3	\$885.2			\$39,810.5
a. Bond payment		\$4,446.3				\$4,446.3
<b>Totals</b>	<b>\$5,238.0</b>	<b>\$48,776.7</b>	<b>\$5,811.2</b>	<b>\$9,372.7</b>	<b>\$5,111.7</b>	<b>\$110,873.8</b>



Table 4: Projected Expenditures by Program or Project - Fiscal Years 2021-2025 (x \$1,000)

Assumption: The bonding limit will increase in 2022

Program/Project		2021	2022	2023	2024	2025
1	Project Maintenance - Channels & Levees	\$4,819.0	\$3,500.0	\$3,500.0	\$3,500.0	\$3,500.0
2	Project Maintenance - Dams	\$667.0	\$600.0	\$625.0	\$625.0	\$625.0
3	Papillion Creek and Tributaries Project	\$2,770.3	---	---	---	---
	WP-1	\$5,000.0	\$5,169.0	\$4,000.0	---	---
	WP-4	\$437.0	\$4,177.0	\$4,200.0	\$4,200.0	---
	DS-19	\$540.0	\$525.0	---	\$4,000.0	\$7,100.0
	WP-2	\$3,600.0	\$760.0	\$3,260.0	\$2,800.0	---
4	Flanagan Lake	\$103.5	---	---	---	---
5	WP-6	\$2,405.0	\$25.0	---	---	---
6	Big Elk Lake	\$2,805.0	\$25.0	---	---	---
7	Zorinsky Basin #2	\$1,160.0	\$25.0	---	---	---
8	Missouri River Levee Certification	\$17,665.0	\$2,000.0	---	---	---
9	Omaha Levee Certification	\$323.0	---	---	---	---
10	Floodplain Management Program	\$25.6	\$30.0	\$30.0	\$30.0	\$30.0
11	Floodway Purchase Program	\$1,032.1	\$1,739.5	\$500.0	\$500.0	\$500.0
12	Flood Mitigation Program	\$155.0	\$50.0	\$50.0	\$50.0	\$50.0
13	Elk/Pigeon Creek Project	\$2,475.6	---	---	---	---
14	Pigeon-Jones Site 15 Project	\$310.0	\$50.0	\$50.0	\$50.0	\$50.0
15	Urban Stormwater Program	\$465.0	\$105.0	\$110.0	\$110.0	\$110.0
16	Stormwater BMP Program	\$5.0	\$50.0	\$50.0	\$50.0	\$50.0
17	Urban Drainage Program	\$737.8	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0
18	Flood Preparedness/Ice Jam Removal	\$224.0	\$370.0	\$380.0	\$380.0	\$380.0
19	Conservation Assistance Program	\$612.0	\$750.0	\$750.0	\$750.0	\$750.0

Table 4: Projected Expenditures by Program or Project - Fiscal Years 2021-2025 (x \$1,000)

Assumption: The bonding limit will increase in 2022

Program/Project	2021	2022	2023	2024	2025
20 Pigeon Creek Special Watershed	\$1,582.0	\$500.0	\$350.0	\$350.0	\$350.0
21 Nebraska Soil & Water Conservation Prog.	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5
22 NRCS Assistance	\$375.0	\$390.0	\$395.0	\$395.0	\$395.0
23 Road Structure Program	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
24 Urban Conservation Assistance Program	\$0.0	\$250.0	\$250.0	\$250.0	\$250.0
25 Elkhorn River 240th Street	\$12.0	\$15.0	\$15.0	\$15.0	\$15.0
26 Erosion & Sediment Control Program	\$1.0	\$1.6	\$1.8	\$1.8	\$1.8
27 Groundwater Management Program	\$458.2	\$450.0	\$430.0	\$430.0	\$430.0
28 Eastern Nebraska Water Resources Assess.	\$1,125.0	\$60.0	\$60.0	\$60.0	\$60.0
29 Chemigation Certification Program	\$0.3	\$4.0	\$4.0	\$4.0	\$4.0
30 Well Abandonment Program	\$30.0	\$36.0	\$38.0	\$38.0	\$38.0
31 Lake Dredging Program	\$100.0	\$15.0	\$15.0	\$15.0	\$15.0
32 Lower Platte River Corridor Alliance	\$51.0	\$50.0	\$50.0	\$50.0	\$50.0
33 Lower Platte River Vegetation Management	\$30.0	\$65.0	\$65.0	\$65.0	\$65.0
34 NRD Recreation Areas	\$1,687.8	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0
35 Missouri River Projects	\$300.0	\$150.0	\$150.0	\$150.0	\$150.0
36 Rumsey Station Wetland	\$262.0	\$53.0	\$54.0	\$54.0	\$54.0
37 Heron Haven Wetland	\$18.0	\$44.0	\$46.0	\$46.0	\$46.0
38 Wetlands Mitigation Bank	\$2,026.5	\$50.0	\$50.0	\$50.0	\$50.0
39 Conservation Easement Program	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0
40 Papio Trails System	\$1,640.5	\$2,000.0	\$2,000.0	\$2,000.0	\$2,000.0
41 Trails Assistance Program	\$1,190.0	\$750.0	\$750.0	\$750.0	\$750.0
42 Recreation Area Development Program	\$359.2	\$150.0	\$150.0	\$150.0	\$150.0

Table 4: Projected Expenditures by Program or Project - Fiscal Years 2021-2025 (x \$1,000)

Assumption: The bonding limit will increase in 2022

Program/Project		2021	2022	2023	2024	2025
43	Wildlife Habitat Program	\$60.0	\$75.0	\$75.0	\$75.0	\$75.0
44	Tree Planting Program	\$79.5	\$80.0	\$80.0	\$80.0	\$80.0
45	Western Sarpy Drainage Project	\$54.6	\$130.2	\$132.2	\$132.2	\$132.2
46	Elk/Pigeon Creek Drainage IPA	\$69.5	\$50.0	\$50.0	\$50.0	\$50.0
47	Elkhorn River Breakout	\$6.6	\$6.9	\$7.0	\$7.0	\$7.0
48	Elkhorn River Stabilization Project	\$16.0	\$243.0	\$258.0	\$258.0	\$258.0
49	Washington County Rural Water	\$1,847.5	\$1,875.2	\$1,903.3	\$1,931.9	\$1,960.9
50	Dakota County Rural Water	\$4,318.4	\$995.6	\$1,010.5	\$1,025.7	\$1,041.1
51	Thurston County Rural Water	\$308.7	\$313.4	\$318.1	\$322.8	\$327.7
52	Solid Waste/Recycling Program	\$12.0	\$12.0	\$12.0	\$12.0	\$12.0
53	Information/Education Programs	\$227.5	\$265.0	\$270.0	\$270.0	\$270.0
54	General Administration	\$39,810.3	\$12,500.0	\$12,687.5	\$12,877.8	\$13,071.0
	a. Bond payment	\$4,446.3	\$4,513.0	\$4,580.7	\$5,649.4	\$5,734.1
Totals		\$10,875.8	\$48,774.8	\$46,494.6	\$47,302.1	\$49,769.2

Table 5 - Projected Revenues Fiscal Years 2021-2025

1. Total valuation in NRD will rise 1.5% each year, with a similar increase in property tax.
2. The bonding limit will increase in 2022

Project	2021	2022	2023	2024	2025
City of Bellevue	\$ 31,129.1	\$ 2,856.2	\$ 2,142.5	\$ 2,315.8	\$ 5,341.5
General Property Tax	\$ 27,293.1	\$ 27,702.5	\$ 28,118.1	\$ 28,539.8	\$ 28,967.9
Direct State Appropriation	\$ 4,905.0	-----	-----	-----	-----
City of Bellevue	-----	-----	-----	-----	-----
City of Omaha	\$ 200.0	-----	-----	-----	-----
Sarpy County	-----	-----	-----	-----	-----
Reimbursement	\$ 310.4	\$ 34.4	\$ 34.4	\$ 34.4	\$ 34.4
GO Bonds 2022	-----	\$ 5,000.0	\$ 5,000.0	\$ 5,000.0	-----
Water Sust. Fund (WP-6, WP-7, WP-1)	\$ 2,370.0	\$ 1,740.0	\$ 1,200.0	\$ 1,200.0	-----
Fees	\$ 3,000.0	\$ 4,500.0	\$ 4,500.0	\$ 4,500.0	\$ 4,500.0
Miscellaneous	-----	\$ 850.0	\$ 680.0	\$ 680.0	-----
NRCS	\$ 1,554.5	-----	-----	-----	-----

Table 5 - Projected Revenues Fiscal Years 2021-2025

1. Total valuation in NRD will rise 1.5% each year, with a similar increase in property tax.

2. The bonding limit will increase in 2022

Project	2021	2022	2023	2024	2025
<b>Capital Construction</b>					
Omaha, Big Papio Culverts	\$ 236.0	-----	-----	-----	-----
Little Papio Culverts	\$ 100.0	-----	-----	-----	-----
Offutt Ditch Cost Share	\$ 20.0	-----	-----	-----	-----
<b>Public Safety Programs</b>					
FEMA	\$ 150.0	-----	-----	-----	-----
<b>Transportation Programs</b>					
Wash Co HMGP	\$ 437.8	-----	-----	-----	-----
Do Co HMGP	\$ 1,159.7	\$ 1,159.7	-----	-----	-----
Sarpy Co HMGP	\$ 516.5	\$ 183.1	-----	-----	-----
Arlington	\$ 42.8	-----	-----	-----	-----
Bellevue	\$ 82.6	\$ 21.0	-----	-----	-----
<b>Water Quality Programs</b>					
Federal Grants	\$ 17.4	-----	-----	-----	-----
WSF Grant for Geoscene 3D	\$ 18.0	-----	-----	-----	-----
NRWQF	\$ 40.0	\$ 36.0	\$ 36.0	\$ 36.0	\$ 36.0
<b>Pigeon Creek Special Watershed</b>					
NDEQ 319	\$ 100.0	-----	-----	-----	-----
<b>Lower Platte Ward Mgt</b>					
LPSNRD	\$ 30.0	\$ 30.0	\$ 30.0	\$ 30.0	\$ 30.0
LPNNRD	\$ 30.0	\$ 30.0	\$ 30.0	\$ 30.0	\$ 30.0

Table 5 - Projected Revenues Fiscal Years 2021-2025

1. Total valuation in NRD will rise 1.5% each year, with a similar increase in property tax.
2. The bonding limit will increase in 2022

Project	2021	2022	2023	2024	2025
Douglas County	\$ 20.0	\$ 20.0	\$ 20.0	\$ 20.0	\$ 20.0
City of Omaha	\$ 9.0	\$ 8.0	\$ 8.0	\$ 8.0	\$ 8.0
Sarpy County	\$ 4.0	\$ 4.0	\$ 4.0	\$ 4.0	\$ 4.0
Washington County	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0
City of Omaha, 'Millard Connection'	-----	-----	-----	\$ 200.0	-----
Nebraska Environmental Trust	\$ 125.0	-----	-----	-----	-----
Western Sarpy Drainage	\$ 55.1	\$ 55.9	\$ 56.8	\$ 57.6	\$ 58.5
Elk/Pigeon Creek Drainage	\$ 69.5	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0
Elkhorn River Breakout	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6	\$ 6.6
Elkhorn River Stabilization	\$ 21.0	\$ 243.0	\$ 258.0	\$ 258.0	\$ 258.0
Washington County RW	\$ 1,847.5	\$ 1,875.2	\$ 1,903.3	\$ 1,931.9	\$ 1,960.9
Dakota County RW	\$ 4,319.4	\$ 995.6	\$ 1,010.5	\$ 1,025.7	\$ 1,041.1
Thurston County RW	\$ 308.7	\$ 313.4	\$ 318.1	\$ 322.8	\$ 327.7
District Projects	\$ 3,272.9	\$ 850.0	\$ 875.0	\$ 875.0	\$ 875.0
Rental Income	\$ 205.1	\$ 208.2	\$ 211.3	\$ 214.4	\$ 217.7
Bond Refinancing	\$ 26,865.0				
<b>Total Revenues</b>	\$ 110,873.8	\$ 48,774.8	\$ 46,494.6	\$ 47,342.1	\$ 43,769.2
<b>Total Expenses (From Table 4)</b>	\$ 110,873.8	\$ 48,774.8	\$ 46,494.6	\$ 47,342.1	\$ 43,769.2

## **#6 Agreements with Other Government Agencies, Public or Private Groups**

**Note: Please see Attachment 2- REPORT OF JOINT PUBLIC AGENCY AND INTERLOCAL AGREEMENTS** *(The District is proud to have cooperative agreements with close to 100 agencies and groups)*

### Cooperating Agencies:

The District cooperates regularly with a variety of state, federal, and local agencies to accomplish its mission. The following agencies are important partners of the District.

#### Federal

- a. NRCS Services
- b. USDA Farm Services Agency
- c. US Army Corps of Engineers
- d. US Environmental Protection Agency
- e. US Fish and Wildlife Service
- f. National Park Service
- g. US Geological Survey
- h. Federal Emergency Management Agency
- i. Federal Highway Commission

#### State

- a. Nebraska Department of Natural Resources
- b. Nebraska Department of Environment and Energy
- c. Nebraska Game and Parks Commission
- d. Nebraska Department of Health and Human Services
- e. Nebraska Department of Transportation
- f. Nebraska Emergency Management Agency
- g. Board of Educational Lands and Funds
- h. Nebraska Department of Economic Development
- i. University of Nebraska – Lincoln Cooperative Extension

#### Local

- a. City and Village Governing Bodies
- b. County Governing Bodies
- c. Metropolitan Area Planning Agency
- d. Metropolitan Utilities District
- e. Omaha Public Power District
- f. Sanitary and Improvement Districts
- g. Sarpy County and Sarpy Cities Wastewater Agency

#### Cooperating Organizations

- a. Nebraska Association of Resources Districts
- b. Nebraska Water Resources Association
- c. Greater Omaha Chamber of Commerce

- d. Nebraska League of Municipalities
- e. Nebraska County Officials Association
- f. Nebraska Rural Water Association
- g. Association of State Floodplain Managers
- h. Nebraska Stormwater and Floodplain Managers Association
- i. Nebraska Groundwater Federation
- j. National Association of Conservation Districts
- k. Nebraska Society of Professional Engineers
- l. Omaha Safety Council
- m. Back to the River, Inc.
- n. Nebraska Land Trust
- o. Friends of Heron Haven, Inc.



**REPORT OF JOINT PUBLIC AGENCY AND INTERLOCAL AGREEMENTS**  
**REPORTING PERIOD JULY 1, 2020 THROUGH JUNE 30, 2021**

Papio-Missouri River NRD

Douglas, Sarpy, Washington, Dodge, Burt, Thurston, Dakota

SUBDIVISION NAME		COUNTY	
Parties to Agreement (Column 1)	Agreement Period (Column 2)	Description (Column 3)	Amount Used as Lid Exemption (Column 4)
City of Fort Calhoun	May 1978 - perpetual (as amended)	Serve Fort Calhoun with MUD Water	
Sarpy County	1986 - perpetual	Papio Dam Site 20 Chalco Hills Recreation Area Roads/Operation and Maintenance	
City of Omaha	1989 - perpetual	Big Papio (L-Center) Channel and Trail Improvements	
NE Dept of Natural Resources, NE Resource Development Fund	1989 - perpetual	Big Papio Channel Improvements	
City of Omaha	1990 - perpetual	Big Papio (Center - Blondo) Channel and Trail Improvements	
City of Omaha	1990 - perpetual	Papio Trails Operation and Maintenance	
NE Dept of Natural Resources, NE Resource Development Fund	1990 - perpetual	Papio Dam Site 21 (Walnut Creek) Project	
City of Papillion	1990-perpetual	Papio Dam Site 21 (Walnut Creek) and West Papio Channel	
NE Dept of Natural Resources, NE Resource Development Fund	1990 - perpetual	Elkhorn River Bank Stabilization (Hwy 36-King Lake)	
Omaha Tribe of Nebraska	August 1992 - perpetual	Blackbird Scenic Overview Operation & Maintenance	
LPNNRD, LPSNRD, Cass, Douglas, Sarpy & Saunders Counties	1993 (amended 1996, 2010) - perpetual	Platte River Ice Jam Removal	
NOA-NWSS; Omaha; Douglas, Sarpy, Washington Counties	1993 - perpetual	Papillion Creek Basin Flood Warning System	
Douglas County	1995 - perpetual	Little Papio Channel Improvements	
LPSNRD, NDEQ, NDNR, NDHHS, NG&PC, NE Military Dept., U of NE Conservation and Survey Division	1996 - perpetual	Lower Platte River Corridor Alliance	
Offutt AFB, USA and City of Bellevue	June 1996 - June 2021	Offutt AFB and City of Bellevue Drainageway Cost Share Agreement	
City of Papillion	1997 - perpetual	Operation and Maintenance of Trails	
Western Sarpy Drainage District Merger	1997 - perpetual	Western Sarpy Levee/Drainage Project	
Dakota Co. Drainage District #5	1998 - perpetual	Operation, maintenance, and repair of the Elk/Pigeon Creek Improvement Area	
SID #425 of Douglas County	April 1998 - perpetual	Papio Dam Site 6 (Bennington Lakes) Project	

City of Omaha, SID #236 of Douglas County	August 1999 - perpetual	Papio Dam Site 17 (Candlewood Lake) Project	
City of Bellevue	2000 - perpetual	Operation and Maintenance of Trails	
City of Dakota City	August 2002 - perpetual	Agreement to buy water for Dakota County Rural Water system	
NE Dept of Natural Resources, NE Resource Development Fund	2003 - perpetual	Western Sarpy/Clear Creek Levee Project	
City of Blair and Washington County	January 2004 (amended 2005, 2006, 2016) - perpetual	Washington County Rural Water Project #2	
Village of Pender	April 2004 - perpetual	Agreement to purchase water for Thurston County Rural Water system	
City of Omaha, City of Elkhorn	April 2006 - perpetual	Papio Dam Site 13 (Youngman Lake) Project	
Lewis & Clark NRD, Lower Elkhorn NRD, LPSNRD, LPNNRD, Nemaha NRD	January 2007 - June 2022	Eastern Nebraska Water Resources Assessment - Amended April 2020	
City of Omaha	2010 - perpetual	Operation and Maintenance of Missouri River Trails	
NE Dept of Natural Resources, NE Resource Development Fund	2010 - perpetual	Pigeon Jones Site 15	
US Geologic Survey	June 2010 - June 2022	Water Quality Monitoring and Sampling	
City of Omaha	December 2010 - perpetual	Zorinsky Basin #1	
Sarpy County	February 2011 - perpetual	Elkhorn River 240th St Bank Stabilization Project	
Nebraska Department of Roads	August 2011 - completion	Western Douglas County Trail Phase 1 (Valley to YMCA)	
Nebraska Department of Roads	August 2011 - completion	Western Douglas County Trail Phase 2 (Valley to Waterloo)	
City of Omaha	February 2012 - completion	City of Omaha Levee Rehabilitation	
City of Papillion, Sarpy County, SID 290	March 2012 (amend 2014) - perpetual	West Papillion Regional Basin #5	
NRCS, City of Omaha, and Cambridge Oaks Homeowners Assoc	April 2012 - perpetual	Emergency Watershed Protection Program Assistance Cambridge Oaks Repair Project and Mockingbird Creek	
State of Nebraska Game & Parks Commission	September 15, 2014 - September 15, 2039	Pigeon/Jones Site 15 Motorboat Access Development Program	
City of Valley	August 2012 - perpetual	Western Douglas County Trail Project	

City of Omaha	November 2012 (amended 2015 & 2018) - perpetual	Papio Dam Site 15A	
Metropolitan Utilities District	May 2013 (amended March 2015) - perpetual	Agreement to purchase water for Washington County Rural Water system	
City of Omaha	Sept 2002 - completion	Cole Creek Flood Mitigation Program	
City of Omaha	June 2013 - completion	Rockbrook Mitigation Bank Credits	
Sarpy County	October 2013 - October 2033	Purchase & Operate Watercraft for Public/Emergency Response	
Nebraska Game & Parks	December 2017 - 2022	Youth Mentored Hunting at Vencil's Island	
NDEQ	February 2014 - August 2024	Groundwater Quality Well Monitor Pumping Equipment & Well Monitoring	
Douglas County	June 2014 - perpetual	Papio Watershed Dam Site 15A Project - County Roads	
City of La Vista	July 2014 - perpetual	Operation, Maintenance and Repair - Thompson Creek Levee Improvement Project	
Lower Platte North and Lower Platte South NRDS	July 2014 - perpetual	Weed management and control of phragmites in the Lower Platte River - Amended July 2016	
SID 564 (Grove Ridge)	July 2014 - perpetual	Utilize Papio PL566 Site 15B for Stormwater Basin	
Village of Rosalie and Thurston County Rural Water	December 2014 - 2021	Water Sales Agreement with Village of Rosalie and TCRW System	
Nebraska Game and Parks	May 2020 - May 2025	Danish Alps/Kramper Lake Project Operation and Maintenance (Negotiated in 5 year increments)	
Sarpy County	May 2015 - perpetual	Chalco Hills Recreation Area/Giles Road Project	
Lower Platte North NRD	May 2016 - completion	Platte and Elkhorn River Valley Integrated Water Monitoring	
Nebraska Game and Parks Commission	July 2018-June 2022	Summit Lake Operation & Maintenance (negotiated in four year increments)	
LPNNRD, LPSNRD, City of Lincoln, MUD, NDNR	August 2016 - 2020	Lower Platte River Consortium (amended October 2019)	
Lakeland Estates Water Co. Water Supply Agreement	Sept. 2016 - Sept. 2036	Agreement for WCRW to supply Lakeland Estates Water Co. with water	

USGS	October 2020 - September 2021	Maintenance of Floodwarning System	
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City of Blair	June 2017 - perpetual	Agreement for Public Access to California Bend for recreation	
Township 1 Washington Co. Water Main Relocation Agreement	June 2017 - completion	Agreement for township to pay for costs incurred to relocate water main on County Rd. 40	
Waterloo Fire Dept.	June 2017 - June 2019	Annual payment to offset costs for Elkhorn River water rescues	
City of Bellevue, City of Plattsmouth, LPSNRD, Cass County, Sarpy County	September 2017 - perpetual	US Highway 34 Bike and Walking Trail	
City of Omaha	September 2017 - 2022	USACE Section 22 Streambed Degradation Study	
US Army Corps of Engineers	September 2017 - 2022	USACE Section 22 Streambed Degradation Study	
City of Omaha, City of La Vista	September 2017 - perpetual	West Papio Trail (Giles to Millard) Construction & Maintenance	
City of Omaha	October 2017 - September 2021	Big Papio Levee Culverts Phase 2 Rehab	
University of Nebraska-Omaha	October 2017 - completion	Glacier Creek Project	
NDNR, LPSNRD, LPNNRD, Lower Loup NRD, Lower Elkhorn NRD, Upper Elkhorn NRD, Upper Loup NRD	November 2017-2022	Lower Platte River Basin Water Management Plan Coalition Agreement #2	
City of Gretna	December 2017 - completion	Sanitary Sewer Main Extension - WP-2	
US Geologic Survey	March 2018 - 2022	Water Quality Monitoring and Sampling	
City of Springfield	March 2018 - completion	Wellhead Protection Area Plan	
USGS	July 2018-June 2020	Western Sarpy County GeoScene 3D-Aquifer Characterization Project	
City of Tekamah	July 2018 - completion	Wellhead Protection Area Plan (amended May 2021)	
US Army Corps of Engineers	Aug 2018 - June 2021	Papillion Creek Feasibility Study	
Sarpy County	Sept 2018 - completion	168th St/Bridge #147 Project	
City of Papillion & Sarpy County	October 2018 - perpetual	Papio Watershed Regional Flood Control Detention Basins WP-6 & WP-7 (amended February 2020)	
City of Omaha	Dec 2018 - completion	Thomas Creek Improvements Phase 1	
City of Omaha	February 2019-perpetual	Modification to Missouri River Levee System & Relocation of Utilities of the Papillion Wastewater Treatment Plant (amended October 2020)	

Cities of Bellevue, Gretna, Papillion, Springfield and Sarpy County	July 2019 - June 2024	Southern Sarpy Watershed Partnership - Continuation	
Omaha, Ralston, Bellevue, Gretna, Papillion, La Vista, Boys Town, Sarpy County	July 2019 - June 2024	Papillion Creek Watershed Partnership - Continuation	
Lower Platte River Consortium Alliance & USGS	2020- 2022	Water Quality Monitoring of the Platte & Elkhorn	
City of Omaha	2020-2021	North Omaha Trail Agreement	
City of Omaha, Omaha Municipal Land Bank	2020-completion	Beltline Trail Agreement (as amended)	
City of Bellevue	2020 - completion	Sarpy County Floodplain Buyout Program	
Village of Arlington	2020 - completion	Arlington Floodplain Buyout Program	
LPSNRD, NG&PC	1996 - 2026	Trail Over Platte River Bridge (amended October 2019, June 2020)	
USGS	October 2020 - September 2021	Platte - Elkhorn Valley Groundwater Monitoring Joint Funding Agreement	
Douglas County	2020 - perpetual	Operation & Maintenance of Grade Stabilization Structure Papio D-20	
Douglas County Sheriff	2020-2021	Patrol & Rescue Watercraft	
City of Omaha Fire Dept	2020-2021	Flood Rescue Watercraft	
City of Omaha	2020 - perpetual	Zorinsky Water Quality Basin #2	
City of Omaha	2020 - completion	West Papio Trail Drainage Improvements	
City of Fremont, Dodge County, LPNNRD	2020 - perpetual	Platte River Cameras and Sensors	
NG&PC	2020 - completion	Summit Lake State Recreation Area Maintenance Shop	
LPNNRD	2020 - completion	3D AEM Hydrogeologic Framework & Assessment Project	
Sarpy County Sheriff	2021 - completion	Airboat Cost Share	
City of Omaha	2021 - completion	Little Papio Creek Channel Culverts Project	

## **#7 Additional helpful information**

### **What the Papio Missouri River NRD Does Do**

In the last 15 years the Papio NRD has performed impeccably in the face of historic challenges thrust upon it by mother nature and the world: In 2012 the district and its levee and reservoir system performed flawlessly in responding to a five-hundred-year flood on the Missouri River for over 4 months. In 2019 the District systems and projects mostly survived the historic flood of 2019, however, those along the Platte and Missouri Rivers were especially hard hit and this damaged infrastructure has been repaired. In 2020 the District managed the COVID 19 pandemic and continued to provide uninterrupted service to the public throughout this unprecedented public health emergency.

The Papio NRD is the only NRD in the state that encompasses a city of the metropolitan class and encompasses the fastest growing county in the entire State of Nebraska, which is Sarpy County. The Papio NRD is home to one of the most important national security assets in the World (STRATCOM/Offutt AFB) and home to the largest Air Force Wing in the world (55<sup>th</sup> wing).

Portions of three major river basins are contained within the Papio NRD: The Missouri, the Platte, and the Elkhorn. The district is bounded by the Missouri River on the east and north, by the Platte on the south and west, and by tributaries to both on the west.

Over 412% of the state's population resides in the Papio NRD's District Boundaries and over 1/3<sup>rd</sup> of the state's population resides in one watershed (Papillion Creek Watershed).

Papio NRD projects are 100% designed by local American firms, use 100% American made products and materials, use American contractors and labor. Are 100% impervious to cyber attack.

The Papio NRD operates and maintains 100 dams and 90 miles of levees that provide flood mitigation and public safety for tens of thousands of people and billions of dollars in public, private and national security infrastructure.

Papio NRD has constructed or assisted in the construction of over 130 miles of trails. 15 miles of additional trail are in planning and design.

Papio NRD operates and maintains 4 public recreation river access sites along the Platte and Elkhorn Rivers with over 40,000 visitors per season.

The Papio NRD over the last 20 years has funded the installation of over 1,230 miles of terraces and invested nearly \$27 million on conservation programs.

The Papio NRD plants 15-20,000 trees per year and the NRD system as a whole have planted well over 93,000,000 trees and shrubs over the last 50 years.



Over the last 30 years the Papio NRD has assisted landowners in planting over 202,000 trees and shrubs to improve wildlife habitat and land conservation.

The Papio NRD operates 3 rural water systems in Washington, Dakota and Thurston Counties that serve 1,900 households and businesses.

Papio NRD has partnered with Federal Emergency Management Agency and local jurisdictions to voluntarily purchase 130 structures located in the floodway/floodplain that were or would have been repeatedly damaged by flooding. NRD cost share was \$1,271,778, Federal cost share was \$14,151,224 and the total calculated benefits is \$99,058,565 or a 7:1 cost benefit ratio.

Papio NRD education outreach program is unparalleled as we provide a variety of classroom and outdoor education programs and camps that have educated over 200,000 kids in the importance of soil, water, flora, and fauna in just the last 10 years.

Papio NRD and NRD's throughout the state levy less than 2% of a property owners tax assessment. In addition, the NRD average yearly property tax increase is less than 3%. NRD's receive no state aid and did not receive one cent in Pandemic relief funds.

The Papio NRD financial audits are impeccable and consistently demonstrate that best practices are utilized, and a transparent and accountable management of public resources is utilized. Of the hundreds of public entities our auditing firm reviews, the NRD consistently ranks in the top 10 percent of compliance with industry and government wide accepted accounting practices.

The Papio NRD consistently meets and exceeds all pertinent and applicable state and federal rules, regulations, statutes and laws.

The Papio NRD has close to 100 active interlocal agreements with other units of government throughout our six-county district to maximize scarce tax dollars to build public projects for the benefit of its citizens.

The Papio NRD spends \$4 to \$5 in projects, programs, payroll, facilities, etc. for every \$1.00 of property tax collected from the 4 more rural counties of our district.

The Papio NRD manages two Wellhead Protection Areas in Tekamah and Springfield.

The Papio NRD spearheaded the rehabilitation effort of the Missouri Levee system that protects Offutt Air Force base from Platte and Missouri River flooding. The NRD, in partnership with the City of Omaha, City of Bellevue, Sarpy County and the State of Nebraska, designed, permitted and constructed a \$35 million dollar levee upgrade project which ensured the Dept of Defense and the Air Force invested in a \$180 million dollar runway replacement project at Offutt, ensured the 55<sup>th</sup> Wing (metro area's largest employer and responsible for 1.3 to 2.0 billion in annual economic impact to the State of Nebraska) remained at Offutt AFB for the foreseeable future, ensured the DOD and Air Force invested 750 million to 1 billion dollars in flood damage repair to the base post 2019 flood, and positioned Offutt AFB to be



assigned future new missions and to ensure Offutt AFB is the most sustainable and resilient military installation anywhere in the world.

### **What the Papio Missouri River NRD Does not Do**

The NRD does not pump water into flood control reservoirs. In one instance that was constructed over 20 years ago, the NRD partnered with an SID to construct a flood control reservoir near Bennington. The NRD did not contribute any public funds to cost of the pumping of the nearby creek to increase the lake size. Horgan Development constructed a weir for intake in the Big Papillion Creek and a pump house to fill the lake at its own cost. The surface water right is issued to Horgan Development Company permits A-17667, A-17665, A-1766 and A-17668 to pump and store water in Newport Landing. Once again, the NRD did not construct, nor does it operate or maintain the pump facility. In fact, as part of the project the SID donated 220 acres to the NRD, which in turn the NRD donated 39 acres to the Bennington School District to build a new school, 40 acres to the City of Bennington to expand a park and used 42 acres to construct a wetland and recreation facility for public use. (Please see attached Bennington Lake Fact Sheet

The NRD does not sell or develop residential or commercial lots for profit. The NRD only buys land that is needed for a project. In some cases, the NRD has purchased additional land from a landowner/producer per the request of the landowner as they did not want to be left with a remnant of property that they could not productively use, farm or they wanted to cash out and utilize a 1031 exchange. In some instances, the Papio NRD has sold this surplus property as it was never needed for the project, was purchased at the request of the landowner and the NRD believes it is wise to recoup the public's investment in this surplus property that will never be utilized by the public. In other instances, the NRD has utilized this surplus property as a part of the project and expanded the green space of the project area. In another example, from 20 years ago, the NRD did take possession of several residential lots per a public/private partnership agreement that a private party could not perform the requirements of the agreement. The NRD sold those lots in an effort to recoup the public investment in the project. (Please see attached Dial Fact Sheet)

The NRD does not build reservoir projects for developers. Yes, development occurs around NRD reservoir sites exactly like development occurs when a road is paved, when water and sewer mains are installed or when a golf course or park is constructed; development occurs in these areas as well. Development is a by-product of our projects.

### **General Operation Information**

The Papio NRD has built 8 reservoir projects in the last 15 years and has not had to utilize eminent domain once. These reservoir projects have 100 percent public access and are utilized heavily by the public.

Our reservoirs are multi-purpose. their primary purpose is flood control; however, they have ancillary purposes like recreation, soil and erosion control, ground water recharge etc.

The Papio NRD deploys a holistic approach to flood mitigation. Technically most experts believe that flood control reservoirs in conjunction with good conservation practices on farmland, channel improvements in creeks and streams and sound floodplain zoning and management by cities and counties is the best approach to reducing the threat of flooding.

Basically, what this means is that over the last fifty years every one in three years these reservoirs provided flood mitigation and prevented millions of dollars in damages from occurring. In addition, this infrastructure was in place.

to mitigate the worst-case scenario (100 year or 500 year) rain event and ensure the worst-case flood damages from these events would not occur.

USACE Constructed Reservoirs (Cunningham, Wehrspann, Standing Bear, Zorinsky) and levees:

#### Flood Damages Prevented (FDP)

Total Unadjusted (values in the year they were recorded): \$98.1 million.

Total Adjusted (values indexed from year recorded to FY20 price levels): \$156.0 million.

Total Years: 46 of projects in existence

# Years FDP recorded: 16 Note: 1 out of every 3 years flood damages were prevented. (This is statistically significant and unusual)

Average Annual FDP (Unadjusted): \$2.13 million

Average Annual FDP (Adjusted): \$ 3.39 million

It is estimated that NRD reservoir projects provide a 25-million-dollar annual economic impact to the Omaha Metro Area.

June 24, 2021

Natural Resources Committee  
Attn: Senator Bruce Bostelman, Chairman  
Room 117  
P.O. Box 94604  
Lincoln, NE 68509

RE: Papio-Missouri River Natural Resources District

Dear Chairman Bostelman and Committee Members,

I am providing this correspondence at the request of Mr. John Winkler, the general manager of the Papio Missouri Natural Resources District (the District) to summarize my experience with the District over my years of service as the external independent auditor for the District.

My previous firm was engaged by the Board of Directors over ten years ago to serve in this capacity. This firm has since merged into BerganKDV, LLC and continues to serve the District. As I reflect on my tenure in providing professional services, there are a few distinct characteristics that come to mind that I have summarized below.

- The District Board and leadership has a commitment to manage and operate the District with professionalism and integrity. During the course of our audit engagements, I do not recall there being a time when we found the District was not in substantial compliance with any applicable laws or regulations. If encountered such I am confident they would quickly correct and rectify the matter.
- The District's financial reporting and management is noteworthy. We have identified very few accounting or financial reporting adjustments in our audits over the years. The accounting and finance team is knowledgeable, conscientious, and committed to high quality work. The Board and General Manager support this team and are accessible and engaged in the financial management of the District.
- The District has developed a strong internal control structure and is aware of proper controls and oversight needed for public funds. Accordingly, our audit reports on internal controls have never reported a significant deficiency or material weakness on internal control, which is not common for local governments of this size.
- The District's leadership, management and personnel are respectful and willing to listen and contemplate our observations and recommendations over the years. We are able to discuss matters in an open and productive manner with all levels of the organization.



Natural Resources Committee  
Attn: Senator Bruce Bostelman, Chairman  
June 24, 2021  
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It has been a pleasure serving the District as its Independent Auditor and I have high regards for the District and how they manage and operate such an important part of our community. I believe the community is served well by the District and have make positive Impacts by fulfilling the purpose and goals set forth by the legislature.

I am glad to visit with you at any time if you would like more information on our perspective and service to the District.

Sincerely,

A handwritten signature in black ink, appearing to read "Gene G. Garrelts". The signature is fluid and cursive, with the first name "Gene" and last name "Garrelts" clearly distinguishable.

Gene G. Garrelts, CPA, CFP