NEBRASKA NATURAL RESOURCES COMMISSION

Water Sustainability Fund

Application for Funding

Section A.

ADMINISTRATIVE

PROJECT NAME: **Waterbanking/Irrigation Retirement Program**

PRIMARY CONTACT INFORMATION

Entity Name: **Central Platte Natural Resources District**

Contact Name: **Lyndon Vogt, General Manager**

Address: **215 Kaufman Avenue, Grand Island, NE 68803**

Phone: **308-385-6282**

Email: ***vogt@cpnrd.org***

Partners / Co-sponsors, if any: ***N/A***

1. Dollar amounts requested: (**Grant**, Loan, or Combination)

   Grant amount requested. $ **$600,000**

   Loan amount requested. $ **0**

   If Loan, how many years repayment period? ***N/A***

   If Loan, supply a complete year-by-year repayment schedule.
   N/A

2. Permits Needed - Attach copy for each obtained (N/A = not applicable)

Nebraska Game & Parks Commission (G&P) consultation on Threatened and Endangered Species and their Habitat	**N/A**☒	Obtained: YES☐	NO☐
Surface Water Right	**N/A**☒	Obtained: YES☐	NO☐

USACE (e.g., 404 Permit)	**N/A☒**	Obtained: YES☐	NO☐
Cultural Resources Evaluation	**N/A☒**	Obtained: YES☐	NO☐
Other (provide explanation below) Click here to enter text.	**N/A☒**	Obtained: YES☐	NO☐

3. Are you applying for funding for a combined sewer over-flow project?

   YES☐ **NO☒**

   If yes, do you have a Long Term Control Plan that is currently approved by the Nebraska Department of Environmental Quality?

   YES☐ **NO☒**

   If yes attach a copy to your application. ***N/A***

   If yes what is the population served by your project? ***N/A***

   If yes provide a demonstration of need. ***N/A***

   If yes and you were approved for funding in the most recent funding cycle, then resubmit the above information updated annually but you need not complete the remainder of the application.

4. If you are or are representing an NRD, do you have an Integrated Management Plan in place, or have you initiated one?

   N/A☐ **YES☒** NO☐

5. Has this application previously been submitted for funding assistance from the Water Sustainability Fund and not been funded?

   YES☒ NO☐

   If yes, have any changes been made to the application in comparison to the previously submitted application? **Yes**

   If yes, describe the changes that have been made since the last application.

   The application has undergone a re-write. Some sections were expanded to add clarity and adequately address the information requested for each section. Economic information has been added to the application to provide numbers pertaining to the overall costs and benefits from the retirement of irrigated acres.

No, I certify the application is a true and exact copy of the previously submitted and scored application. (Signature required) ***N/A***

6. Complete the following if your project has or will commence prior to next July 1st.

As of the date of submittal of this application, what is the Total Net Local Share of Expenses incurred for which you are asking cost share assistance from this fund?

$ ***N/A***

Attach all substantiating documentation such as invoices, cancelled checks etc. along with an itemized statement for these expenses.

N/A

Estimate the Total Net Local Share of Expenses and a description of each you will incur between the date of submittal of this application and next July 1st for which you are asking cost share assistance from this fund.

The CPNRD is required as part of the North Platte River Settlement of the North Platte Decree to reduce Platte River depletions to streamflow. One of the most effective methods to reduce groundwater depletions to streamflow is to retire groundwater irrigated lands to dryland row crops or pasture. Two landowners with a total of 288 groundwater irrigated acres, in CPNRD's overappropriated area, are willing to sell the ability to irrigate to CPNRD. The groundwater irrigation retirements would result in an estimated 6,000 ac/ft of accretion back to the Platte River over the 50-years. The estimated Total Net Local Share of Expenses would be $450,600.

Section B.

DNR DIRECTOR'S FINDINGS

Does your project include physical construction (defined as moving dirt, directing water, physically constructing something, or installing equipment)?

YES☐ **NO**☒

1(a). If yes (structural), submit a feasibility report (to comply with Title 261, CH 2) including engineering and technical data and the following information:

A discussion of the plan of development (004.01 A);
Click here to enter text.

A description of all field investigations made to substantiate the feasibility report (004.01 B); Click here to enter text.

Maps, drawings, charts, tables, etc., used as a basis for the feasibility report (004.01 C); Click here to enter text.

A description of any necessary water and land rights and pertinent water supply and water quality information, if appropriate (004.01 D);
Click here to enter text.

A discussion of each component of the final plan including, when applicable (004.01 E);

Required geologic investigation (004.01 E 1); Click here to enter text.

Required hydrologic data (004.01 E 2); Click here to enter text.

Design criteria for final design including, but not limited to, soil mechanics, hydraulic, hydrologic, structural, embankments and foundation criteria (004.01 E 3). Click here to enter text.

1(b). If no (non-structural), submit data necessary to establish technical feasibility including, but not limited to the following (004.02):

A discussion of the plan of development (004.02 A);

The Interstate Agreement for the Platte River Decree and the Nebraska New Depletions Plan requires the CPNRD to mitigate for certain Platte River depletions that result from groundwater irrigation development. The COHYST modeling efforts, along with other streamflow depletion analysis, show that retirement of groundwater acres is one of the most effective methods to reduce future groundwater declines and depletions to

streamflows for the Platte River and its tributaries. Retirement of these acres expand the current successful measures that CPNRD has had previously in finding willing sellers of irrigated lands (Attachment 1). The CPNRD would acquire perpetual conservation easements on the retired acres that would forbid any future irrigation on the acres and in cases of sub-irrigated ground, deep rooted vegetation restrictions would be implemented as well. All high capacity wells would have to be decommissioned or converted to stock wells or the equivalent. (See Attachment 2. Sample Conservation Easement). This current effort will not only have benefits to Platte River streamflow depletions in the Overappropriated Area, but the lands are also located in an area with substantial groundwater declines. Purchase of the conservation easements will allow the agricultural land to remain in either dryland or grazing production. These easements will reduce groundwater consumptive use in perpetuity. The conservation easement will include language that requires the landowner to implement best practices that maintain the integrity of the soil and water quality.

A description of field or research investigations utilized to substantiate the project conception (004.02 B);

The CPNRD has been a major contributing sponsor of the Platte River Cooperative Hydrology Study (COHYST) since the inception of the project. COHYST objectives included exploration and delineation of subsurface stratigraphy and development of a groundwater model. The groundwater model required extensive development of hydrogeologic information to investigate the impacts of water uses of both depletions to streamflow and groundwater levels. The nearly 20 years of study and integrated landscape-surface water-groundwater modeling has evaluated various management scenarios and associated hydrologic outcomes. The extensive modeling efforts have shown reduction of groundwater pumping, particularly within the Overappropriated Area, greatly reduces the overall depletive effects to both surface and groundwater sources. Retirement of irrigated lands is an effective water management strategy for the CPNRD, shown by the permanent retirement of 1,743 acres of groundwater acres that has returned an estimated 653 ac/ft of flow back to Platte River within the overappropriated area (Attachment 3).

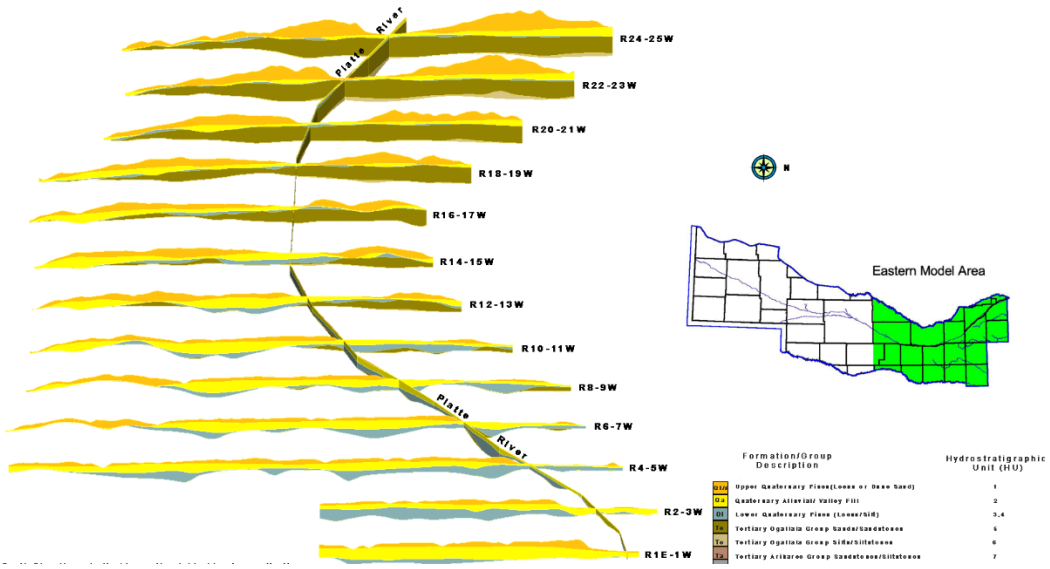


Figure 1. Fence diagram of the hydrogeologic information assembled for the COHYST modeling efforts. The fence diagram shows the spatial relationship of the thickness of different geologic units.

A description of the necessary water and/or land rights, if applicable (004.02 C);

CPNRD would acquire perpetual conservation easements on 288 acres on 2 tracts of land. The parcels are located within the District boundaries. Once project funding is secured, CPNRD will negotiate and finalize easements with the landowners.

A discussion of the anticipated effects, if any, of the project upon the development and/or operation of existing or envisioned structural measures including a brief description of any such measure (004.02 D).

The proposed project is entirely non-structural and would not have any impacts to current structures including surface water irrigation infrastructure, roads, bridges, or private property. Retirement of groundwater irrigated acres achieves 3 goals; increases streamflow to the Platte River within the CPNRD, helps return the overappropriated area of the District to a fully appropriated status, and maintain a fully appropriated status in the remainder of the District. Achievement of these three goals will insure water availability in the Platte River for agricultural, municipal, industrial, and recreational uses, as well as provide streamflow for threatened and endangered species.

2. Provide evidence that there are no known means of accomplishing the same purpose or purposes more economically, by describing the next best alternative.

The next best alternative to reduce streamflow depletions and reduce groundwater declines is to build a large re-regulation reservoir upstream of the critical habitat reach. This option is significantly more expensive, as it requires land acquisition, engineering design, construction, operation, and maintenance expenses that well exceed the total $1,000,000 cost of the proposed project, particularly as the lands will need to be bought outright. This option would also require obtaining a surface water right to divert for intentional underground storage or induced recharge. CPNRD may have to pay another entity for the surface water, hence increasing the annual cost of that option. The other alternative available to increase water supplies in the District is to enact portions of the 1987 Groundwater Management Plan that consists of phased controls in response to groundwater level declines. This option requires additional regulations, restrictions on development, and potential reductions in groundwater irrigated acres. Mitigation strategies, such as acres retirements, reduces the likeliness or severity of implementing management rules and regulations to reduce streamflow depletions and groundwater declines. In doing so the CPNRD would potentially not have to implement rules and regulations that address these groundwater management areas related to declines and help insure that water is available for uses that include, agricultural, municipal, industrial, recreational, and flow for endangered and threatened species use in the Platte River of Nebraska.

3. Document all sources and report all costs and benefit data using current data, (commodity prices, recreation benefit prices, and wildlife prices as prescribed by the Director) using both dollar values and other units of measurement when appropriate (environmental, social, cultural, data improvement, etc.). The period of analysis for economic feasibility studies shall be fifty (50) years or with prior approval of the Director, up to one hundred (100) years [T261 CH 2 (005)].

- Describe any relevant cost information including, but not limited to the engineering and inspection costs, capital construction costs, annual operation and maintenance costs, and replacement costs. Cost information shall also include the estimated construction period as well as the estimated project life (005.01). Only primary tangible benefits may be counted in providing the monetary benefit information and shall be displayed by year for the project life. In a multi-purpose project, estimate benefits for each purpose, by year, for the life of the project. Describe any intangible or secondary benefits separately. In a case where there is no generally accepted method for calculation of primary tangible benefits describe how the project will increase water sustainability, such that the economic feasibility of the project can be approved by the Director and the Commission (005.02).
- All benefit and cost data shall be presented in a table form to indicate the annual cash flow for the life of the proposal, not to exceed 100 years (005.03). In the case of projects for which there is no generally

accepted method for calculation of primary tangible benefits and if the project will increase water sustainability, the economic feasibility of such proposal shall be demonstrated by such method as the Director and the Commission deem appropriate (005.04).

Relevant Cost Information:

The total estimated costs for this program are $1,050,600 over the 50-year period. The CPNRD currently pays producers $8,000 per ac/ft for gains back to the Platte River in the overappropriated area. The CPNRD pays all costs associated with a transaction of this nature, which include but are not limited to; title lien holder fees, survey, legal fees, etc. The CPNRD also has infrared aerial imagery flown every year and maintains a GIS database in part for inspection purposes.

Item		**Cost**
Conservation Easement		$1,000,000
Fees		$600
Infrared Imagery		$500/year
Database Maintenance		$500/year
	Purchase Total	$1,000,600
	O&M Total	$50,000
	Total Cost	$1,050,600

Primary Tangible Benefits:

A summary of the primary tangible benefits for this project include reductions in stream depletions and reductions in groundwater declines. Assumptions to calculate primary tangible benefits include reduction of average annual pumping of 6" per year to 0" per year for 288 acres, for a total pumping reduction of 144 AF per year. Benefit calculations assume $200 per acre-foot per year for the value of increased accretions to streamflow.

Primary Tangible Benefit	**Average Annual Monetary Benefit**	**50-Year Benefit**
Increased Streamflow	$24,000	$1,200,000

Intangible Benefits:

Intangible benefits include reductions to groundwater declines and increasing Platte River flows for threatened and endangered species. Retiring groundwater irrigation reduces depletions to both surface and groundwater sources. These reductions provide benefits to groundwater by reducing groundwater level declines. Reductions in the volume of water removed from the hydrologically connected aquifer are one of the most effective and cost-effective methods to prolong the useable life of the aquifer. Additionally, reductions to groundwater pumping reduce depletions to streamflows. These retirements will return approximately 6,000 AF of water to the Platte River over 50 years. These additional flows will support habitat for threatened and endangered species within the Platte River. The CPNRD contains the designated habitat reach for

the Platte River Recovery Implementation Program (PRRIP) that focuses on protecting the least tern, piping plover, whooping crane, and pallid sturgeon. Projects such as this align with PRRIP goals to reduce anthropogenic impacts to streamflows, particularly during the summer months.

Annual Cash Flow:

The costs and benefits have been assessed over a 50-year lifetime as illustrated in the following cash flow table.

Project Year	Calendar Year	Category	Costs	Benefits
1	2018	Land Acquisition	$1,000,600	
2-50	2019-2068	Infrared & GIS Database	$50,000	
		Stream Accretions		$1,200,000
		Total Costs	$1,050,600	
		Total Benefits		$1,200,000

Benefit: Cost Ratio:

The benefit to cost ratio computed from the total annual benefits and costs for the project 1.14 for the 50-year project life.

4. Provide evidence that sufficient funds are available to complete the proposal.

The Central Platte NRD is the local jurisdiction supporting the project. The FY 2015 /2016 Tax Levy for CPNRD is 0.03842, the property tax valuation is $15,919,152,725.00, and the property tax collected is $6,115,709.64. The annual budget includes a line item, the Waterbanking/Irrigation Retirement Program, reserved specifically for retirement of irrigated acres.

5. Provide evidence that sufficient annual revenue is available to repay the reimbursable costs and to cover OM&R (operate, maintain, and replace).

Currently the CPNRD budgets for GIS specialists to maintain various databases and information to ensure compliance with the District's rules and regulations. These positions are currently funded in the District's budget, with the expectation that these long-term positions will incorporate the additional information from these retirements with the information collected for all retired irrigation lands in the District.

6. If a loan is involved, provide sufficient documentation to prove that the loan can be repaid during the repayment life of the proposal.

No loan will be involved with this project.

7. Describe how the plan of development minimizes impacts on the natural environment.

The proposed groundwater irrigated retirements are non-structural, and as such, will not have a structural footprint or disturb the environment through construction activities. The retirement of groundwater irrigated acres not only minimize impacts to the environment in comparison to other structural options, but has a direct benefit to the natural environment by increasing the volume of water to the Platte River. The increase of Platte River flows supports the targets set by the Platte River Recovery Implementation Program to protect threatened and endangered species within the boundaries of the CPNRD. The District assures that no secondary negative impacts arise from the groundwater retirement through the District's standard retirement agreement contract language, as shown in attached Attachment 2. This contract includes requirements that landowners continue to manage their lands to prevent erosion and excess sediment loss. The District requires that landowners continue to engage in sound resource and land management practices, even though groundwater irrigation has ceased, so that all applicable statutes and rules are followed.

8. Explain how you are qualified, responsible and legally capable of carrying out the project for which you are seeking funds.

The CPNRD has authority and jurisdiction, under its general purposes for erosion prevention and control, soil conservation, and management of water supplies for beneficial uses (Neb. Rev. Stat. 42-3229). Under Neb Rev. Stat. 2-3230 and 2-3232, the CPNRD also has the authorities for the development of facilities, works, studies, and demonstration projects that further the CPNRD's purposes for soil and water resource management. The CPNRD has statutory responsibility for groundwater quantity management and for integrated management of the over appropriated area. The District is the only entity in the area with specific water-management goals to reach, and the District has dedicated funds this fiscal year toward the retirement of groundwater irrigation for the purpose of meeting those goals. The District possesses both the technical, financial, and legal capability to identify successful management strategies and implement them for the benefit of the District's citizens as a whole.

9. Explain how your project considers plans and programs of the state and resources development plans of the political subdivisions of the state.

The Nebraska Department of Natural Resources 2016 Annual Report and Plan of Work for the Nebraska State Water Planning and Review Process outlines the following objectives for the state's water resources: 3) Support locally developed water management plans for managing hydrologically connected water supplies. This project would fall under this objective, as the CPNRD's Integrated Management Plan and the Platte River Basin-wide Integrated Management Plan outlined the need to reduce streamflow depletion in the overappropriated portion of the Platte Basin. More specifically, core components of both plans include the reduction of groundwater consumptive use and offsetting Platte River depletions in hydrologically connected areas. The basin-wide plan specifically includes objectives intended to keep Nebraska in compliance with the Platte River Recovery Implementation Program, and the District's individual Integrated Management Plan provides the mechanisms for meeting those objectives. The District's groundwater retirement program specifically implements the goals of the Platte Basin-wide plan and the Nebraska New Depletions Plan, both of which are state-level concerns.

10. Are land rights necessary to complete your project?

YES☐ NO☒ Only conservation easements are necessary. Landowners will maintain full ownership of the property (Attachment 2).

If yes, provide a complete listing of all lands involved in the project.

N/A

If yes, attach proof of ownership for each easements, rights-of-way and fee title currently held.

CPRND does not currently have conservation easements on these properties, but will obtain the easements once appropriate funding is secured.

If yes, provide assurance that you can hold or can acquire title to all lands not currently held.

The CPNRD has authority to acquire the necessary easement for the land through Neb.Rev. Stat. 2-3235, which states that an NRD can enter into agreements with landowners for the purposes of carrying out projects for the benefit of the NRD and Neb. Rev. Stat. 2-3233 that allows the CPNRD to acquire interests in real property for projects. The current landowners have expressed interest in the project, and the CPNRD has had multiple communications with the landowners to confirm support for the project. Once project funding is secured, the CPNRD will negotiate the details of the conservation easement.

11. Identify how you possess all necessary authority to undertake or participate in the project.

The CPNRD has authority and jurisdiction to manage groundwater resources through the Nebraska Groundwater Management and Protection Act (Neb. Rev. Stat. 46-702, 46-703,46-704), which states that NRDs have the legal authority and are the preferred regulators of groundwater quantity and quality management, and statutes listed above that outline the general purposes and capabilities of NRDs. Through their management authorities, the CPNRD adopted the both the Platte River Basin-wide IMP and the District's IMP. These plans formalize goals to address groundwater declines and streamflow effects due to groundwater pumping. The CPNRD authorities and the goals of both planning documents provide the CPNRD with sufficient capabilities, regulatory authorities, and funding authorizes to successfully implement this project.

12. Identify the probable environmental and ecological consequences that may result as the result of the project.

The probable environmental and ecological consequences for this project are beneficial. The retirement of groundwater irrigated acres will increase streamflows in the Platte River and its tributaries that will support and enrich habitat for threatened and endangered species. Landowners have the option to convert their retired irrigated acres to wildlife habitat, which increases wildlife diversity and supports ecosystem health.

Section C.

NRC SCORING

In the NRC's scoring process, points will be given to each project in ranking the projects, with the total number of points determining the final project ranking list.

The following 15 criteria constitute the items for which points will be assigned. Point assignments will be 0, 2, 4, or 6 for items 1 through 8; and 0, 1, 2, or 3 for items 9 through 15. Two additional points will be awarded to projects which address issues determined by the NRC to be the result of a federal mandate.

Notes:

- The responses to one criterion *will not* be considered in the scoring of other criteria. Repeat references as needed to support documentation in each criterion as appropriate. The 15 categories are specified by statute and will be used to create scoring matrixes which will ultimately determine which projects receive funding.

- There is a total of 69 possible points, plus two bonus points. The potential number of points awarded for each criteria are noted in parenthesis. Once points are assigned, they will be added to determine a final score. The scores will determine ranking.

- The Commission recommends providing the requested information and the requests are not intended to limit the information an applicant may provide. An applicant should include additional information that is believed will assist the Commission in understanding a proposal so that it can be awarded the points to which it is entitled.

Complete any of the following (15) criteria which apply to your project. Your response will be reviewed and scored by the NRC. Place an N/A (not applicable) in any that do not apply, an N/A will automatically be placed in any response fields left blank.

1. Remediates or mitigates threats to drinking water;
   - Describe the specific threats to drinking water the project will address.
   - Identify whose drinking water, how many people are affected, how will project remediate or mitigate.
   - Provide a history of issues and tried solutions.
   - Provide detail regarding long range impacts if issues are not resolved.

Drinking Water Issues: Within the CPNRD, groundwater supplies drinking water for its 112,000 residents, which can be vulnerable to over pumping and over use, especially in the Districts overappropriated areas. Water quality is also a concern within the CPRND, primarily intensively farmed areas with shallow depth to water and sandy soils. These

conditions, which are typical in the Platte River Valley, mean that most of the groundwater in the CPNRD is vulnerable to contamination.

Drinking Water Effects & Mitigation: Having the ability to retire acres that are within the CPNRD groundwater management phase areas 2 and 3, the District can effectively stop the application of certain chemicals that are used to raise an irrigated crop. Many of the tools needed by the farmers to establish best management practices, including fertilizer calibration meters, irrigation well hour meters, surge valves, vertical dam manifolds, irrigation flow meters and reuse pits, were encouraged through the availability of cost sharing by the District Research indicated that most farmers did not know how much water they were using during irrigation, so the Board decided to make mandatory the practice of monitoring well outputs in Phases II and III. Through the retirement of irrigated lands, this project helps secure clean and sustainable water.

Previous Management Actions: The CPNRD has a Groundwater Quality Management Program that went into effect in 1983 and has natation wide recognition. The Groundwater Quality Management Program is having a beneficial impact on the nitrate levels in groundwater. Producers have been instrumental in the success of the program by implementing best management practices and newer, more efficient technologies as they are developed. The program, which has been in effect for more than 28 years, is undertaking a long-term solution for the District's widespread high groundwater nitrate-nitrogen problems. Nitrate-nitrogen levels have been lowered through management efforts primarily by landowners. Current average nitrate levels throughout the District in 2014 are 14.24 parts per million (ppm); down from 19.24 ppm when the Program was implemented. Until the Central Platte NRD's Groundwater Quality Management Program was adopted, the nitrate level in the high Nitrate area of the District had increased at a rate of about 0.5 ppm/year to 19.24 ppm. At the end of the first crop year under the program, the level dropped by 0.3 ppm and continued to drop through the 1993 crop year. Adverse weather conditions resulted in increases during the 1994 and 1995 crop years, but, a lowering of the nitrate rate occurred again after the 1996 and 1997 crop years. In 1999, nitrate levels in the NRD's high-nitrate area dropped from 17.41 ppm from spring 1998 to 16.62 ppm spring 1999. The drop is credited to landowners in the District using better management practices recommended by the NRD and the University of Nebraska- Lincoln. Farmers from throughout the District, with varying soils and cropping practices, were recruited to work with the NRD in using the best management practices to demonstrate that nitrates can be managed efficiently and effectively while maintaining crop yieldsA well measuring program was adopted, and later revised, that could determine how much water is being used. Wells in Phase III were measured by the NRD by 1998 and in Phase II by 2000.

Long-Range Impacts:
The long-range impacts for this type of project are quite large, as the benefits are cumulative as the pumping volume is permanently decreased. Retirement of a single or handful of fields will not produce the results necessary to meet the District's obligations under the Platte River Recovery Implementation Program, but total number of retired irrigated acres will have substantial benefits to increasing streamflows and maintaining groundwater levels.

2. Meets the goals and objectives of an approved integrated management plan or ground water management plan;
    - Identify the specific plan that is being referenced including date, who issued it and whether it is an IMP or GW management plan.
    - Provide the history of work completed to achieve the goals of this plan.
    - List which goals and objectives of the management plan the project provides benefits for and how the project provides those benefits.

Water Plan: The retirement of groundwater irrigated acres within the Overappropriated portion of the Platte River Basin directly meets the goals and objectives of the CPNRD's 2009 Integrated Management Plan and the Platte River Basin-wide Integrated Management Plan.

Plan History: CPNRDs Integrated Management Plan, which was also adopted by the Nebraska Department of Natural Resources, first goal is to incrementally achieve and sustain a fully appropriated condition. (ties into Goal 1. of the Basin-Wide Plan) (a) Within the first ten (10) year increment, address impacts of streamflow depletions to surface water appropriations and water wells constructed in aquifers dependent upon recharge from streamflow to the extent those depletions are due to water use initiated after July 1, 1997. (ties into Goal 1. objectives of the Basin-Wide Plan) (b) Impacts of streamflow depletions to surface water appropriations and water wells constructed in aquifers dependent upon recharge from streamflow to the extent those depletions are due to water use initiated prior to July 1, 1997, may be addressed prior to a subsequent increment with the intent of achieving a fully appropriated condition. To date, the CPNRD has permanently retired 1,743 acres of groundwater with 30 different transactions and has returned an estimated 653 ac/ft of flow back to Platte River in its overappropriated area. An additional 2,372 acres and 1,800 ac/ft of flow has been returned to the Platte River, in the overappropriated area of CPNRD, through surface water retirements. These accretions of acre feet of returned water to the Platte River are determined using the COHYST model developed by CPNRD and its partners. Objective 1 of the Districts IMP is to implement measures within the first ten (10) year increment to offset an annual depletion rate of one thousand nine hundred (1,900) acre-feet to the river in the year 2043. This rate is the current best estimate and is subject to change based upon new data and information.

Plan Goals & Objectives: The District's Integrated Management Plan outlines separate and specific goals for the overappropriated portion of the basin. The main focus of these goals is to achieve compliance with interstate agreements and the Nebraska New Depletions Plan for the Platte River. Reduction of consumptive use by retiring irrigated acres directly meets the following plan goals:

- Goal 1: Incrementally achieve and sustain a fully appropriated condition
- Goal 2: Ensure no act or omission of the District will cause the state to be in noncompliance with any interstate compact or decree or other formal state contract or agreement
- Goal 3: Maintain consistency with the Basin-wide plan

3. Contributes to water sustainability goals by increasing aquifer recharge, reducing aquifer depletion, or increasing streamflow;
   List the following information that is applicable:

   - The location, area and amount of recharge;
   - The location, area and amount that aquifer depletion will be reduced;
   - The reach, amount and timing of increased streamflow. Describe how the project will meet these objectives and what the source of the water is;
   - Provide a detailed listing of cross basin benefits, if any.

Project Details: The proposed programs goals are to increase streamflow to the Platte River within the CPNRD, help return the overappropriated area of the District to a fully appropriated status, to maintain a fully appropriated status in the remainder of the District by reducing depletions in target areas, and to help insure that water is available for Agricultural use, Municipal and Industrial use, Recreational use, and flow for endangered and threatened species use in the Platte River of Nebraska.

Aquifer Benefits: The CPNRD would acquire perpetual conservation easements on the acres being retired which would forbid any future groundwater irrigation on the acres and in cases of sub-irrigated ground, deep rooted vegetation restrictions would be implemented as well. All high capacity wells would have to be decommissioned or converted to stock wells or the equivalent.

Stream Benefits: The main benefits of the retirement of groundwater irrigated acres in the overappropriated area are accretions to streamflow. Retirement of these acres will reduce groundwater pumping by approximately 130 AF/year, with the cumulative 50-year benefit of an increase to streamflows of at least 653 AF.

Basin-wide Benefits: The proposed project to retire irrigated acres helps meet the goals and objectives of the Basin-wide Plan and the Nebraska New Depletions Plan by reducing both groundwater consumptive use and depletions to Platte River streamflows. The primary cross basin benefits of this program would be reducing depletions in target areas within the CPNRD that are also recognized in adjacent NRD's and by increasing streamflow to the Platte River for the benefit of not only CPNRD but also the State of Nebraska. (See Attachment 3. Fully & Overappropriated Designations)

4. Contributes to multiple water supply goals, including, but not limited to, flood control, agricultural use, municipal and industrial uses, recreational benefits, wildlife habitat, conservation of water resources, and preservation of water resources;
   - List the goals the project provides benefits.
   - Describe how the project will provide these benefits
   - Provide a long range forecast of the expected benefits this project could have versus continuing on current path.

Project Goals: The retirement of groundwater irrigated acres will contribute towards meeting multiple water supply goals, particularly reducing consumptive use and increasing Platte River streamflows.

Project Benefits: The project will accrue an additional 6,000 AF of water back to the Platte River over the 50-year period. The reduction of consumptive use will increase streamflows, help the District meet its obligations under the Platte River Interstate Agreement, the Nebraska New Depletion Plan, and provide improved habitat for threatened and endangered species. The increased streamflows will benefit the least tern, piping plover, and whooping cranes.

Future Without Project: Without the project, the irrigated lands will continue to pump approximately 144 AF/year, and as such would deplete the Platte River and its tributaries by an additional 6,000 AF over 50 years.

5. Maximizes the beneficial use of Nebraska's water resources for the benefit of the state's residents;
   - Describe how the project will maximize the increased beneficial use of Nebraska's water resources.
   - Describe the beneficial uses that will be reduced, if any.
   - Describe how the project provides a beneficial impact to the state's residents.

Project Beneficial Uses: The project benefits the state's residents by aiding the District and state meet its obligations under the Platte River Interstate Agreement to return the overappropriated portion of the basin to a fully appropriated status and meet its streamflow goals under the Nebraska New Depletions Plan. The increase in streamflows will benefit the piping plover, least tern, and whooping crane within the critical habitat reach of the District. The increased streamflows will also benefit threatened and endangered species within the critical habitat reach of the District.

Adverse Impacts: This project will not reduce streamflow or aquifer benefits for any user or group of users.

State Benefits: This project has a direct and tangible benefit to the state in meeting obligations under interstate agreements. The state and the District are both cooperating partners in reducing streamflow depletions, hence increasing streamflows, in the Upper and Middle portions of the Platte River Basin to fulfill obligations under both the Platte River Interstate Agreement and the Nebraska New Depletions Plan. This project results in a direct reduction in groundwater consumptive use, reduces groundwater declines, and results in increased accretions to streamflow for threatened and endangered species, all of which are goals in the District and Basin-wide Integrated Management Plans to remain compliant with the documents agreed upon in interstate discussions with Colorado and Wyoming.

6. Is cost-effective;
    - List the estimated construction costs, O/M costs, land and water acquisition costs, alternative options, value of benefits gained.
    - Compare these costs to other methods of achieving the same benefits.
    - List the costs of the project.
    - Describe how it is a cost effective project or alternative.

Project Costs: The following outlines the projected project costs:

- Conservation Easement:
- Fees:
- Infrared Imagery:
- Database Management:

The direct value of the estimated annual benefits gained in the direct vicinity of the site are $40,000 per year or $1,200,000 over 50 years.

Alternative Solutions: The two main alternatives to the voluntary retirement of groundwater irrigated acres are additional regulations and construction of a single, large reservoir, such as J2. Management preferences lend towards innovative solutions to address water issues, rather than rely upon regulations and enforcement, and therefore, is not a viable alternative. Mandated regulatory reductions would be widespread and affect a far greater population, thus causing a decreased revenue for taxing entities and hardship for producers in the affected areas. The second alternative, a large reservoir upstream of the critical habitat reach is not currently viable. Proposed plans for J2 re-regulating reservoir have stalled indefinitely due to escalating construction costs. Without the J2 re-regulating reservoir as a water re-timing option, the District must implement other management strategies to achieve its streamflow goals.

7. Helps the state meet its obligations under interstate compacts, decrees, or other state contracts or agreements or federal law;
    - Identify the interstate compact, decree, state contract or agreement or federal law.
    - Describe how the project will help the state meet its obligations under compacts, decrees, state contracts or agreements or federal law.
    - Describe current deficiencies and document how the project will reduce deficiencies.

Interstate Compact: The states of Nebraska, Colorado, and Wyoming entered into the North Platte Decree in 1945, with the North Platte River Settlement with Wyoming finalized in 2001. In 1997, these three states agreed to the Platte River Recovery Implementation Program to protect threatened and endangered species in the central and lower portions of the Platte River Basin. These interstate agreements apportion the North and South Platte Rivers for use between the three states. Additionally, the state of Nebraska must comply with the Nebraska New Depletions Plan and cooperate with the Platte River Recovery Implementation Program to meet goals associated with Platte

River streamflows and reductions of consumptive use in the overappropriated area of the District.

Compact Compliance: The proposed project directly helps CPNRD and Nebraska meet the Platte River Recovery & Implementation Program obligations for groundwater depletions, improve flows for endangered and threatened species, and assist the NRDs with regulation and management of groundwater. PRRIP is required to improve flows in the Platte River for endangered and threatened species, and this program will help with their goals as well as the Districts.

Current Deficiencies: The District's IMP and Basin-wide Plan take an incremental approach to reduce consumptive use, reduce groundwater declines, and increase streamflows to meet streamflow goals and return the Platte Basin overappropriated area to fully appropriated status. The full extent of these deficiencies is not yet finalized, as the most recent COHYST model runs will re-define streamflow depletions due to post-1997 increased in consumptive use. Additionally, the analysis to define the difference between overappropriated and fully appropriated conditions is not yet finalized. Once these two analyses are finalized and adopted, CPNRD will know the full extent of the deficiencies.

8. Reduces threats to property damage or protects critical infrastructure that consists of the physical assets, systems, and networks vital to the state or the Untied States such that their incapacitation would have a debilitating effect on public security or public health and safety;
    - Identify the property that the project is intended to reduce threats to.
    - Describe and quantify reductions in threats to critical infrastructure provided by the project and how the infrastructure is vital to Nebraska or the United States.
    - Identify the potential value of cost savings resulting from completion of the project.
    - Describe the benefits for public security, public health and safety.

Property & Infrastructure: The proposed project will have no adverse impacts on property or infrastructure as the retirement of groundwater irrigated acres simply reduces the level of pumping and associated consumptive use within the District.

Reductions to Infrastructure Threats: Water security and public health and safety for Nebraskans is directly tied to clean and sustainable groundwater resources. About 85% of the state's population uses groundwater as drinking water. Groundwater is also a major source of irrigation water for much of the state's agriculture. However, decades of crop production have allowed fertilizers and some agricultural chemicals to reach the groundwater in some parts of the state, causing contamination that may have harmful health implications for local residents. The program will benefit public security, health, and safety by securing clean & sustainable groundwater resources through voluntary retirements and improve flows to the Platte River. The knowledge learned through these retirements can be used by the CPNRD and other NRDs to improve land

management best practices and strategies within their groundwater management plans to better protect vulnerable groundwater resources.

Cost Savings: The project provides cost savings to the District and surrounding counties by preventing the implementation of regulatory controls that would have economic ramifications by reducing irrigation throughout the entire District, particularly the overappropriated area.

Public Safety Benefits: The project provides public safety benefits by reducing groundwater declines and increasing streamflows that are the source of potable water supplies for all residents of the District.

9. Improves water quality;
    - Describe what quality issue(s) is/are to be improved.
    - Describe and quantify how the project improves water quality, what is the target area, what is the population or acreage receiving benefits, what is the usage of the water: residential, industrial, agriculture or recreational.
    - Describe other possible solutions to remedy this issue.
    - Describe the history of the water quality issue including previous attempts to remedy the problem and the results obtained.

Water Quality Issues: Within the CPNRD, groundwater supplies drinking water for its 140,000 residents, which can be vulnerable to over pumping and over use, especially in the Districts overappropriated areas. Water quality is also a concern within the CPRND, primarily intensively farmed areas with shallow depth to water and sandy soils. These conditions, which are typical in the Platte River Valley, mean that most of the groundwater in the CPNRD is vulnerable to contamination.

Project Water Quality Benefits: Retirement of groundwater irrigated acres has the potential to reduce the quantity of nitrates and other agrochemicals applied to the lands. Lands that are retired to either grassland or wildlife habitat will greatly reduce agrochemical application.

Alternative Solutions: CPNRD currently has several water quality programs and initiatives that have been successful in reducing nitrate levels in the District. Prior to the adoption of CPRND's Groundwater Quality Management Program was adopted, the nitrate level in the high Nitrate area of the District had increased at a rate of about 0.5 ppm/year to 19.24 ppm. Current average nitrate levels throughout the District in 2014 are 14.24 parts per million (ppm); down from 19.24 ppm when the Program was implemented. Although these programs have been successful in reducing the concentration of nitrates in groundwater, further reductions are necessary to reduce treatment levels for drinking water standards. Without other options, such as retiring irrigated acres, additional rules and regulations will be necessary to achieve further reductions in groundwater nitrate levels.

10. Has utilized all available funding resources of the local jurisdiction to support the program, project, or activity;
    - Identify the local jurisdiction that supports the project.
    - List current property tax levy, valuations, or other sources of revenue for the sponsoring entity.
    - List other funding sources for the project.

Local Jurisdiction: The CPNRD has authorities through Neb. Rev. Stat. 2-3225, 2-3230, and 2-3232 to levy taxes and to develop facilities, works, projects, and investigations to facilitate and carry out the intended purposes of NRDs. The LBNRD also has authority and jurisdiction to manage groundwater resources through the Nebraska Groundwater Management and Protection Act (Neb. Rev. Stat. 46-702, 46-703,46-704), which states that natural resources districts have the legal authority and are the preferred regulators of groundwater quantity and quality management.

Local Revenue: The CPNRD's mill levy at the time of application is 0.03842 cents of valuation. The FY 2016 valuation of the LBNRD is $15,919,152,725. The FY 2016 mill levy generated $6,115,709.64 in tax revenues for District projects, activities and operations.

Other Funding Sources: The CPNRD established a Water Banking/Retirement Fund for the retirement of irrigated agricultural lands for meeting depletion offsets under the North Platte Decree agreement and Nebraska New Depletions Plan, which are outlined in both the District and Basin-wide Integrated Management Plans.

11. Has a local jurisdiction with plans in place that support sustainable water use;
    - List the local jurisdiction and identify specific plans being referenced that are in place to support sustainable water use.
    - Provide the history of work completed to achieve the goals of these plans.
    - List which goals and objectives this project will provide benefits for and how this project supports or contributes to those plans.
    - Describe and quantify how the project supports sustainable water use, what is the target area, what is the population or acreage receiving benefits, what is the usage of the water: residential, industrial, agriculture or recreational.
    - List all stakeholders involved in project.
    - Identify who benefits from this project.

Local Jurisdiction & Water Plans: The CPNRD has authority and jurisdiction to manage groundwater resources through the Nebraska Groundwater Management and Protection Act (Neb. Rev. Stat. 46-702, 46-703,46-704), which states that natural resources districts have the legal authority and are the preferred regulators of groundwater quantity and quality management. Through their management authorities, the CPNRD adopted both the District's Integrated Management Plan and the Platte River Basin-wide Integrated Management Plan. These plans formalized goals to address groundwater declines and streamflow effects due to groundwater pumping.

Each year the District provides annual reports on both plans to NeDNR and the other Upper Platte River NRDs that include any changes in development, as well as progress towards meeting plan goals.

Plan Goals & Objectives: This project helps meet the following goals and objectives of the Platte River Basin-wide Integrated Management Plan:
Goal A1: Incrementally achieve and sustain a fully appropriated condition.

Goal A2: Prevent reductions in the flow of a river or stream that would cause noncompliance with an interstate compact or decree or other formal state contract or agreement.

Objective 1 of Goal 1: Offset impacts of streamflow depletions to (A) surface water appropriations and (B) water wells constructed in aquifers dependent upon recharge from streamflow to the extent those depletions are due to water use initiated after July 1, 1997.

Objective 2 of Goal 1: Actively pursue funding for offsets…
Objective 5 of Goal 1: Use available funds to offset depletions due to water uses initiated prior to July 1, 1997, that are identified as part of the overall difference between current and fully appropriated levels of development.

Objective 1 of Goal 2: Prevent streamflow depletions that would cause noncompliance by Nebraska with the Nebraska New Depletions Plan (NDP) included within the Platte River Recovery Implementation Program (Program), for as long as the Program exists.

The proposed project would directly aid in the achievement of these goals by having a direct and measurable offset to groundwater depletions.

Sustainable Water Use & Benefits: There are a total of 30 villages and cities within the CPNRD, with the total District population estimated at 140,000. These municipalities rely upon groundwater for their potable water supplies. Management activities, such as direct and measurable reductions to groundwater pumping, directly benefit municipal water supplies by lessening the demand on the shared water supplies. This overall reduction of streamflow depletions of the Platte River Basin Overappropriated area directly benefits all agricultural, industrial, municipal, and domestic users for which the Platte River hydrologically connected basin is the sole source of water supplies.

Project Stakeholders: Stakeholders involved include the CPNRD and the current land owners. The Nebraska Department of Natural Resources is a stakeholder, only in so much as this project aims to meet goals and objectives stated in the joint Integrated Management Plan. The Nebraska Department of Environmental Quality is a not a stakeholder.

Project Beneficiaries: This project reduces CPNRD's obligations under the Platte River agreement and associated planning documents. Reducing the District's obligations has a direct benefit to other users whose water use might be regulated or otherwise restricted to meet the interstate agreement. Therefore, this project directly benefits all producers, irrigators, ethanol producers, cities, industry, municipal, and domestic groundwater users within the District. The project could also result in increased flows downstream of the CPNRD, which could potentially assist the water supplies of a more densely populated area during severe drought conditions.

12. Addresses a statewide problem or issue;
    - List the issues or problems addressed by the project and why they should be considered statewide.
    - Describe how the project will address each issue and/or problem.
    - Describe the total number of people and/or total number of acres that would receive benefits.
    - Identify the benefit, to the state, this project would provide.

Statewide Issues: Platte River management is a state-wide issue as it affects 10 NRDs, is part of the Platte River Interstate Agreement, Platte River Recovery Implementation Program, and subject to the Nebraska New Depletions Plan. This requires significant coordination between various entities, including state agencies, other states, NRDs, Fish and Wildlife Service, and others. The District also contains the section of river designated as critical habitat for the following threatened and endangered species; least tern, piping plover, and whooping crane. This level of inter-agency and entity coordination is necessary to address declines to both streamflows and groundwater levels that affect agriculture, municipalities, industries, and threatened and endangered species.

Statewide Benefits: The Platte River is the largest river in Nebraska. As such, changes that benefit streamflows affect numerous NRDs, counties, and the majority of the state's residents. Projects that produce direct and tangible increases to streamflow provide for benefit and increase the reliability and security for all municipalities, industries, and agricultural uses that draw upon the river for water supplies. Increases in streamflow support many of the District's 140,000 residents, as well support the cities of Omaha and Lincoln in maintaining adequate water supplies.

Benefit to the State: The proposed project will help ensure that the state will continue to comply with the Nebraska New Depletions Plan and meet the streamflow goals of the Platte River Recovery Implementation Program by reducing consumptive use in the overappropriated portion of the District. Retirement of groundwater acres helps achieve local goals for water sustainability without enforcement of additional water use regulations.

13. Contributes to the state's ability to leverage state dollars with local or federal government partners or other partners to maximize the use of its resources;

- List other funding sources or other partners, and the amount each will contribute, in a funding matrix.
- Describe how each source of funding is made available if the project is funded.
- Provide a copy or evidence of each commitment, for each separate source, of match dollars and funding partners.
- Describe how you will proceed if other funding sources do not come through.

Other Partners: These projects are joint projects between the CPNRD and the landowners, for the benefit of the entire area. Besides the partnership of the NRC through the Water Sustainability Fund, no other partnerships are anticipated.

Other Funding Sources: The CPNRD does not anticipate any additional funding sources for these projects. The NRD has the funds dedicated to meet the local match for this project.

14. Contributes to watershed health and function;
    - Describe how the project will contribute to watershed health and function in detail and list all of the watersheds affected.

Watershed Function: Watershed health and function is partially dependent upon maintaining the hydrologic system. Extensive use of surface and groundwater supplies can greatly effect surface groundwater interconnectivity and sustainable use of water supplies. Projects that seek to reduce streamflow depletions to the Platte River and its tributaries will contribute to an overall increase in watershed health through time.

15. Uses objectives described in the annual report and plan of work for the state water planning and review process issued by the department.
    - Identify the date of the Annual Report utilized.
    - List any and all objectives of the Annual Report intended to be met by the project
    - Explain how the project meets each objective.

Annual Report: This application utilizes the Nebraska Department of Natural Resources 2015 Annual Report and Plan of Work for the Nebraska State Water Planning and Review Process.

Report Objectives: NDNR's 2015 Annual Report and Plan of Work for the Nebraska State Water Planning and Review Process outlines the following objectives for the state's water resources: 3) Support locally developed water management plans for managing hydrologically connected water supplies Project Support of Objectives: This induced recharge aspect of this project fulfills both a goal of the Central Platte NRD Integrated Management Plan, the Platte River Basin-wide Integrated Management Plan, and an objective of the Department's annual planning document by focusing on measurable management actions in hydrologically connected areas that seek to reduce both groundwater level declines and depletions to streamflow.

16. Federal Mandate Bonus. If you believe that your project is designed to meet the requirements of a federal mandate which furthers the goals of the WSF, then:
    - Describe the federal mandate.
    - Provide documentary evidence of the federal mandate.
    - Describe how the project meets the requirements of the federal mandate.
    - Describe the relationship between the federal mandate and how the project furthers the goals of water sustainability.

    This project was not designed to meet a federal mandate.

Section D.

PROJECT DESCRIPTION

1. Overview

In 1,000 characters *or less*, provide a brief description of your project including the nature and purpose of the project and objectives of the project.

This grant application requests a total of $600,000 in matching funds from the Water Sustainability Fund to retire 288 acres of groundwater irrigation in the overappropriated area as well as targeted groundwater management areas within the Central Platte Natural Resources District. The Districts seeks with this funding request to continue and expand on the achievements of retiring groundwater irrigated acres so that mandatory reductions will not have to be implemented. The overall goals of the program are to increase streamflow to the Platte River within the CPNRD, help return the overappropriated area of the District to a fully appropriated status, to maintain a fully appropriated status in the remainder of the District, and to help insure that water is available for Agricultural use, Municipal and Industrial use, Recreational use, and flow for endangered and threatened species use in the Platte River of Nebraska.

2. Project Tasks and Timeline

Identify what activities will be conducted by the project. For multiyear projects please list what activities are to be completed each year.

FY 2017-2018: execute agreements with landowners; report to NDNR on finalized agreements; payments to landowners under executed agreements FY 2018-2019: execute agreements with landowners; report to NRDR on finalized agreements; payments to landowners under executed agreements; compliance field inspections by District staff through perpetuity.

3. Partnerships

Identify the roles and responsibilities of agencies and groups involved in the proposed project regardless of whether each is an additional funding source. List any other sources of funding that have been approached for project support and that have officially turned you down. Attach the rejection letter.

Not applicable to this project.

4. Other Sources of Funding

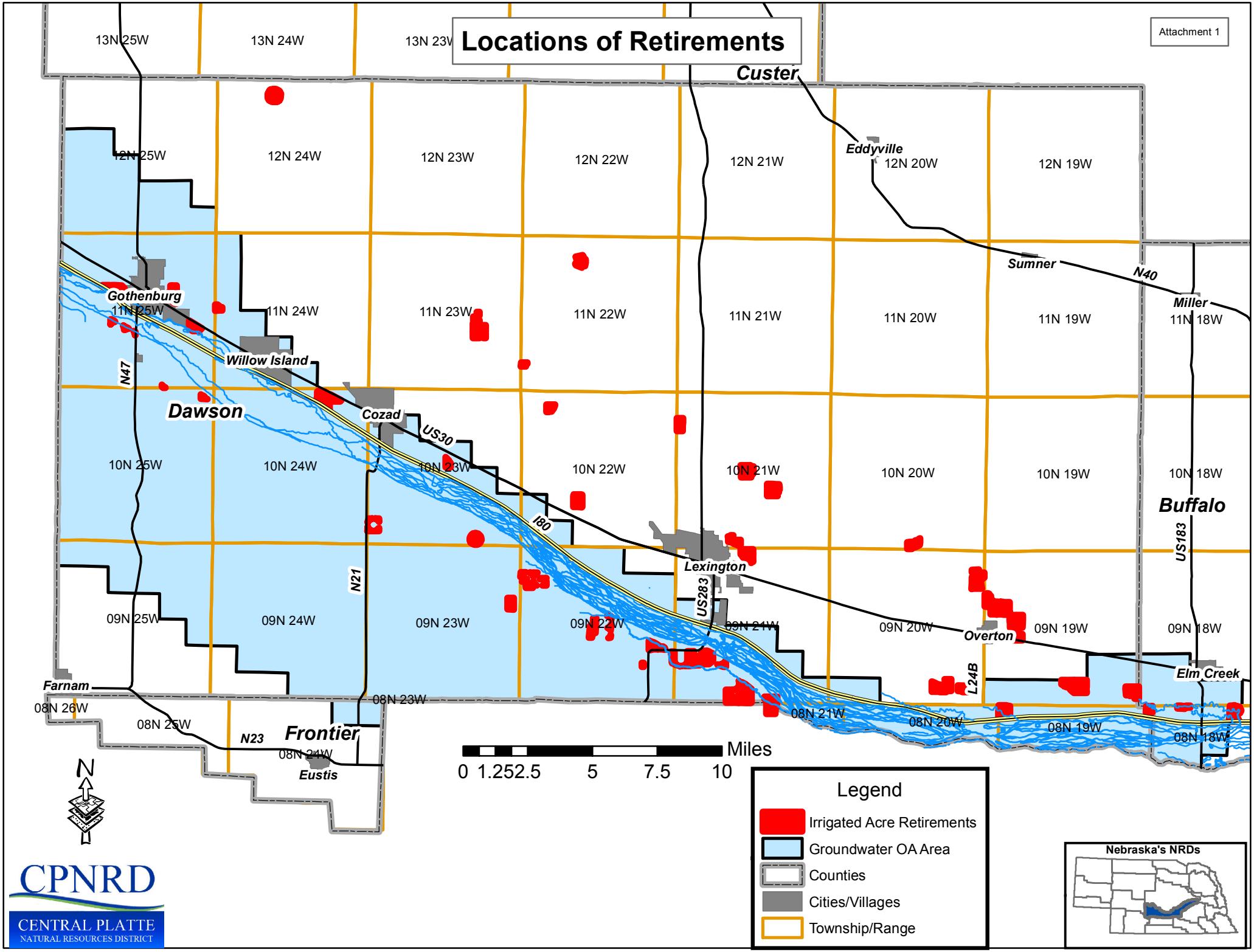
Identify the costs of the entire project, what costs each other source of funding will be applied to, and whether each of these other sources of funding is confirmed. If not, please identify those entities and list the date when confirmation is expected. Explain how you will implement the project if these sources are not obtained.

The total cost of this phase of the Waterbanking/Irrigation Retirement Program (288 acre feet) is $1,050,600 over the next two years. Costs, if successfully funded through the Water Sustainability Fund, will be $600,000 from WSF and $450,600 from the CPNRD.

5. Support/Opposition

Discuss both support and opposition to the project, including the group or interest each represents.

The CPNRD sees no opposition to increasing streamflow and getting back to a fully appropriated status.


Locations of Retirements
Attachment 1
13N 25W
13N 24W
13N 23W
Custer
12N 25W
12N 24W
12N 23W
12N 22W
12N 21W
Eddyville
12N 20W
12N 19W
Sumner
N40
Miller
11N 18W
Gothenburg
11N 25W
11N 24W
11N 23W
11N 22W
11N 21W
11N 20W
11N 19W
Willow Island
N47
Dawson
Cozad
US30
10N 25W
10N 24W
10N 23W
10N 22W
10N 21W
10N 20W
10N 19W
10N 18W
Buffalo
I80
US183
Lexington
N21
US283
09N 25W
09N 24W
09N 23W
09N 22W
09N 21W
09N 20W
Overton
09N 19W
09N 18W
L24B
Elm Creek
Farnam
08N 26W
08N 25W
08N 23W
08N 21W
08N 20W
08N 19W
08N 18W
N23
Frontier
08N 24W
Eustis
N
Miles
0 1.252.5 5 7.5 10
Legend
Irrigated Acre Retirements
Groundwater OA Area
Counties
Cities/Villages
Township/Range
Nebraska's NRDs
CPNRD
CENTRAL PLATTE
NATURAL RESOURCES DISTRICT

DEED OF CONSERVATION EASEMENT

This Deed of Conservation Easement ("Conservation Easement") made this _____day of _____, 2008, by and between _____ ("Grantor") and _____ ("Grantee").

WHEREAS, all requirements imposed pursuant to the Nebraska Conservation and Preservation Easements Act, NEB. REV. STAT. §§76-2,111 through 76-2,118 (Reissue 2003) have been complied with in that the local planning commission, if applicable, and the appropriate governing body have approved of this Deed of Conservation Easement as evidenced by the attached Resolution, marked as Exhibit "A" and incorporated herein by this reference.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and in receipt of payments to the Grantor by the Grantee, the Grantor and Grantee agree as follows:

1. The Grantor hereby assigns, transfers and grants to the Grantee a Conservation Easement enforceable with respect to the property (the Property) of the Grantor described as follows:

(insert legal description here)

2. The terms, conditions and restrictions of the Conservation Easement are as follows:

a. As used in this Conservation Easement, the term "water well" shall mean any water well as that is defined in Nebraska statutes.

b. No water well capable of pumping more than 50 gallons per minute may exist or be constructed on the Property. Any water well that exists on the Property on the date of this Conservation Easement and that is capable of pumping more than 50 gallons per minute shall be decommissioned in accordance with all applicable statutes, rules and regulations or permanently reduced in capacity so that it is incapable of pumping more than 50 gallons per minute. Except that any irrigation well existing on the Property on the date of this Conservation Easement that was previously used to irrigate other land in addition to the Property may continue to be used to irrigate the other land. Only land previously certified by the Natural Resources District for irrigation by that well may be irrigated. No additional land may ever be irrigated with the well. The pipes, pivot, and any and all other equipment formerly used to irrigate the Property must be permanently removed, detached, or otherwise disabled to the satisfaction of the Natural Resources District (District).

c. Water wells capable of pumping 50 gallons per minute or less individually but in excess of 50 gallons per minute collectively may not be clustered or joined nor may the water from such wells be commingled or in any other way combined unless the wells are used as described in Paragraph 2(b) above.

d. Water wells capable of pumping 50 gallons per minute or less may be used to provide water on the Property for (1) household and other domestic uses, or (2) watering range livestock.

e. No use of the water from a natural stream, regardless of whether or not a permit for such use is required from the Nebraska Department of Natural Resources or any successor agency, shall be made on the Property except for providing water for range livestock on the Property.

f. No water from any water well not located on the Property shall be used on the Property except for (1) household and other domestic uses, or (2) watering range livestock.

g. The Property must remain in dryland agricultural production unless prior written approval is granted by the District to alter this prohibition. No crops, hay, grass or other plants that could be sub-irrigated shall be grown on Property. Only those items listed on Attachment "B" may be grown on the property unless prior written approval is granted by the District.

h. No use shall be made of the Property which will consume groundwater, including, but not limited to, the following:

(1) No pits or other excavated areas that would expose or consume ground water shall be allowed;

(2) No mining, sand or gravel operations shall be allowed;

(3) No industrial, commercial, agricultural or residential development shall occur on the Property unless prior written approval is granted by the District.

3. This Conservation Easement shall be perpetual. It is appurtenant and runs with the land as an incorporeal interest in the Property and shall be enforceable against any owner or other person having any interest in the above described property including the Grantor, all persons or entities holding any interest acquired through the Grantor and all Grantor's heirs, successors, assigns and personal representatives.

4. It is the Grantor's intent, through this Deed of Conservation Easement, to permanently transfer and surrender any rights that they or their successors, heirs, assigns or personal representatives may have to irrigate or sub-irrigate the above-described property and to permanently prevent the development and use of any ground water for any uses on the Property or off except those specifically permitted by Paragraph 2 above. The fact that the well or wells on the Property have been decommissioned, reduced in pumping capacity to 50 gallons per minute or less, or are no longer used to irrigate the Property cannot be used to supply an offset to allow irrigation of any other land or any other water use or to justify construction of a new water well as a replacement.

5. Upon any breach of the terms of this Conservation Easement by the Grantor, the Grantee may, after reasonable notice to the Grantor, institute suits to enjoin any breach or enforce any covenant by ex parte, temporary, and/or permanent injunction either prohibitive or mandatory. The Grantee's remedies shall be cumulative and shall be in addition to any other rights and remedies available to the Grantee at law or equity. If the Grantor is found to have breached any of the terms of this Conservation Easement, the Grantor shall reimburse the Grantee for any costs or expenses incurred by the Grantee, including court costs and reasonable attorney's fees to the extent permitted by applicable law. No failure on the part of the Grantee to enforce any term of this Conservation Easement shall discharge or invalidate such term or any other term hereof or affect the right of the Grantee to enforce the same in the event of a subsequent breach or default.

6. The Grantee, acting by and through their respective employees and agents, have the right to enter the Property at reasonable times for the purpose of inspecting the Property to determine whether the Grantor is complying with the terms of this Conservation Easement.

Grantor(s)

_____ _____

_____ _____

STATE OF _____)
) ss:
COUNTY OF _____)

The foregoing Deed of Conservation Easement was acknowledged before me this _____ day of _____, 2008 by _____ known to me personally or produced satisfactory evidence of identification to me.

_____
Notary Public

My commission expires: _____

STATE OF _____)
) ss:
COUNTY OF _____)

The foregoing Deed of Conservation Easement was acknowledged before me this _____ day of _____, 2008 by _____ known to me personally or produced satisfactory evidence of identification to me.

_____
Notary Public

My commission expires: _____

STATE OF _____)
) ss:
COUNTY OF _____)

The foregoing Deed of Conservation Easement was acknowledged before me this _____ day of _____, 2008 by _____ known to me personally or produced satisfactory evidence of identification to me.

_____
Notary Public

My commission expires: _____

STATE OF NEBRASKA)
) ss:
COUNTY OF HALL)

The foregoing Deed of Conservation Easement was acknowledged before me this _____ day of _____, 2008 by _____ known to me personally or produced satisfactory evidence of identification to me.

_____
Notary Public

My commission expires: _____

Accepted for the Grantee

By: _____

STATE OF NEBRASKA)
) ss:
COUNTY OF HALL)

The foregoing Deed of Conservation Easement was acknowledged before me this _____ day of _____, 2008 by _____ known to me personally or produced satisfactory evidence of identification to me.

_____
Notary Public

My commission expires: _____

SUBORDINATION AGREEMENT

For valuable consideration, including the execution of the above Deed of Conservation Easement, the undersigned, being the owner and holder of an indebtedness secured by a lien upon the real estate described in the Deed of Conservation Easement which Deed of Trust is dated the _____ day of _____, 2008, and recorded in the office of the Register of Deeds or County Clerk of _____ County, Nebraska at _____ hereby joins in the conveyance of the Conservation Easement to _____, and its successors and assigns, and conveys to _____ the same rights as contained in the Deed of Conservation Easement. Such conveyance is made for the sole purpose that the rights of the Conservation Easement shall be prior to and paramount to all rights held by the assigned under such Deed of Trust and that any sale or foreclosure of the Deed of Trust shall be subject to such Conservation Easement.

Dated this _____ day of _____, 2008.

_____

By: _____

STATE OF _____)
) ss:
COUNTY OF _____)

The foregoing Deed of Conservation Easement was acknowledged before me this _____ day of _____, 2008 by _____, President of _____.

_____

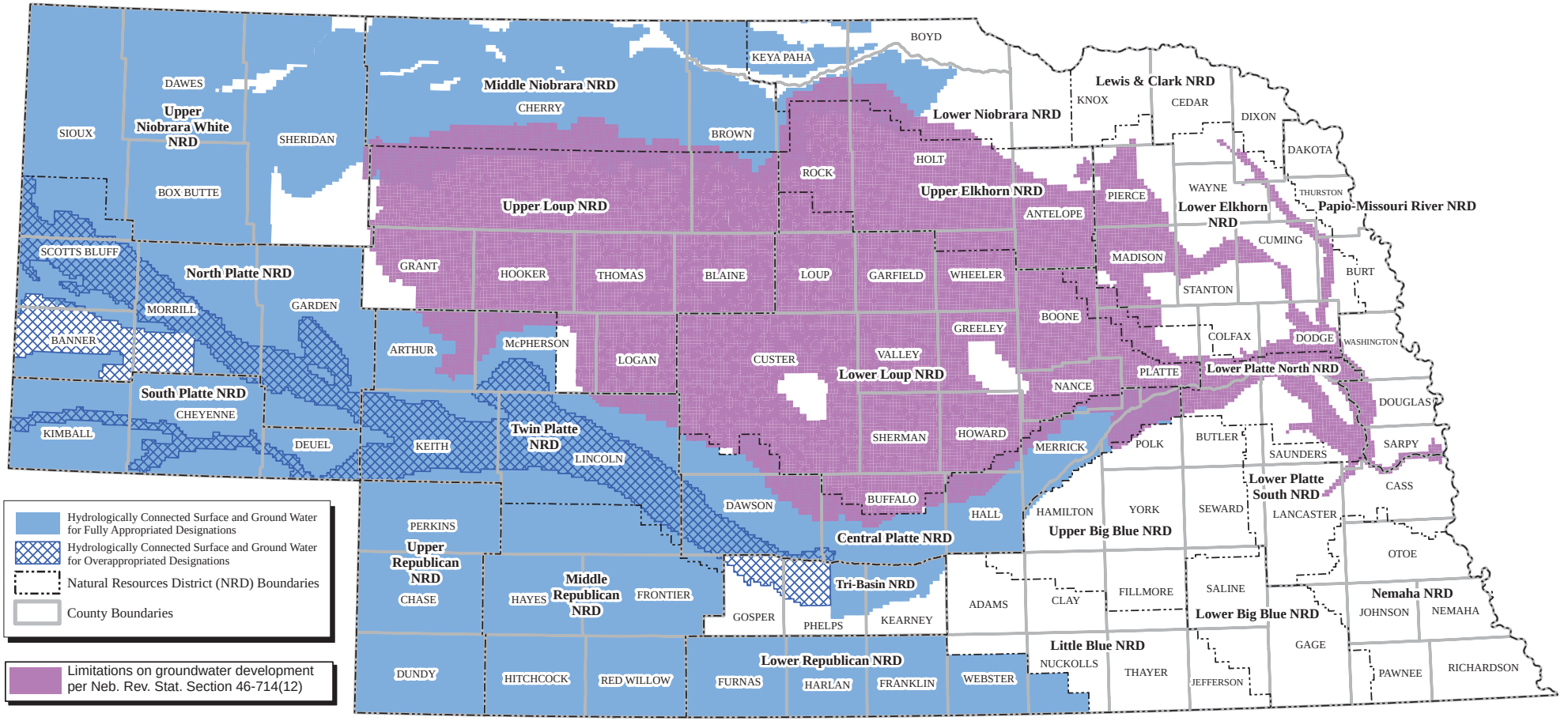
Notary Public

My commission expires: _____

Geographic Areas Determined to Have Surface Water Hydrologically Connected to Ground Water for the Purpose of Fully Appropriated or Overappropriated Designations

Determinations made by the Department of Natural Resources as of April 08, 2009

Mapping Section



Map produced by Daniel Kloch - April 2009

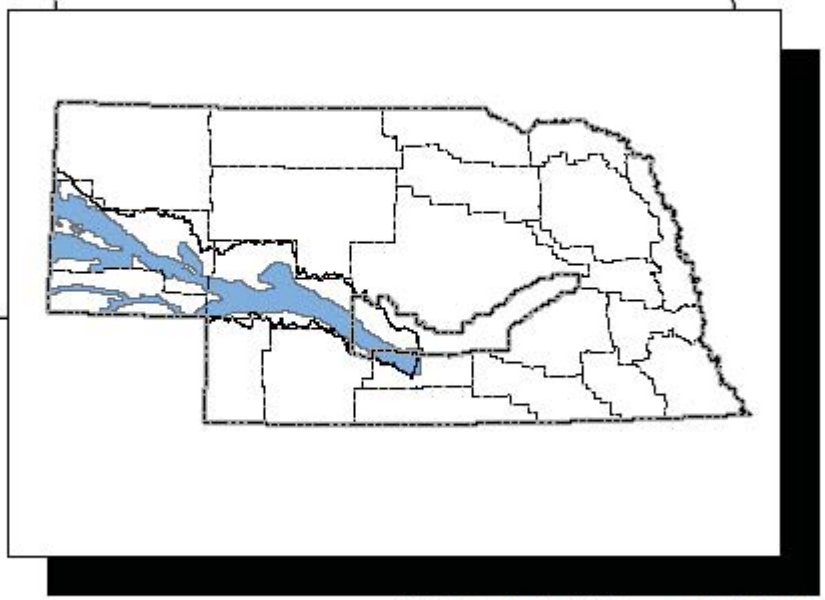
Map 2: Geographic Areas of the Central Platte NRD Designated by the Department of Natural Resources as Overappropriated.

Planning Section

This map represents the areas described in the Order issued by the Department of Natural Resources on September 15, 2004 designating the surface water resources within the Platte River Basin above the Kearney Canal Diversion, the North Platte River Basin including Pumpkinseed Creek and the South Platte River Basin including Lodgepole Creek as overappropriated. Also represented is the geographic area within which it has been determined that surface water is hydrologically connected to ground water for the purpose of designating the surface water resources within this same area. Additional information regarding the designation can be found in the Order issued by the Department of Natural Resources on September 15, 2004.

Central Platte NRD

0 5 10 20 30 40 Miles



Explanation

- Overappropriated Integrated Management Subarea (OAIMS)
- Overappropriated Surface Water Area
- Central Platte NRD
- NRDs

Map Produced by Kevin J. Schwartman, April 27, 2009