Water Committee Meeting
Thursday, April 3, 2025 9:30 AM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

2. REGULATORY

2.A. GROUND WATER MANAGEMENT AREA

2.A.1. Irrigated Acre Transfer

Kolb Farms Inc is wanting to transfer 30 irrigated acres from Part of the SE1/4 NW1/4 & Part of the NW1/4 SW1/4 S35-14-9E to S1/2 NE1/4 S13-14-9E, Saunders County. He is requesting the need for additional irrigated acres due mainly to MUD lowering the water table. (NRD water level graph is attached) Part of the land is owned by GJC which has agreed to release 30 acres from Section 35 to Kolb Farms in Section 13.
Attached are maps showing the acres being transfered.

2.A.2. Well Permit Program

2.A.3. Well Permit Duck Pond

Well Permit discussion on a duck pond, which was carried over from March Water Committee Meeting.
Ryan Glow attended the Water Committee Meeting to assist in answering questions. This is currently cropland and planning on covering 10 acres with water in the fall. This could be a water quality issue from leaching with a high water table in this area. The height ot the dike could be a concern during flooding which might affect other homeowners in the area. The Committee requested a more detailed design of the dike and having the landowner look into conservation practices.
Attached is information from Ryan Glow on the plans for the duck pond.

2.A.4. Supplemental Well Permit

Wode farms received a variance in 2023 for expansion of acres in the NW1/4 S14-14-8E, Saunders County. They used an existing well during last year crop year and kept losing flow during the season. They would like to drill a supplemental well in the NW SW S14-14N-8E. They know they can enough water going deeper but sodium could become an issue.
Attachments.

2.A.5. Livestock Well Permit

Beller Feedlot has applied for a new livetock well permit in NW SW S13-20-4W, Platte County (2 miles west of Lindsay). The well will be pumping 150 GPM and connected to the other 3 existing wells. He will be abandoning 1 of

the older unregistered wells after the new well is drilled. This well will be classified as a new well as the other 2 wells are not registered because they were drilled prior to 1993.

2.A.6. Cost Share Programs

2.A.6.a. NiRIA Update

Our Nitrogen Reduction Incentive Act Program contract has been updated by DNR to a total of $66,982.92. This updated amount will allow us to approve Prioirty A, B, and C producers.

2.A.7. Lower Platte River Basin Water Management Plan Coalition (LPRBC)

The Coalition Board meeting will be held on Wednesday, April 16 at 10:30 am at Clint Johannes Educational Building. This Board will review the V-IMP reports from each district and contracts from firms for the next 5 year depletion analysis. The Board will approve the budget for the upcoming year which will include an annual payment from each District and NeDNR of $10,000. Bob Hilger and Dave Saalfeld are the LPN representatives.

2.B. GROUND WATER ENERGY LEVELS

Staff has finished spring water level measurements with a report at next water committee meeting.

3. GROUND WATER PROGRAMS

3.A. DECOMMISSIONED WELL PROGRAM

3.A.1. Well Estimates

No new wells has been reviewed and approved for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County

3.A.2. Plugged Wells

No wells have been plugged, reviewed, and ready for cost share payment approval this month.

Well Owner	Type of Well	Cost Share Estimate	County

3.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

3.B.1. Phase Area Update

Staff has been meeting with Phase Four producers to discuss Nitrogen Recommendations.

Tim Rickert sent in cost share information for one flow meter. This is for his 19 acre field that was discussed at the March meeting.

We have one flow meter cost share invoice for two meters from Richard Shonka for a total of $2,000.

3.B.2. Eastern Nebraska Water Resources Assessment (ENWRA)

Attached is the annual dues for $30,000 per contract agreement.

3.B.3. Lower Platte River Consortium

3.C. NEW MONITORING WELLS

We have applied for the Water Sustainability Fund for the Source Water Monitoring Project. This project looks to construct dedicated monitoring wells with transducers installed with telemetry upgradient of municipal wells in Wellhead Protection Areas. The total cost of the project is estimated at $414,678. The WSF will fund 60% or $248,807 of the project and the LPNNRD will fund the remaining 40% or $165,871. They begin reviewing applications in the second quarter and make final determinations in the 3rd quarter. Attached is the WSF Application.

3.D. Source Water Protection

The Village of Abie is repairing one of their municipal wells. We would like to take the oppurtunity to install one of the transducers from the transducer agreement (State of Nebraska American Rescue Plan Act of 2021). We have been quoted $3,636.22 from InSitu for the transducer, cable, and VuLink connection. Dan Freese from Downey has quoted us $1,055.00 for the PVC pipe to suspend the transducer in the well. Quotes are attached.

3.D.1. Newman Grove Well Decommissioning

The contaminant inventory survey in Newman Grove led to the discovery of abandoned wells to potentially be decommissioned. We currently have signatures for 2 wells and 1 cistern. The district is not paying for the decommissioning of the cisterns, that cost will come out of the grant. We are in talks and following up with 3 other landowners for signatures. Estimates to come at a later date. There is an open house for the Wellhead Protection Area project in Newman Grove at the Community Center on April 8th at 7:00 PM.

4. Database Update

The Phoenix Webgroup database has closed its doors and are no longer in business. The database is currently working but could be a concern if the database starts developing programing errors without dependable support. A majority of the NRDs in the past 2 year have went to a company called Longitude 103. (18 of 23) Thad Kuntz from

Longtitude 103 will being giving a presentation at the upcoming Board meeting. The cost for Longitude 103 is $16,000 annually and the cost of data migration will be $17,500. Once the data migration is completed, $10,000 will be invoiced directly to NeDNR and the remaining $7,500 will be invoiced to the District. So the total first year costs will be $23,500 with annual fees each year after.
This cost includes an optional Dam feature service which allows staff to house inpections and utlize a dam inspection data collection feature.

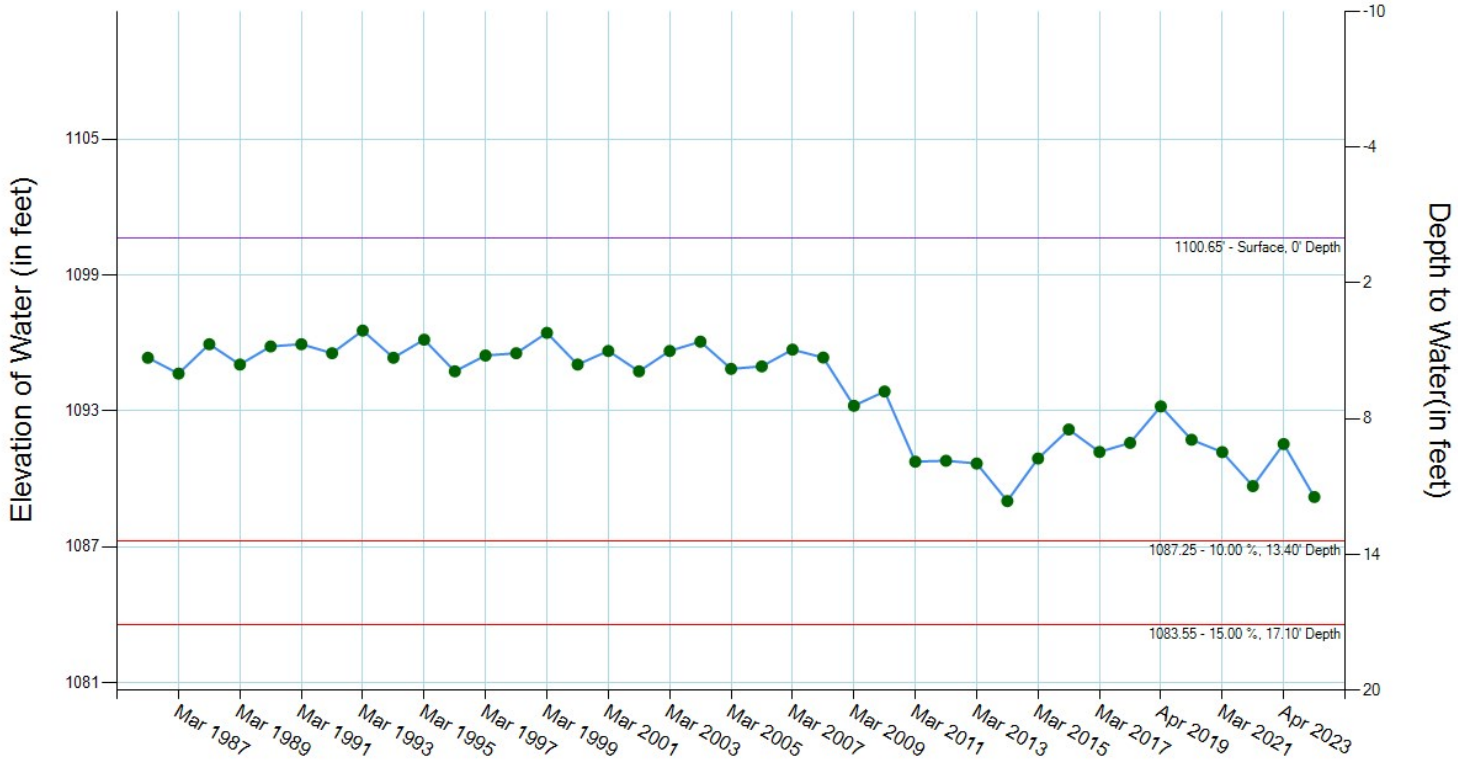
5. Texting and Emailing Policy
   A policy is attached for information on how texting and emailing will be conducted within the LPN departments.
6. Domestic Wells Permits
   At the last Board meeting it was approved to allow Bob Hilger to research this topic further. Bob would like further discussion from the Committee.
   The Committee discussed how the permit would be approved with more discussion at futrue meetings.
7. GMDA Summer Conference
   The plan is to hold the GMDA Summer Conference in Idaho Falls, Idaho on July 21 - 23.
8. SURFACE WATER PROGRAMS

9. OTHER

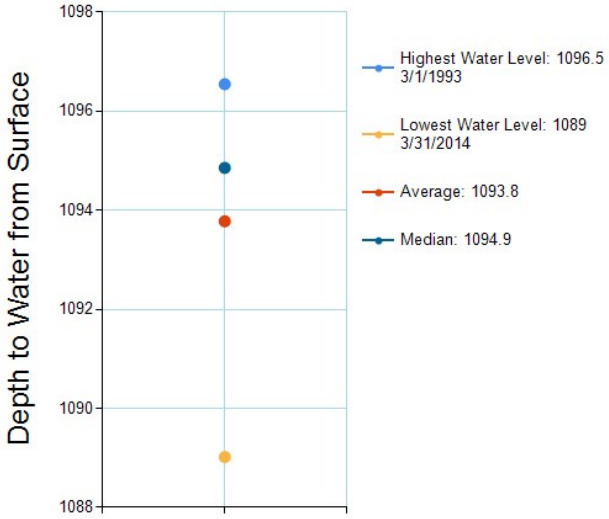
   9.A. COMMENTS FROM THE PUBLIC

RegCD: G-066531 **Well #:** PV-37
Region: Platte V. **County:** Saunders
Legal: 14-9E-13 **Owner Name:** Harold Kolb

Water Level Readings



Record Results

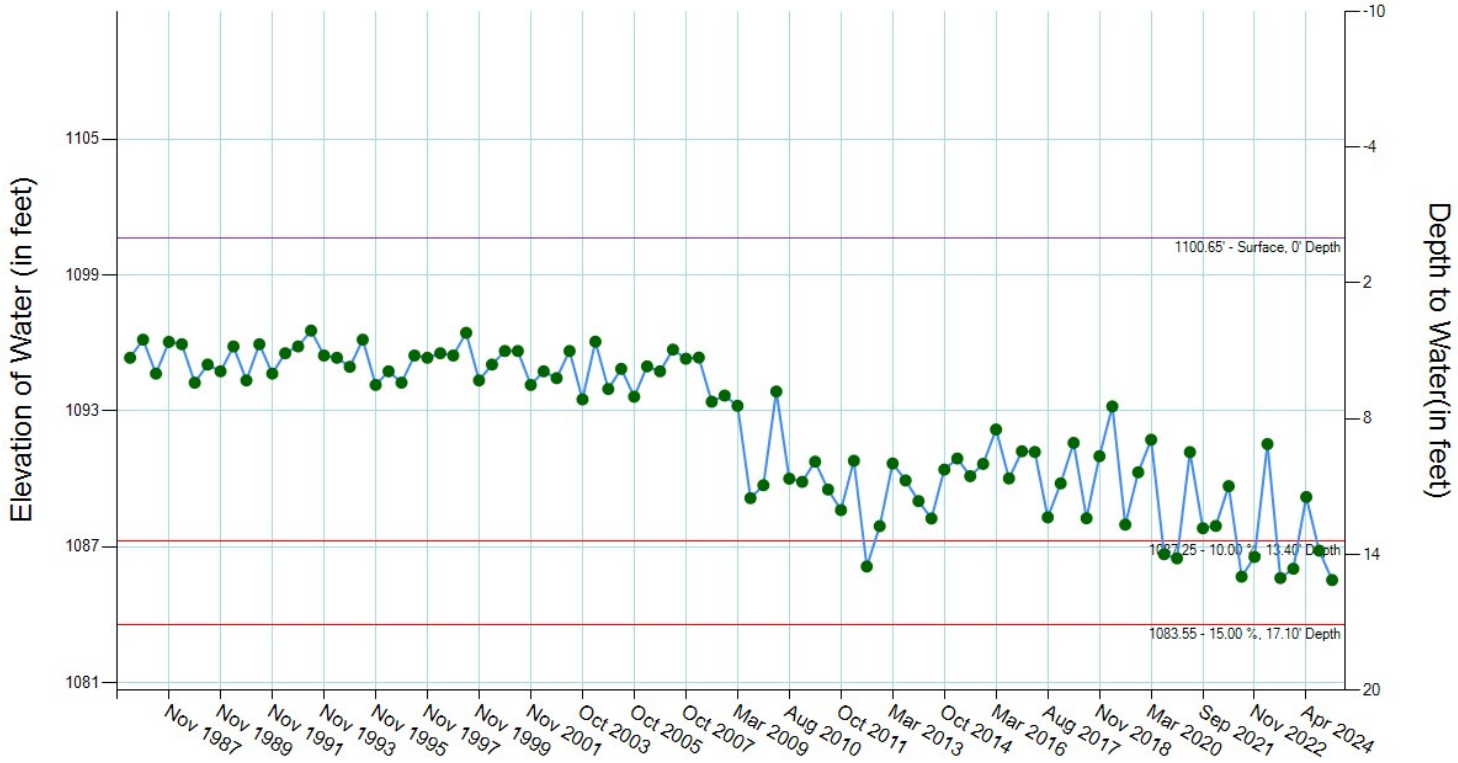


Historical Readings (date - reading)

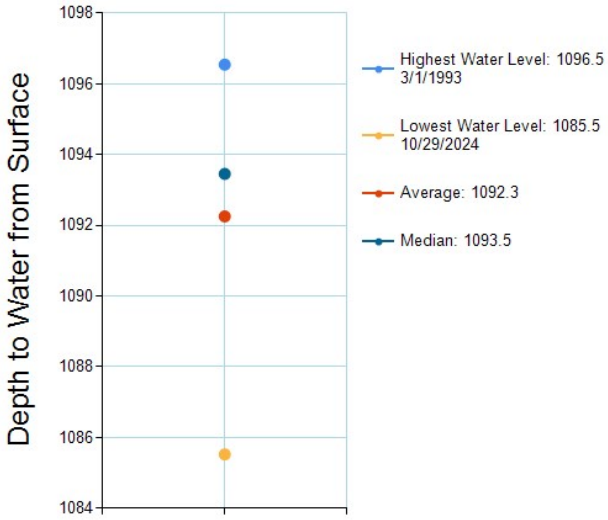
03/01/1986 - 1095.3	03/01/1996 - 1094.7	03/29/2006 - 1095	03/28/2016 - 1092.2
03/01/1987 - 1094.6	03/01/1997 - 1095.4	03/29/2007 - 1095.7	03/31/2017 - 1091.2
03/01/1988 - 1095.9	03/01/1998 - 1095.5	03/28/2008 - 1095.4	04/04/2018 - 1091.6
03/01/1989 - 1095	03/01/1999 - 1096.4	03/30/2009 - 1093.2	04/02/2019 - 1093.2
03/01/1990 - 1095.8	03/01/2000 - 1095	03/29/2010 - 1093.9	03/31/2020 - 1091.7
03/01/1991 - 1095.9	03/01/2001 - 1095.6	03/29/2011 - 1090.8	03/30/2021 - 1091.2
03/01/1992 - 1095.5	03/01/2002 - 1094.7	03/29/2012 - 1090.8	03/30/2022 - 1089.7
03/01/1993 - 1096.5	03/01/2003 - 1095.6	03/29/2013 - 1090.7	04/04/2023 - 1091.5
03/01/1994 - 1095.3	03/29/2004 - 1096.1	03/31/2014 - 1089	04/02/2024 - 1089.2
03/01/1995 - 1096.1	03/29/2005 - 1094.9	03/30/2015 - 1090.9	

RegCD: G-066531 **Well #:** PV-37
Region: Platte V. **County:** Saunders
Legal: 14-9E-13 **Owner Name:** Harold Kolb

Water Level Readings



Record Results



Historical Readings (date - reading)

03/01/1986 - 1095.3
11/01/1986 - 1096.1
03/01/1987 - 1094.6
11/01/1987 - 1096
03/01/1988 - 1095.9
11/01/1988 - 1094.2
03/01/1989 - 1095
11/01/1989 - 1094.7
03/01/1990 - 1095.8
11/01/1990 - 1094.3
03/01/1991 - 1095.9
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03/01/2003 - 1095.6
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10/29/2004 - 1094
03/29/2005 - 1094.9
10/31/2005 - 1093.6
03/29/2006 - 1095
10/30/2006 - 1094.7
03/29/2007 - 1095.7
10/30/2007 - 1095.3
03/28/2008 - 1095.4
08/26/2008 - 1093.4
10/30/2008 - 1093.7
03/30/2009 - 1093.2
08/27/2009 - 1089.1
10/30/2009 - 1089.7
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10/29/2010 - 1089.9
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10/28/2011 - 1088.6
03/29/2012 - 1090.8
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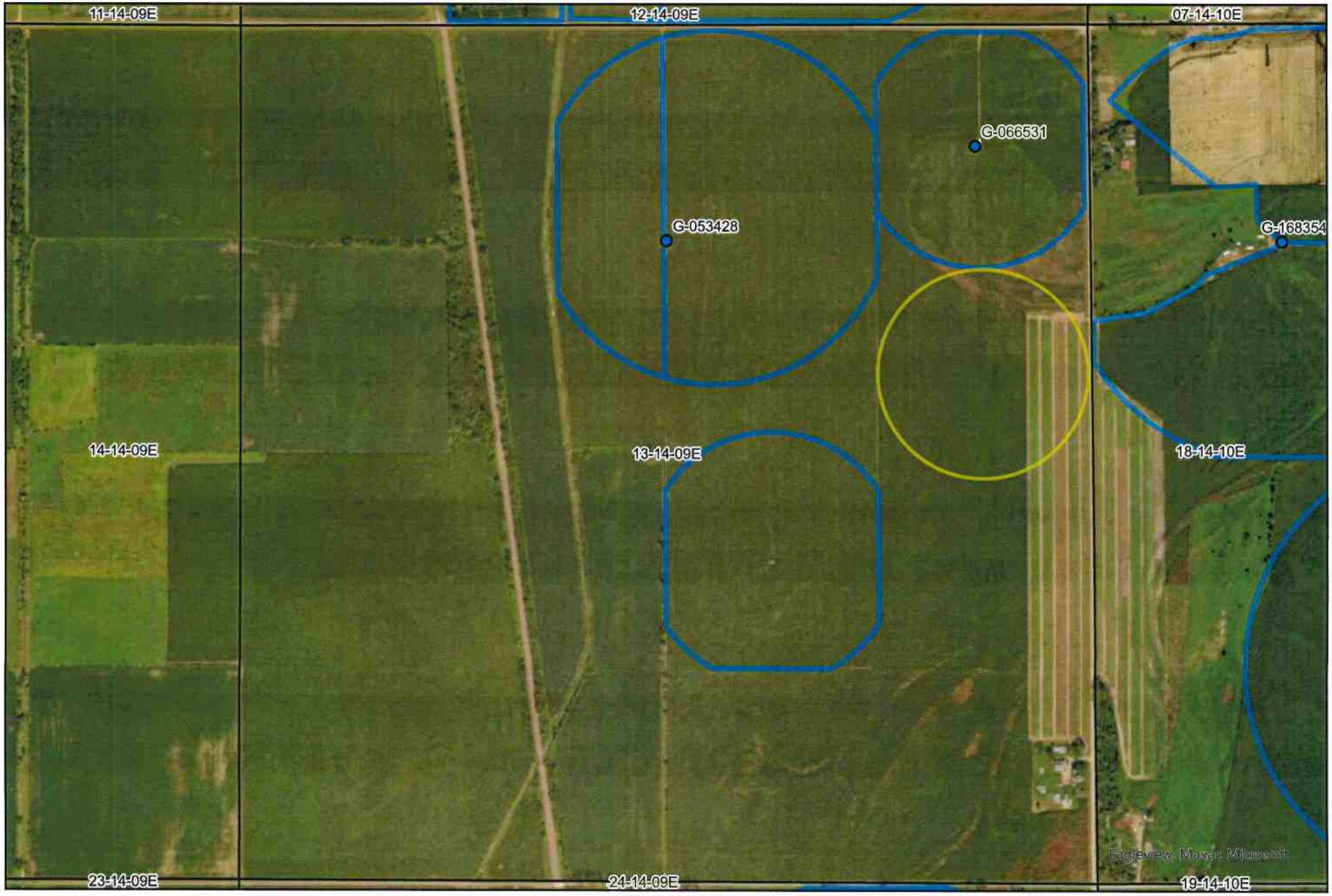
10/30/2012 - 1087.9
03/29/2013 - 1090.7
10/29/2013 - 1089.9
03/31/2014 - 1089
08/26/2014 - 1088.2
10/30/2014 - 1090.4
03/30/2015 - 1090.9
08/31/2015 - 1090.1
10/29/2015 - 1090.7
03/28/2016 - 1092.2
08/25/2016 - 1090
10/31/2016 - 1091.2
03/31/2017 - 1091.2
08/24/2017 - 1088.3
10/31/2017 - 1089.8
04/04/2018 - 1091.6
08/21/2018 - 1088.3
11/01/2018 - 1091
04/02/2019 - 1093.2
08/27/2019 - 1088
10/28/2019 - 1090.3
03/31/2020 - 1091.7
08/24/2020 - 1086.7
10/28/2020 - 1086.5
03/30/2021 - 1091.2
09/01/2021 - 1087.8
10/26/2021 - 1087.9
03/30/2022 - 1089.7
08/30/2022 - 1085.7
11/01/2022 - 1086.5
04/04/2023 - 1091.5
08/29/2023 - 1085.6
11/01/2023 - 1086
04/02/2024 - 1089.2
08/27/2024 - 1086.8
10/29/2024 - 1085.5


S13 T14N R9E
Elkhorn River
Omaha
94

Transfer From 35-14-9E
30.00 Acres

Transfer To 13-14-9E
30.00 Acres



Cassels Duck Pond
2378 County Rd 7
Fremont, NE 68025

Lower Platte North NRD - Water Committee,

The property at question, 2378 County Rd 7, we are wanting to develop the northwest area of our property that will hold water annually, from late October to early January. This land project is a dual-purpose project, providing migratory birds with water, food, and shelter on their fall migration along with providing recreational hunting usages to the landowner and family. The purpose of acquiring a permit for an irrigation well is so that this redesigned area can be flooded after harvest to provide for the migratory birds. The area would be roughly 10 acres and will range from 2" to 18" of water depth. The field will be surveyed and graded for proper water flow along with a berm being put in on the south boarder of the field. The berm will also be surveyed and graded to control any high-water during rains or snows throughout the period of October to January.

On the Southeast corner there will be a culvert with a water control structure (Agri Drain). This gated structure will allow us to maintain our water depth throughout the October to January period, with its spill off capabilities, while also allowing for a slow controlled release of the water beginning mid-January. The water will be exiting the culvert into an already existing creek system that runs through the property. With the ability to control depth and releasing of the water there would be no issues of flooding our property, our neighboring properties, and or any structures downstream.

After the purchase of the ground in the fall of 2019, the ground was turned into row crop in 2021. If granted a permit, our renter would begin the process of the getting the field certified as irrigated farm ground, with hopes of the well and dirt work being done before crops are in the ground in May, if at all possible, so as to not disturb the crop with the construction activity.

On the following pages you will find attached photos of the water control structure being used, our design plan for our property and an arial of the properties and structures downstream from the creek the water is being returned to.

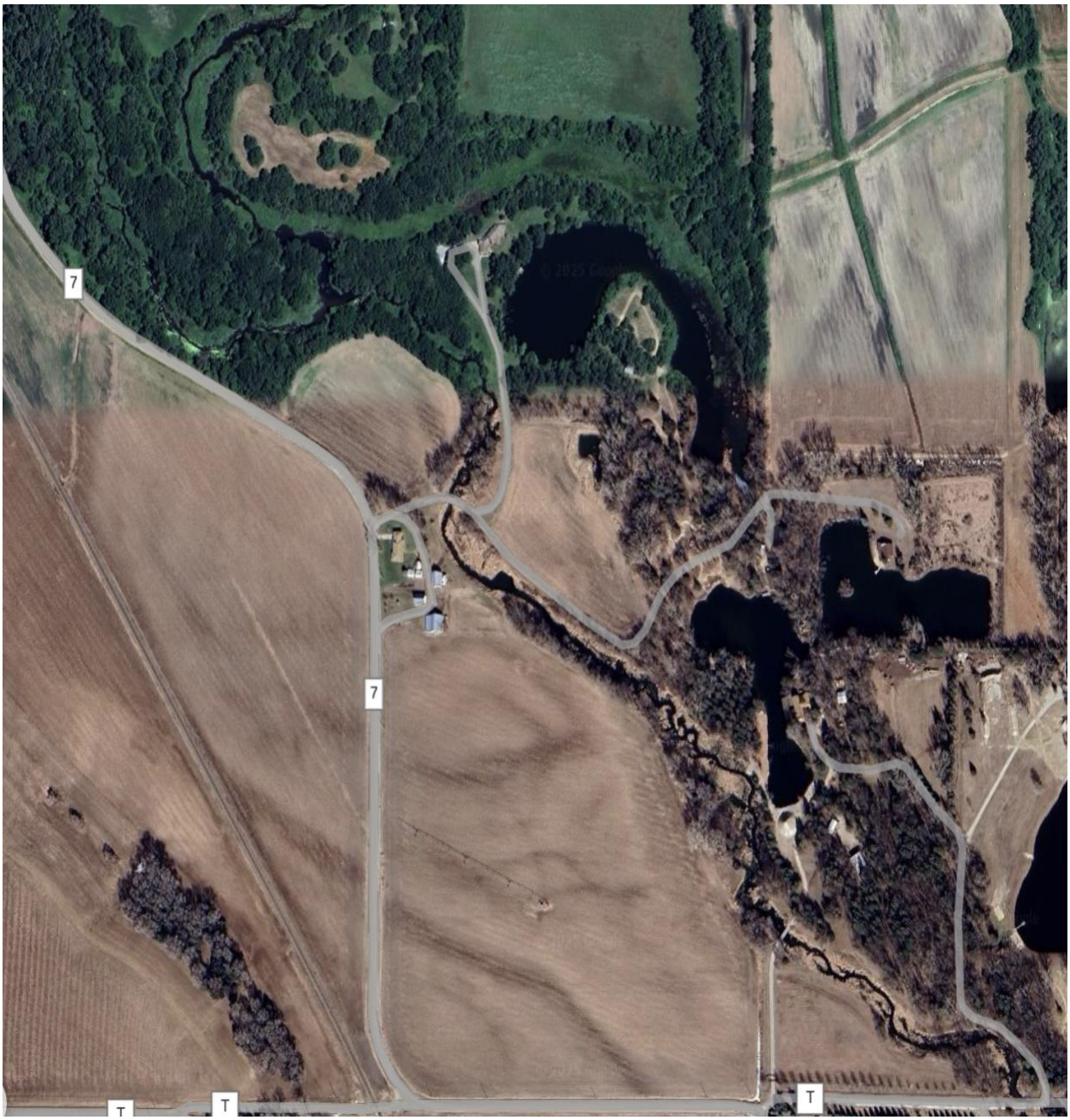
Thank you,

Scott Cassels-Landowner
Ryan Glow-Property Manager

Water Control Structures (Agri Drain):

Property Design Plan:

Properties and Structures Downstream:




Duck pond well
Platte River
Leshara Rd
Leshara
Image © 2025 Airbus

APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
IN THE *LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT*

DNR & NRD USE ONLY		
Permit No. _____	Date Approved/Denied _____	NRD Representative _____
Permit Type: New, Replacement or Late	Date Received _____	Paid: Cash or Check
Date Post-inspected _____	Registration No. _____	Updated Form: June 2022

ALL APPLICANTS SEEKING A WATER WELL PERMIT MUST COMPLETE PAGES 1 AND 2, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 1 – 4 WELL PERMIT)
WATER WELL PERMITS FOR IRRIGATED ACRES GREATER THAN 160 ACRES IN SIZE OR TOTAL ANNUAL WATER USE BETWEEN 150 AND 300 ACRE FEET PER YEAR MUST COMPLETE PAGES 1, 2, AND 3, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 3 WELL PERMIT)
WATER WELL PERMITS FOR TOTAL ANNUAL WATER USE EQUAL TO OR GREATER THAN 300 ACRE FEET PER YEAR, REGARDLESS OF NUMBER OF IRRIGATION ACRES, MUST COMPLETE PAGES 1, 2, AND 4, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 4 WELL PERMIT)

1. NAME AND ADDRESS OF **LAND OWNER:**
HF & F LLC
1303 N 136 Ave.
Omaha NE 68154
Phone: _____

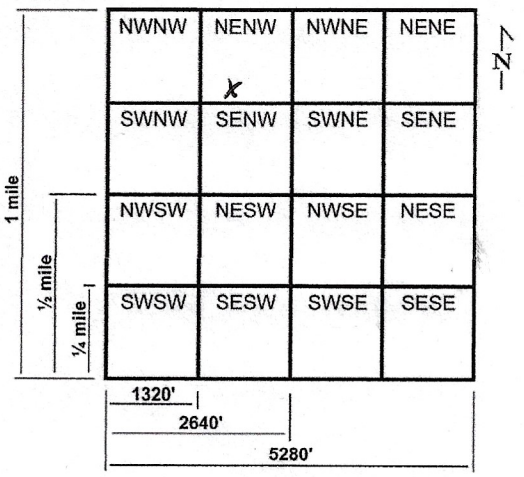
NAME AND ADDRESS OF **CONTACT:**
Ryan Glow
_____
_____
Phone: 402 238 6622

2. **PURPOSE OF NEW WATER WELL (indicate one):**
__ Irrigation (Complete section A)
__ Livestock (Complete section C)
__ Industrial (Complete section E)
__ Recovery or Remediation (Complete section G)
X Other (specify) Duck Pond (Complete section H)
__ Dewatering (Over 30 days, Complete section B)
__ Domestic (Irr. on one acre or larger, Complete section D)
__ Public Water Supply (Complete section F)

3. **IDENTIFY LOCATION OF PROPOSED WELL:**
A. Saunders County, NW ¼ of the NE ¼ of Section 20, Township 16 North, Range 9E East/West. (circle one)

B. The box at the right represents one square mile, (section). Indicate with an "X", the proposed location of the well. Outline the proposed water use area. If the water is to be used outside the above written legal description, give legal description of water use area,
____ ¼ of the ____ ¼ of Section ____,
Township ____North, Range ____ East/West.

C. The well will be located 699 feet from the North/South section line, and will be 1932 feet from the East/West section line. Or enter Lat. / Long.
Latitude Degree 41 Minute 20 Second 52.74
Longitude Degree -96 Minute 25 Second 58.15



4. **REPLACEMENT AND ABANDONED WELL INFORMATION:**
A. Is this a replacement well? __ Yes, X No If yes, fill out the rest of this section.
B. Registration number of well to be replaced: _____
C. Well to be replaced was last operated (month/year): _____
D. Replacement well is _____ feet from original well.
E. Decommissioning of Original well on (month/day/year): _____
F. If water use is for irrigation, list the number of acres watered by the original well: _____
G. If water use is for irrigation, will replacement well, water the same tract of land as the decommissioned well?
__ Yes, __ No: If No, list the number of additional acres _____ and legal description ____ ¼ of the ____ ¼ of Section ____, Township ____ North, Range ____ East/West. (circle one)

- A replacement water well must deliver water to the same tract of land as the original water well, pump from a comparable aquifer, and yield approximately the same gallons per minute and total annual water use as the original water well.

5. **SPECIFICATIONS OF INTENDED WELL AND PUMP:**
   A. Approximate date when construction will begin (month/day/year): April 2025
   B. Expected total well depth: 70 feet.
   C. Well Casing Diameter: 16 inches.
   D. Pump Column Diameter: 6 inches.
   E. Estimated pumping capacity: 600 GPM.
   F. Expected total annual water use in Acre Inches / Year 24 or Total Gallons / Year _____
   G. The system is to be powered by X Electric __ Fuel
   H. Will the well be used in a system with other wells? __ Yes, X No. If Yes, How many _____
      List well registration number and legal description of each well in Section 6 below.
   I. Name of Well Driller: AWS Well Co. (Please attach test hole log, if available.)

6. List additional information requested in this Section or attached additional sheet.

Well will be used to flood approximately 10 acres during duck hunting season.

7. Addition information and requirements for Lower Platte North NRD review.

- Attach current tax assessor records including map, parcel number, and current land use such as irrigated acres.
- Attach aerial photo showing location of water source(s) and area water or reuse water is to be used.
- All new and replacement water wells must install a District approved flow meter and report water pumped annually to the LPNNRD by January 31st of the following year. See approved list in this packet.
- Water well permit conditions maybe required for approval by the Lower Platte North NRD for each individual well.

8. I certify that I am familiar with the information contained in this application, and it's restrictions, rules and regulations and that to the best of my knowledge and belief such information is true, complete and accurate.

Date 19 Feb 2025 Signature of Applicant _____

Signature of Well System Operator, if different than Applicant _____

NRD Certification Number of Landowner or Operator _____ (Required for irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells.)

9. **Lower Platte North NRD Use Only. Comments by District Representative.**

File: WellPermit2008_050908.doc

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IN THE *LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT*

WATER WELL PERMIT FOR IRRGATED ACRES GREATER THAN 160 ACRES IN SIZE OR TOTAL ANNUAL WATER USE BETWEEN 150 AND 300 ACRE FEET PER YEAR, PROVIDE INFORMATION REQUESTED ON PAGES 1, 2, AND 3. (CLASS 3 WELL PERMIT)

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10. WATER SOURCE INFORMATION:

In a TWO-mile radius around the water source location, provide the following information to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

A. List of all registered wells in this area giving registration number, well identification number, legal description, latitude / longitude or UTM coordinates in NAD 83, elevation in feet above mean sea level, and well log for each well.

B. List of all test holes in the area that have been published by Conservation and Survey Division of the University of Nebraska.

C. List of all surface water rights in this area giving appropriation number, priority date, legal description, use, status, current total acres (if applicable), and grant amount.

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11. WATER USE LOCATION INFORMATION:

In the location where the water will be used, provide the following information to the LPNNRD in both paper copy and electronically in Word (Microsoft) format.

A. Description of expanded water use including: latitude / longitude or UTM coordinates in NAD 83 of water use location and timeframe or schedule when water will be used.

B. Amount of water that will be reused or recycled at this new location.

C. Description of how water will be used at this new location, i.e. process water vs. cooling water, etc. and estimated total annual water use for each purpose.

WATER WELL PERMIT FOR TOTAL ANNUAL WATER USE EQUAL TO OR GREATER THAN 300 ACRE FEET PER YEAR, REGARDLESS OF NUMBER OF IRRIGATED ACRES, PROVIDE INFORMATION REQUESTED ON PAGES 1, 2, AND 4. (CLASS 4 WELL PERMIT)

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12. WATER SOURCE INFORMATION:

In a FIVE-mile radius around the water source location, provide the following information to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

A. List of all registered wells in this area giving registration number, well identification number, legal description, elevation in feet above mean sea level, latitude / longitude or UTM coordinates in NAD 83, and well log for each well.

B. List of all test holes in the area that have been published by Conservation and Survey Division of the University of Nebraska.

C. List of all surface water rights in this area giving appropriation number, priority date, legal description, use, status, current total acres (if applicable), and grant amount.

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13. WATER USE LOCATION INFORMATION:

In the location where the water will be used, provide the following information to the LPNNRD in both paper copy and electronically in Word (Microsoft) format.

A. Description of expanded water use including: latitude / longitude or UTM coordinates in NAD 83 of water use location and timeframe or schedule when water will be used.

B. Amount of water that will be reused or recycled at this new location.

C. Description of how water will be used at this new location, i.e. process water vs. cooling water, etc. and estimated total annual water use for each purpose.

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14. AQUIFER PUMP TEST:

In the location of the proposed water source a District approved aquifer pump test is to be performed to obtain geologic data that will be used in the ensuing ground water modeling effort. Data from the pump test is to be reported to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

A. Description of pumping well should include legal description of well, latitude / longitude or UTM coordinates in NAD 83, elevation of well in feet above mean sea level, total amount of water pumped, gallons per minute during pump test, duration of pump test, well construction, well log, water discharge location and method.

B. Description of each monitoring well should include legal description of well, latitude / longitude or UTM coordinates in NAD 83, spacing in feet and direction from pumping well, elevation of well in feet above mean sea level, well log, and well construction.

C. Depth to bedrock, bedrock material, and name of geologic formation.

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15. GROUNDWATER MODEL:

In a FIVE-mile radius of the location of the proposed water source a ground water model using MODFLOW software, or similar software approved by LPNNRD, is to be done. Data from the ground water model is to be reported to the LPNNRD in both paper copy and electronically using the appropriate software.

A. Model should list boundary conditions used, grid size, include all high capacity wells in modeled area, streams and rivers in the modeled area, expected recharge rates, location and flow amounts, hydrologic conductivity and transmissivity values used.

B. At least one iteration, reviewed and approved by LPNNRD, should model steady state conditions over a five-year period with a no flow boundary, and little or no recharge to simulate drought conditions.

APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
IN THE *LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT*

PURPOSE OF WELL

IRRIGATION WELLS (SECTION A)

A. How many acres will be irrigated? _____ acres
B. Crops to be planted: _____ Crop rotation schedule _____
C. Type of irrigation system. __ Center Pivot, __ Gravity, __ Other (specify) _____
D. The irrigation system is to be powered by __ Electric __ Fuel
E. Expected total annual consumptive water use in Acre Inches / Year _____ or
Total Gallons / Year _____
F. Will Fertilizer, Chemicals or Animal waste be applied through the system? __ Yes, __ No

DEWATERING WELLS OVER 30 DAYS (SECTION B)

A. Purpose of dewatering well, such as installation of building foundation, etc. _____
_____
B. Expected total number of days the dewatering well will be in use _____
C. Approximate dates (month/day/year) in operation: Start _____ End _____
D. Legal description of water discharge location: ____ ¼ of the ____ ¼ of Section ____, Township ____North, Range ____ East/West and name of river, stream or water body _____
E. Will discharge water be used for another purpose, such as livestock, irrigation, etc.? __ Yes, __ No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.
_____
_____

LIVESTOCK WELLS (SECTION C)

A. Name of facility _____
B. Type of Livestock: ___ Feeder Cattle, ___ Dairy Cattle, ___ Swine over 55 lbs., ___ Swine under 55 lbs., ___ Sheep, ___ Poultry, ___ Horses
C. Average number of livestock per year _____ and average weight per animal _____ lbs.
D. Peak number of livestock _____ and time of year _____
E. Is facility approved by Nebraska Department of Environmental Quality? __ Yes, __ No. If Yes, list NDEQ certification IIS number _____ If No, complete the rest of this section.
F. Type of facility: ___ Open lot, ___ Covered Building
G. If facility is Open lot, list soil type _____
H. Estimated depth to ground water under feedlot _____ ft.
I. Describe manure collection system of feedlot _____
_____
J. Name and distance of nearest surface watercourse from feedlot _____
K. For each manure land application site, list legal description and size in acres, method of application, and distance from feedlot operation. _____
_____
_____

DOMESTIC WELLS WITH IRRIGATION ON ONE ACRE OR MORE (SECTION D)

A. Check all that apply:
a. Water use: ___ Lawn and number of acres to be irrigated _____ acres.
b. Water use: ___ Commercial garden and number of acres to be irrigated _____ acres.
c. Water use: ___ Tree Farm and number of acres to be irrigated _____ acres.
d. Water use: ___ Type of livestock _____ and number _____
B. Type of irrigation system. __ Sprinkler, __ Drip Tape, __ Other (specify) _____
C. If applicable, give Street address and town _____
_____

* One acre equals 43,560 square feet.

INDUSTRIAL AND COMMERCIAL WELLS (SECTION E)

A. Name of facility _____
B. Products produced by facility _____
C. In Section 6 or on a separate sheet of paper, list well registration number and legal description of current wells supplying water to this facility.
D. In Section 6 or on a separate sheet of paper, provide a short description how water is used within the facility and the expected annual amount of water for each use. For example: "The manufacturing plant will use 45% of total annual water use, or 1.45 million gallons per year, for electroplating of galvanized pipe and the remaining 55% of total annual water use, or 1.77 million gallons per year, will be used for non-contact cooling water throughout the plant".
E. Will any of the used water or waste water from this facility be re-used for another purpose? __ Yes, __ No.
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.
_____
_____

PUBLIC WATER SUPPLY WELLS (SECTION F)

A. On a separate sheet of paper, list the well registration numbers and legal description of current wells supplying water to this community.
B. Attach a list of the five largest industrial water users that your community supplies water to, and the total annual amount of water supplied to each of these industries for the last five years.
C. For these same industries list the total annual amount of water returned to the community as waste water for each of the last five years.
D. Will waste water be used for another purpose, such as livestock, irrigation, etc.? __ Yes, __ No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.
_____
_____
E. Attach a list of the golf courses that the community supplies water to and list the location and number of acres for each one.

RECOVERY OR REMEDIATION WELLS (SECTION G)

A. Reason for recovery or remediation well, i.e. leaking underground storage tank. _____
_____
B. Contaminates of concern _____
C. Treatment method of contaminates _____
D. Approximate dates (month/day/year) in operation: Start _____ End _____
E. Legal description of water discharge location: ____ ¼ of the ____ ¼ of Section ____, Township ____North, Range ____ East/West and name of river, stream or water body _____
F. Will cleanup water be used for another purpose, such as livestock, irrigation, etc.? __ Yes, __ No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.
_____
_____

OTHER WELLS (SECTION H)

A. Purpose of water use Duck Pond filling
B. Will the well be used for one calendar year or less? __ Yes, X No
   a. If Yes, list approximate dates (month/day/year) the well will be in operation: Start _____ End _____
   b. If No, list the approximate dates (months) or seasons of the calendar year that well is expected to be in peak or highest use. Oct - Feb
C. Legal description of water discharge location: NW ¼ of the NE ¼ of Section 20, Township 16 North, Range 9 (East)/West and name of river, stream or water body NA

File: WellPermit2008_050908.doc

This form must be completed in full and accompanied by a non-refundable $50.00 filing fee (payable to the Lower Platte North Natural Resources District). In addition, for Class 3 well permits an added fee of $250.00 is required for District review. For Class 4 well permits an added fee of $500.00 is required for District review. Forward this application and filing fees to:

Lower Platte North Natural Resources District
P.O. Box 126
Wahoo, NE 68066
Phone: (402) 443-4675

Please take the time and fill out the information correctly. The District will return an incomplete or defective application, with 60 days being allowed for resubmission. The District shall issue all permits with conditions attached, or denied not later than 30 days after receipt of a complete and properly prepared application.

WATER WELL PERMIT RESTRICTIONS

1. A well permit is required prior to the construction of a water well. If construction of a water well is commenced prior to obtaining a permit, a late permit must be completed and accompanied by a $250.00 application fee. Construction or operation of a new water well without an approved water well permit shall result in the District issuing a 'cease and desist order' against further construction or use of that water well.
2. An irrigation well shall not be constructed within 1000 feet of any registered industrial or public water supply well or within 600 feet of a registered irrigation well; A public water supply well shall not be constructed within 1000 feet of any registered irrigation, industrial or other public water supplier's well; An industrial well shall not be constructed within 1000 feet of any registered irrigation, industrial or public water supply well pursuant to §46-609 and §46-651. These spacing restrictions shall not apply to water wells owned by the same person. Any person may apply to the Nebraska Department of Natural Resources for a special permit to drill a water well without regard to the spacing requirements pursuant to §46-653. The District may adopt stricter well spacing requirements based on different aquifer subareas. Check with the District office if you have any questions.
3. This permit does not register the well with the Department of Natural Resources. All wells are required to be registered by the well driller with the Nebraska Department of Natural Resources within 60 days after the well is completed.
4. A replacement water well is one, which replaces an abandoned water well that has been operated within the last three years, and is constructed to water the same tract of land as the abandoned water well that is being replaced. A replacement water well must be pumping from a comparable aquifer and yield approximately the same gallons per minute and total annual water uses as the original water well it is replacing. As of January 1, 1997, both new and replacement wells need a permit from the Lower Platte North Natural Resources District.
5. Consumptive water use in acre-inches is determined from the Department of Natural Resources (DNR) Net Corn Crop Irrigation Requirement map or a similar map produced by the University of Nebraska.
6. If the well is being replaced it must be properly abandoned according to state guidelines. A copy of these guidelines is available from the Lower Platte North NRD.
7. If the water well is not constructed within a one-year period from the date of approval, a new permit is needed.
8. Water wells may not be drilled within 50 feet of a stream bank without first obtaining a surface water right for that water withdrawal from the Department of Natural Resources pursuant to §46-637.
9. Any person who, on or after January 1, 1997, commences or causes construction of such a well for which the required permit has not been obtained, or who knowingly furnishes false information regarding such a permit, shall be guilty of a Class IV misdemeanor pursuant to §46-602.01 and §46-613.02.
10. Permits are not required for test holes or temporary dewatering wells (30 days or less). Permits are needed for water wells designed to pump 50 gallons per minute or less in Level 3 and Stay management areas.
11. Tax assessor records submitted with water well permit must include map, parcel number and an accurate account of current land use, such as irrigated acres.
12. With the well permit application, submit an aerial photograph with markings to show the location of the water source(s) and the location of where the water is to be used.
13. Any person, who knowingly furnishes false information regarding a water well permit, shall be subject to the imposition of penalties imposed through the controls adopted by the District pursuant to §46-746.
14. All new or replacement water wells must install a District approved flow meter and report water pumped annually in acre-inches per year or total gallons per year on LPNNRD approved forms by January 31st of each following year.
15. If multiple water sources are used, landowner must supply flow records from each water source in acre-inches per year or total gallons per year on LPNNRD approved forms by January 31st of each following year.
16. Water well permit applications require that the applicant or operator of irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells by NRD certified.

**** Landowners must list new irrigated acres with the County Assessor, update the DNR well registration, and comply with any additional conditions within 90 days of LPNNRD approval of this water well permit. LPNNRD staff may perform a site visit to verify information provided in the well permit application. ****

Approved List of Propeller Flow Meters
Lower Platte North Natural Resources District (LPNNRD)
Effective: April 11, 2022

Approved List of Propeller Flow Meters and Required Conditions

LPNNRD requirements for all propeller flow meters:

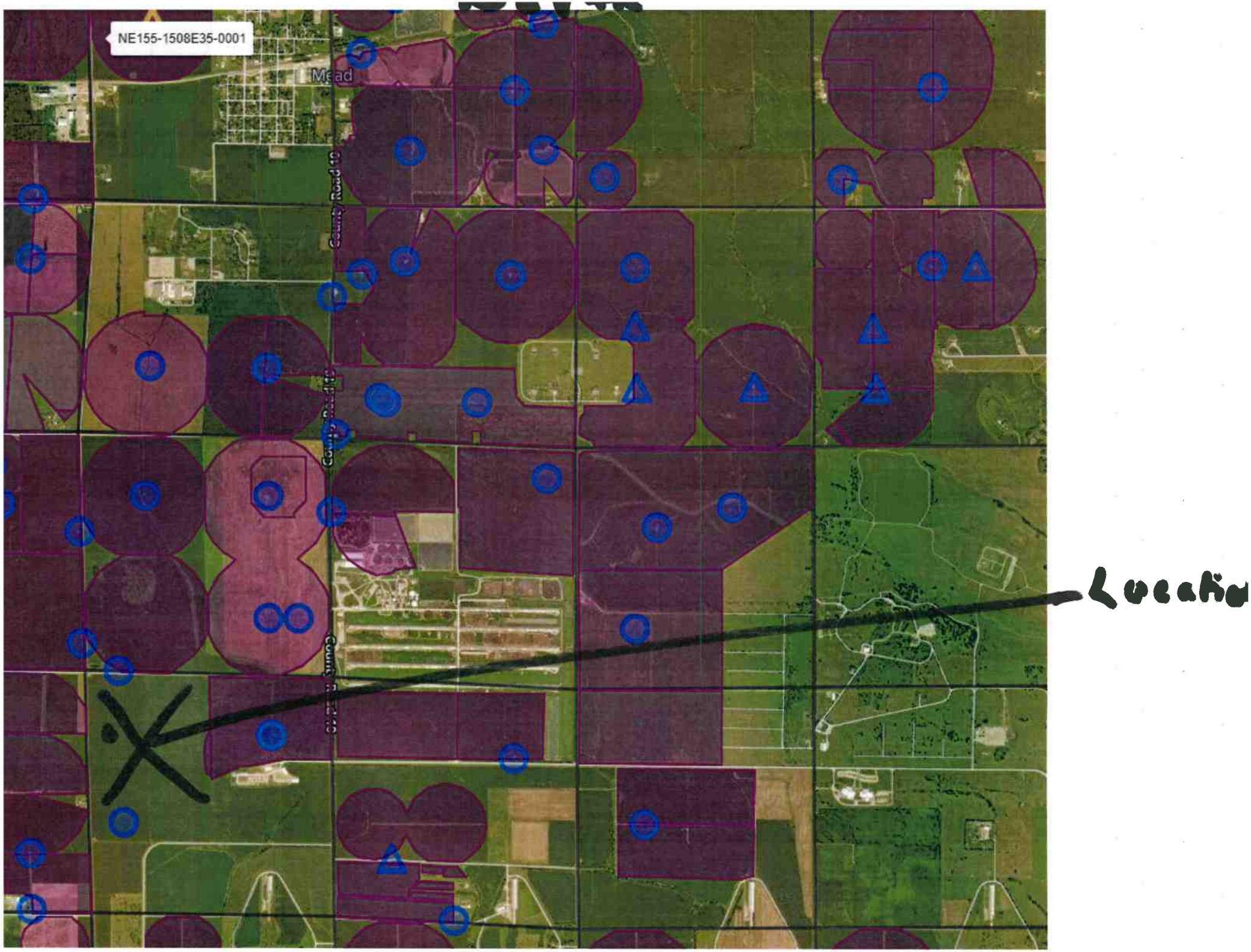
- Anti-reverse flow feature to prevent backflow.
- Follow manufactures installation recommendations taking into account in-pipe jetting or non-jetting flow conditions. (Correct installation of the flow meter is critical to getting an accurate reading. Most meters require a straight pipe before and after the flow meter that is at least equivalent to five times the pipe diameter in order to obtain an accurate flow measurement. Doing the installation correctly the first time saves money in the long run).
- Straightening vanes are required according to manufacturer's installation recommendations for in-pipe jetting or non-jetting flow conditions.
- Meter must be positioned to ensure water totally fills the pipe, such as a level pipe or positioned on a riser.
- Meter must be configured: to inside and outside diameter of the pipe, material of the pipe, meter used that will operate within minimum and maximum output flow rates of the well, horizontal or vertical installations, and unobstructed straight run distance upstream and downstream of meter and in most cases straightening vanes (or other flow straightener) will be necessary.
- Meter totalizes flow in acre inches and flow meter dial is in gallons per minute.
- A flow meter must be dedicated to each individual well. (Exceptions will be made if several wells are used to provide enough water to operate a single irrigation system such as a pivot or gated pipe. In these situations a flow meter placed at the central location where all water can be metered is acceptable).

Manufacturer	Model	Notes
McCrometer	McPropeller	All propeller models
Sparling	Propeller saddle meter	Model 312 propeller meter
Geyser	Saddle meter	All propeller models for Farmland Irrigation

LPNNRD prefers the following added features for all propeller flow meters:

- Over-run bearing (or extra bearing) for smother operation and to extend life of the meter
- Canopy cover to protect meter

LPNNRD will inspect systems for proper installation of flow meters


NE155-1508E35-0001
Mead
County Road 19
County Road 19
County Road 19
Location

5. **SPECIFICATIONS OF INTENDED WELL AND PUMP:**
   A. Approximate date when construction will begin (month/day/year): 11-25
   B. Expected total well depth: 150 feet.
   C. Well Casing Diameter: _____ inches.
   D. Pump Column Diameter: _____ inches.
   E. Estimated pumping capacity: 500 GPM.
   F. Expected total annual water use in Acre Inches / Year 10 or Total Gallons / Year _____
   G. The system is to be powered by √ Electric __ Fuel
   H. Will the well be used in a system with other wells? √ Yes, __ No. If Yes, How many 1
      List well registration number and legal description of each well in Section 6 below.
   I. Name of Well Driller: AWS (Please attach test hole log, if available.)

6. List additional information requested in this Section or attached additional sheet.
There is an existing well (G-064906) on this quarter of land that will lose flow during the irrigation season. The option of drilling a deeper well on the property was considered; but the potential for sodium is too high. With that said, we are seeking approval to use the existing well in conjunction with a new well for supplying water to the existing center pivot.

7. Addition information and requirements for Lower Platte North NRD review.

- Attach current tax assessor records including map, parcel number, and current land use such as irrigated acres.
- Attach aerial photo showing location of water source(s) and area water or reuse water is to be used.
- All new and replacement water wells must install a District approved flow meter and report water pumped annually to the LPNNRD by January 31st of the following year.
- Water well permit conditions maybe required for approval by the Lower Platte North NRD for each individual well.

8. I certify that I am familiar with the information contained in this application, and it's restrictions, rules and regulations and that to the best of my knowledge and belief such information is true, complete and accurate.

Date 2/26/2025 Signature of Applicant Katy Wolf Bode
Signature of Well System Operator, if different than Applicant Rick Bennett
NRD Certification Number of Landowner or Operator 7533 (Required for irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells.)

9. **Lower Platte North NRD Use Only. Comments by District Representative.**

File: WellPermit2008_050908.doc

FIRST AMENDMENT TO NeDNR CONTRACT #1558

WHEREAS, the Nebraska Department of Natural Resources and Lower Platte North Natural Resources District collectively referred to as "Parties" entered into NeDNR Contract #1558 on November 9, 2024, for the purpose of participating in the Nitrogen Reduction Incentive Act Program.

WHEREAS, the Parties desire to amend NeDNR Contract #1558 to change the total reimbursable amount under the agreement.

NOW THEREFORE, the Parties hereby mutually agree to the following amendments:

Last WHEREAS clause:

WHEREAS, the Department awards the District a grant for up to Sixty Six Thousand Nine Hundred and Eighty Two Dollars and Ninety Two Cents ($66,982.92) to disburse to producers contingent upon compliance with the Program, and continued merit and eligibility for the funding.

Paragraph 3. Reimbursement.

C. The total reimbursement amount and payments may not exceed Sixty Six Thousand Nine Hundred and Eighty Two Dollars and Ninety Two Cents ($66,982.92) and reimbursements shall be limited to amounts approved by the Department. If the District does not enter into individual producer agreements equal to Sixty Six Thousand Nine Hundred and Eighty Two Dollars and Ninety Two Cents ($66,982.92) the Department may reallocate unobligated funds to other natural resources districts within the Program in order to carry out the Act. The Department may utilize funds from the Nebraska Department of Environment and Energy's ONERED program as a reimbursement source under this Agreement.

Except as expressly set forth herein, all other terms and conditions of NeDNR Contract #1558 and its Attachments shall remain unchanged and in full force and effect. The effective date of this First Amendment shall be the date of the signature last affixed hereto.

IN WITNESS WHEREOF, the Parties to this First Amendment, through their duly authorized representatives, have executed this First Amendment on the dates set forth below.

By: Eric Gottschalk, General Manager
Lower Platte North Natural Resource District
511 Commercial Park Road
Wahoo, NE 68066

_____ Date:_____

By: Jesse Bradley, P.G., Interim Director
Nebraska Department of Natural Resources
245 Fallbrook Blvd., Suite 201
Lincoln, NE 68521

_____ Date:_____

EMAIL ONLY

ENWRA

PO Box 83581 Lincoln, NE
68501-3581

INVOICE

INVOICE: #3086

Date: January 28, 2025

TO:

Lower Platte North Natural Resources District
PO Box 126
Wahoo, NE 68066
Attn: Daryl Andersen

DESCRIPTION	AMOUNT
FY 2025 ENWRA annual dues	$30,000
TOTAL	**$30,000**

Make all checks payable to: **ENWRA**

THANK YOU!

NEBRASKA NATURAL RESOURCES COMMISSION

Water Sustainability Fund

Application for Funding

Section A.

ADMINISTRATIVE

PROJECT NAME: LPNNRD Source Water Monitoring Project

SPONSOR'S *PRIMARY CONTACT INFORMATION* **(Not Consultant's)**

Sponsor Business Name: Lower Platte North Natural Resources District

Sponsor Contact's Name: Jacob Maslonka

Sponsor Contact's Address: 511 Commercial Park Road Wahoo, NE 68066

Sponsor Contact's Phone: 402-443-4675

Sponsor Contact's Email: jmaslonka@lpnnrd.org

1. **Funding** amount requested from the Water Sustainability Fund:

   Grant amount requested. $ 248,807

   - If requesting less than 60% cost share, what %? Click here to enter text.

   If a loan is requested amount requested. $ Click here to enter text.

   - How many years repayment period? Click here to enter text.
   - Supply a complete year-by-year repayment schedule. Click here to enter text.

2. **Neb. Rev. Stat. § 2-1507 (2)**

   Are you applying for a **combined sewer overflow 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☐
- Attach a copy to your application. Click here to enter text.
- What is the population served by your project? Click here to enter text.
- Provide a demonstration of need. Click here to enter text.
- **Do not complete the remainder of the application.**

3. **Permits Required/Obtained** Attach a copy of each that has been obtained. For those needed, but not yet obtained (box **"NO"** checked), 1.) State when you will apply for the permit, 2.) When you anticipate receiving the permit, and 3.) Your estimated cost to obtain the permit.

(N/A = Not applicable/not asking for cost share to obtain)
(Yes = See attached)
(No = Might need, don't have & are asking for 60% cost share to obtain)

G&P - T&E consultation (required)	N/A☒ Obtained: YES☐ NO☐
DNR Surface Water Right	N/A☒ Obtained: YES☐ NO☐
USACE (e.g., 404/other Permit)	N/A☒ Obtained: YES☐ NO☐
FEMA (CLOMR)	N/A☒ Obtained: YES☐ NO☐
Local Zoning/Construction	N/A☒ Obtained: YES☐ NO☐
Cultural Resources Evaluation	N/A☒ Obtained: YES☐ NO☐
Other (provide explanation below)	N/A☒ Obtained: YES☐ NO☐

Click here to enter text.

4. **Partnerships**

List each Partner / Co-sponsor, attach documentation of agreement:

N/A

Identify the roles and responsibilities of each Partner / Co-sponsor involved in the proposed project regardless of whether each is an additional funding source.

N/A

5. **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 the Where feasible, implement cost-share programsfor irrigation conservation by partnering withproducers in technologies that improve irrigationefficiency and track water usage over time.project will be $414,678. The LPNNRD will provide $165,871 with the remaining $248,807 of the proposed project coming from the Water Sustainability Fund. Attached is the LPNNRD Fiscal Year 2025 Budget.

6. **Overview**

In 1,000 words *or less*, provide a brief description of your project including the nature/purpose of the project and its objectives. Do not exceed one page!

The Lower Platte North Natural Resources District (LPNNRD) has been recently working on developing a drought mitigation plan and updating the Groundwater Management Plan along with associated Rules and Regulations. To complete these plans, District personnel individually met with Community Public Water Systems to gather information about their system and how prepared they are for future droughts and water quality threats. Meetings with public water system operators and elected officials over the past six months have revealed a need for more dedicated monitoring wells to fill gaps in the district's monitoring network and assist Public Water Systems with short and long-term planning. This project proposes installing dedicated monitoring wells, installing transducers with telemetry, and collecting samples with analysis. Wells are planned within Wellhead Protection (WHP) area modeled time-of-travel paths, nested in clusters of 1-3 per area based on localized geology and aquifer conditions. Real time data loggers and telemetry will be installed in all wells so Public Water Systems and the LPNNRD can continuously monitor changes in water levels. Capturing data during high pumping and drought conditions is vital to getting a more complete picture of how the aquifer recharges and reacts when stressed. Along with collecting real-time water level data in these WHP areas, wells will also allow the district to collect more frequent water quality samples with a higher degree of quality assurance. This will allow for trend analysis, helping predict potential future needs so appropriate resources can be planned. Specifically, this project proposes installing 29 monitoring wells into 12 of the district's most vulnerable Community Public Water Systems. The Conservation and Survey Division (CSD)

will be utilized to drill test holes at all 12 locations to allow for proper monitoring well design by a Professional Geologist. The test hole data will be added to CSD's database making it available to the public. Approximately 10 wells per year are planned for three years. Expanding the LPNNRD's dedicated monitoring well network through this funding is an important step to getting more real time data to help monitor groundwater in Eastern Nebraska. This will give the district a larger sample of better data, and just as importantly, give Communities within the District defendable data so they can better monitor their source water and be able to prepare for any issues that may arise in the future.

7. **Project Tasks and Timeline**

Identify what activities will be conducted to complete the project, and the anticipated completion date.
For multiyear projects please list (using the following example):

Tasks	Year 1$	Year 2$	Year 3$	Remaining	Total $ Amt.
Permits	$18,000				$18,000
Engineering		$96,000			$96,000
Construction		$87,000	$96,000		$183,000
Close-out				$8,000	$8,000
				TOTAL	$305,000

- What activities (Tasks) are to be completed.
- An estimate of each Tasks expenditures/cost per year.
- Activities in years 4 through project completion under a single column.

The project aims to construct 29 monitoring wells into the Wellhead Protection Areas (WHPs) of the district of the course of 3 years. The LPNNRD will begin by having the CSD drill test holes in viable locations to construct the monitoring wells. The wells will then be designed by a Professional Geologist. Along with the construction of these monitoring wells, the district plans to put real time data loggers installed with telemetry into the wells. Finally, the LPNNRD will run water quality analysis at every monitoring site. The total cost of the project is $414,678. The breakdown of the budget is below.

Tasks	Year 1	Year 2	Year 3	Total
Test Hole Cost $15/ft	$22,050	$21,525	$16,500	
Well Construction Cost	$97,200	$105,356	$60,800	
Data Loggers	$11,008	$9,907	$11,008	
Telemetry Cost	$11,400	$10,260	$11,400	
Cable Cost	$6,719	$6,440	$5,461	

DHHS 13 Parameter Water Sampling Kit	$2,730	$2,184	$2,730	
				$414,678

8. **IMP**

Do you have an **Integrated Management Plan** in place, or have you initiated one? YES☒ NO☐ Sponsor is not an NRD☐

Section B.

DNR DIRECTOR'S FINDINGS

Prove Engineering & Technical Feasibility
(Applicant must demonstrate compliance with Title 261, CH 2 - 004)

1. Does your project include physical construction (defined as moving dirt, directing water, physically constructing something, or installing equipment)?
YES☐ NO☒

If you answered "YES" you must answer all questions in section 1.A.
If you answer "NO" you must answer all questions in section 1.B.

If "YES", it is considered mostly structural, so answer the following:

1.A.1 Insert a feasibility report to comply with Title 261, Chapter 2, including engineering and technical data; Click here to enter text.

1.A.2 Describe the plan of development (004.01 A); Click here to enter text.

1.A.3 Include a description of all field investigations made to substantiate the feasibility report (004.01 B); Click here to enter text.

1.A.4 Provide maps, drawings, charts, tables, etc., used as a basis for the feasibility report (004.01 C); Click here to enter text.

1.A.5 Describe any necessary water and/or land rights including pertinent water supply and water quality information (004.01 D); Click here to enter text.

1.A.6 Discuss each component of the final plan (004.01 E); Click here to enter text.

1.A.7 When applicable include the geologic investigation required for the project (004.01 E 1); Click here to enter text.

1.A.8 When applicable include the hydrologic data investigation required for the project (004.01 E 2); Click here to enter text.

1.A.9 When applicable include the 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.

If "NO", it is considered mostly non-structural, so answer the following:

1.B.1 Insert data necessary to establish technical feasibility (004.02); **Installing dedicated monitoring wells is common practice throughout the NRDs. These monitoring wells will also be equipped with transducers with**

telemetry installed so the LPNNRD and the public water system will get continuous data on water levels. The proposed project will start by having CSD drill test holes in viable spots upgradient from municipal wells and then having the monitoring wells designed by a Professional Geologist. The test hole data will be made public through CSD. After the wells have been installed, the LPNNRD will then take water samples using DHHS 13 Parameter Sampling Kit to start collecting data on the condition of the source water in the area. Public Water Systems will then be able to see the data collected from these monitoring wells to aid in decision making when it comes to their system.

1.B.2 Discuss the plan of development (004.02 A); **The LPNNRD will begin by consulting with a team of Nebraska Department of Environment and Energy (NDEE) and UNL-Conservation and Survey Division (CSD) Professional Geologists (PG) to review existing WHP area delineations and update if needed. NDEE does a simplified version of this utilizing NeDNR regional models for free. Once WHP area time-of-travels are finalized, the team will define priority locations for new wells and work with landowners for permission. Test holes will be drilled and logged in cooperation with CSD and data will be added to the statewide test hole database. The team of PGs will design dedicated monitoring wells based on test hole data and other accessible hydrogeologic data. Their design will include nested wells – two or more wells at the same geographic location but screened at different depths – when appropriate. Dedicated water level transducers will be installed at all wells, at depths specified by the team. Telemetry will be included with all loggers making real-time water levels available to the Public Water System, LPNNRD, and NeDNR. Once wells are fully developed, a water quality sample will be collected and analyzed for a suite of drinking water constituents (13 Parameter analysis) at the Nebraska DHHS Laboratory. Analysis results will be evaluated by the team and shared with the Public Water System and uploaded to the Nebraska Groundwater Quality Clearinghouse. As the project concludes, the team will regroup to discuss water quantity and quality results to make plans for future trend analysis and sampling planning.**

1.B.3 Describe field or research investigations utilized to substantiate the project conception (004.02 B); **The LPNNRD discovered the need for this project based on a few different projects and plans that have recently taken place. The first was talking to the public water systems in our district. This was done to gather information for the drought mitigation plan that is currently being developed for the district. These meetings were designed for the public water systems to answer questions not only about their vulnerability to drought, but also their water quality and quantity issues. A common**

theme from these talks was the need for more monitoring in the source water areas. When asked if more monitoring wells in these areas were needed, most public water systems agreed that more monitoring would be a good thing. Apart from the meetings, the consultant group JEO has put together a vulnerability matrix, which guided the district in which source water areas to put monitoring wells in. These public water systems were found to be the most at-risk in the district. Aside from the drought mitigation plan, the LPNNRD is also going through an update to the Groundwater Management Plan (GWMP). Based on work LRE has done to update the plan, it was found that there are spatial holes in our dedicated water level monitoring network. This project looks to remedy this by placing dedicated monitoring wells strategically in these source water areas where they are upgradient of public water system wells.

1.B.4 Describe any necessary water and/or land rights (004.02 C); **The LPNNRD will develop agreements with landowners for drilling test holes and wells as well as long term access to said site. The LPNNRD will maintain monitoring sites.**

1.B.5 Discuss 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). **No structural measures are proposed.**

Prove Economic Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 005)

2. Provide evidence that there are no known means of accomplishing the same purpose or purposes more economically, by describing the next best alternative. **There are not currently wells in appropriate locations to collect the quantity of good data to guide public water systems to make educated long-term planning decisions. This project seeks to add to LPNNRD's monitoring well network and collect real time data using telemetry. Having these monitoring wells will give LPNNRD and public water systems critical data as to how the aquifer they are pulling from reacts to stress during dry spells or during high pumping times during the growing season. The next best alternative to this project would be to still install said monitoring wells with data loggers, but no telemetry. This would result in more cost overall once drive time, employees' salaries, benefits, and time at each well are accounted for.**

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 is the project life. (Title 261, CH 2 - 005). **The benefit of this project is the access to real-time data on water quality and quantity in WHP areas throughout the year. With dedicated loggers and telemetry, the district will be able to collect data on how the aquifer reacts to usage throughout the year instead of the district's routine twice a year sampling. This will be interesting in the short term; however, the real benefit is after long term data capturing to truly see how the aquifer reacts over a multi-year time frame. It will also give the LPNNRD the ability to collect water samples throughout the year in these WHP areas to see how contaminants in the groundwater trend over time.**

3.A 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). **The total cost of the project is $414,678. This includes the costs of constructing 29 monitoring wells equaling $263,356. There is also the cost of installing the data loggers and cable which equals $50,543 as well as the cost of installing telemetry and cell service will equal $33,060. This telemetry cost is for the installation and the first 12 months of the subscription. This cost will be spread throughout the 3-year period of the project as the district plans to install around 10 wells per year. Ongoing subscription and maintenance costs will be provided by the LPNNRD. Finally, the cost of the 13 Parameter drinking water sampling kits from DHHS will total $7,644. Sampling will occur after the monitoring wells have been installed. These LPNNRD will pay for ongoing testing after the initial water testing.**

3.B 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 intangible or secondary benefits (if any) 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, in a way that justifies economic feasibility of the project such that the finding can be approved by the Director and the Commission (005.02). **The tangible benefit of this project is gathering real time water levels in source water areas continuously through telemetry while also having the ability to collect high quality groundwater samples. This high-quality data will then be shared between the LPNNRD, Public Water Systems, and NeDNR. This is critical in source water areas so planning can happen for future resource allocation.**

3.C Present all cost and benefit data in a table to indicate the annual cash flow for the life of the project (005.03).

The benefits of this project are the installation of monitoring wells in source water areas for the purpose of gathering high-quality data to aid the LPNNRD and communities in the detection of rising concentrations of contaminants and for continuous monitoring of water levels in these areas. This is vital for the purpose of making defendable, water management decisions.

Cost Activity	Year 1	Year 2	Year 3	Cost Total
WSF Grant	$90,664	$93,403	$64,739	$248,806
LPNNRD Match	$60,443	$62,269	$43,160	$165,872
Cost Total	$151,107	$155,672	$107,899	$414,678

3.D 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, demonstrate the economic feasibility of such proposal by such method as the Director and the Commission deem appropriate (005.04). (For example, show costs of and describe the next best alternative.)

The next best alternative to this project would be to have employees of the NRD drive out and collect levels from existing wells, typically irrigation wells, and sample in the spring, fall, and summer months to collect the data this project plans to do in source water areas. When comparing the cost of installing dedicated monitoring wells that have loggers with telemetry to having employees going out to multiple sites multiple times a year, the proposed project is cheaper. While the initial cost is higher with the project, the long-term cost of having employees drive out to collect data manually out of loggers becomes greater than that of the initial cost and the continuing telemetry subscription cost. There is also the fact that using existing irrigation wells does not produce the high-quality data this project wants to collect due to factors such as unknown construction and the impact of high-capacity pumping from these existing wells.

Prove Financial Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 006)

4. Provide evidence that sufficient funds are available to complete the proposal. **See the LPNNRDs Fiscal Year 2025 Budget which is attached.**

5. Provide evidence that sufficient annual revenue is available to repay the reimbursable costs and to cover OM&R (operate, maintain, and replace). **See the LPNNRDs Fiscal Year 2025 Budget which is attached.**

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

7. Describe how the plan of development minimizes impacts on the natural environment (i.e. timing vs nesting/migration, etc.). **This project will not have a negative impact on the environment. All installations will be done by a certified well driller and designed by a Nebraska licensed Professional Geologist.**

8. Explain how you are qualified, responsible and legally capable of carrying out the project for which you are seeking funds. **The Lower Platte North NRD has multiple duties that make it qualified to legally and responsibly pursue this project. With the adoption of LB 1106 in 1985, the state required the NRD's to develop groundwater management plans. The LPNNRD GWMP has focuses on both water quality and quantity, showing the LPNNRD has the legal authority to have the monitoring wells proposed in the project constructed to improve our ability to monitor water.**

9. Explain how your project considers plans and programs of the state and resources development plans of the political subdivisions of the state. **This project considers a couple of different programs including WHP Plans and Hazard Mitigation Plans. Of the WHP areas this project is focusing on, 4 have WHP Plans approved by the state with one currently going through the process of being approved. Besides WHP Plans, the district is also working on a drought mitigation plan. This plan focuses on communities with WHP areas within the district to assess their vulnerabilities to drought and help them be more prepared for it. It was through these talks and looking at the goals of the district's GWMP that this project was conceived. These plans focus on the objective of monitoring for water quality and quantity in these WHP areas.**

10. Are land rights necessary to complete your project? YES☐ NO☒

If yes:

10.A Provide a complete listing of all lands involved in the project. Click here to enter text.

10.B Attach proof of ownership for each easements, rights-of-way and fee title currently held. Click here to enter text.

10.C Provide assurance that you can hold or can acquire title to all lands not currently held. Click here to enter text.

11. Identify how you possess all necessary authority to undertake or participate in the project. **The Lower Platte North NRD has multiple duties that make it**

qualified to legally and responsibly pursue this project. With the adoption of LB 1106 in 1985, the state required the NRD's to develop groundwater management plans. The LPNNRD GWMP has focuses on both water quality and quantity, showing the LPNNRD has the legal authority to have the monitoring wells proposed in the project constructed to improve our ability to monitor water.

12. Identify the probable consequences (environmental and ecological) that may result if the project is or is not completed. **N/A**

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 to 6 for items (1) - (9); and 0 to 3 for items (10) - (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 72 possible points, plus two bonus points. The potential number of points awarded for each criteria are noted above. 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.

   The LPNNRD serves 28 communities with a total population of 65,447 that rely on groundwater to meet their drinking needs. Breaking down the demographics a bit more, with 50% of that population living in an

urban setting, it is likely that they live inside a Wellhead Protection Area. This project seeks to help those communities at most risk for water quality and quantity issues by installing monitoring wells in their WHP areas. Installing these monitoring wells on the time-to-travel paths that were modeled for the WHP areas will give the public water systems and the district the ability to mitigate drinking water threats by acting as an early warning system for the rise of contaminants or the lowering of water levels in times of drought or high pumping during growing season. With these monitoring wells being installed in such a way, it will give the public water systems and the district time to figure out a solution to remediate the problem instead of having it become an issue that needs to be dealt with immediately. The LPNNRD would be monitoring water levels in these wells continuously with data loggers using telemetry, so there will be high-quality real time data to substantiate whether there is a cause for concern on dropping water levels. The LPNNRD will also be taking high-quality samples from the wells for water quality concerns such as nitrates, arsenic, uranium, and other emerging contaminants with the 13 Parameter testing kit from DHHS. If these potential issues went undiscovered, the potential long-range impact could be devastating to municipalities who do not have the financial resources to deal with these problems. This project would act as a mitigation factor for these municipalities and give them the time to either save money to remediate the problem or try out a different solution altogether. Monitoring wells have proven to be successful tools for monitoring contaminants as they are used throughout the NRDs and with the added benefit of having telemetry, they also continuously collect high-quality data that is instrumental in defendable management decisions.

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.

The project will aid in achieving the goals and objectives laid out in the groundwater management plan (GWMP). The current GWMP was passed in 1995, and the LPNNRD is in the process of updating the GWMP. As far as the goals of the project are concerned, it aligns with both the new and proposed GWMP. For purposes of this application, only the goals and objectives of the GWMP that was passed in 1995 are being used. Along with the district's GWMP, the project also aligns with the goals of our voluntary Integrated Management Plan (IMP) which went in effect in June of 2018.

GWMP Goals and Objectives

Goal 1: To provide a sustained groundwater supply of quality water adequate to support reasonable and beneficial uses, and maintain long-term quality yields

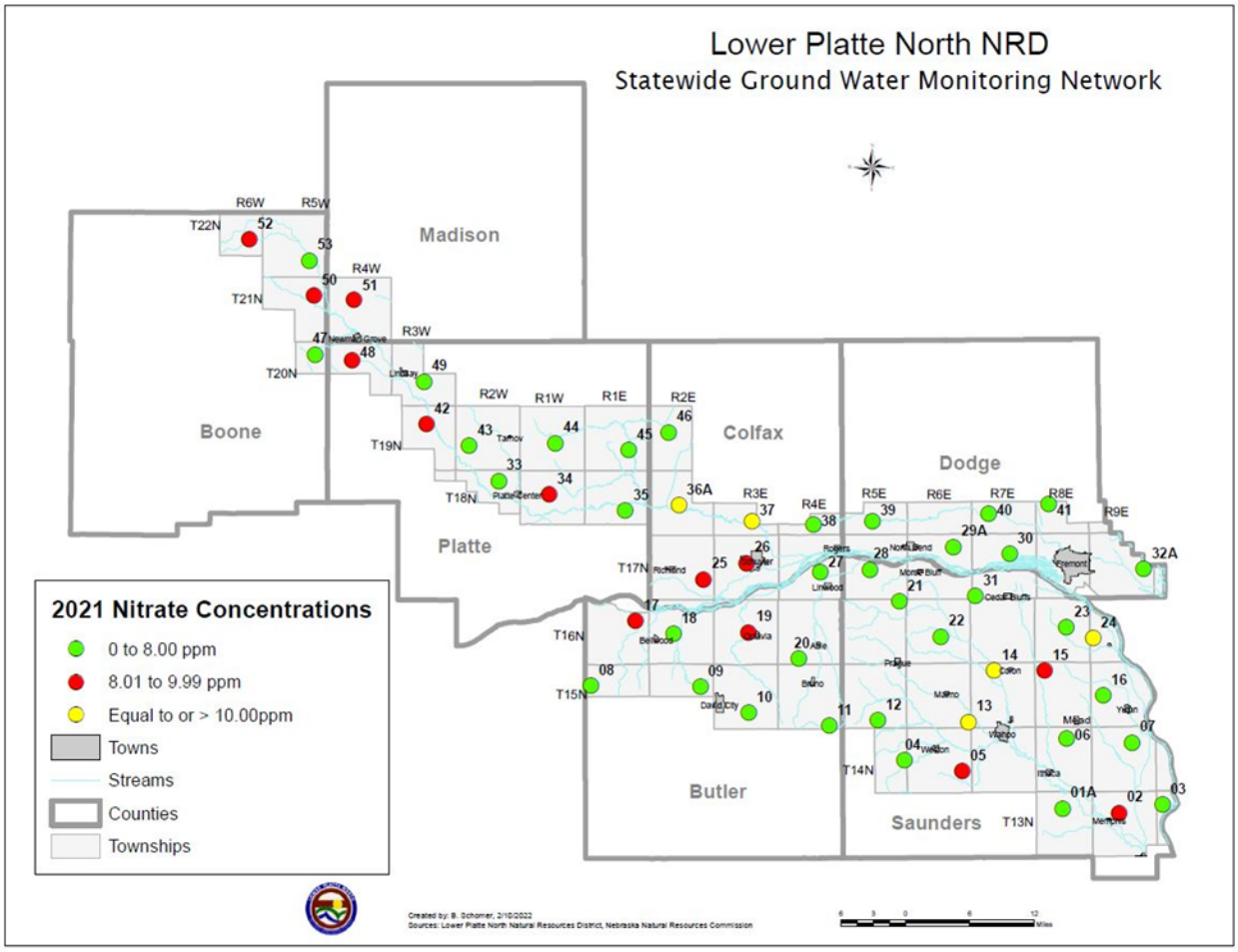
Objective 7: Maintain groundwater quality and quantity programs

Voluntary IMP Goals and Objectives

Goal 1: Develop and maintain a District-wide water supply inventory

Objective 1.1: Conduct data collection and analyses of current and potential water supplies using the best available information, data, science, and considering future technological advances.

The GWMP for the LPNNRD states in Objective 7 the need to maintain groundwater quality and quantity programs. The LPNNRD has successfully achieved this objective by maintaining and improving water quality and quantity programs since the time of its' inception. Below is the current monitoring network of the LPNNRD.



This network has provided the LPNNRD invaluable data to help with the monitoring of the state's groundwater resources. It has shown trends in both the quality and quantity of groundwater through long term data collection and will continue to be instrumental in how the district approaches groundwater management decisions. This project would help maintain Objective 7 in expanding and improving the district's ability to monitor groundwater quality and quantity in source water areas. By following Objective 7 and expanding the monitoring network, the district will ultimately be able to maintain its' success in achieving the first goal of the GWMP which states, "To provide a sustained groundwater supply of quality water adequate to support reasonable and beneficial uses and maintain long-term quality yields." Monitoring the quality and quantity of the water in source water areas helps the LPNNRD fulfill this goal by monitoring the long-term quality of the groundwater. This will be done through the continuous data collection of water levels through telemetry and from taking high-quality water samples at the monitoring sites.

Similarly, the project will also help in achieving some of the goals and objectives laid out in the voluntary IMP. Goal 1 states, "Develop and maintain a District-wide water supply inventory." The district currently uses telemetry throughout its monitoring network. However, this project looks to add monitoring wells in source water areas to fill in the gaps in the network that were found through the updating of our current GWMP. The project also fulfills objective 1.1 which states, "Conduct data collection and analyses of current and potential water supplies using the best available information, data, science, and considering future technological advances." Not only is this project strengthening the LPNNRDs' current monitoring network, but it will also have real time data loggers and telemetry installed into the monitoring wells so the LPNNRD will have high-quality real time data from those areas. Using technology in this way gives the district the best available data during the summer months when water usage is the highest to see how the aquifer is responding to the stress.

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.

This project focuses on installing monitoring wells with telemetry in source water areas. With the additional continuous monitoring of the groundwater in these source water areas, the LPNNRD can gain high quality data on the recharge rates of the aquifers in that specific location as well as aquifer depletion. Since the LPNNRD has a wide array of different aquifers and hydrogeologic conditions within the district, adding these monitoring wells to source water areas will give the district and those public water systems high-quality data on their specific location. This will allow the district to perform trend analysis for these source water areas for both water quality and quantity with a high degree of confidence, allowing the district to make best management decisions when it comes to those source water areas.

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.

This project will contribute to multiple goals including water sustainability, sustainable agricultural use, and protection of municipal wells. The project contributes to the goal of water sustainability by adding dedicated monitoring wells into WHP areas. This will give the LPNNRD more water level data in the area, allowing for more accurate groundwater management. It will also give the district better data on how the aquifer in that area recharges not only during normal summers, but also during drought and high pumping seasons. This will lead to better management decisions when it comes to that specific area. The LPNNRD will also be able to monitor water quality with regular sampling at those monitoring wells. This will also lead to better data for management decisions to ultimately lead to better water sustainability. Along with the overall goal of water sustainability, the goal of sustainable agricultural use will be contributed to those reasons specified above, among others. Agricultural producers in WHP areas know they have a responsibility to keep the drinking water clean for the communities they surround because they are either a part of that community or regularly are in that community. This project will help to spread awareness of the LPNNRD's commitment to sustainable water use to the public not only from the data that will be collected, but also by the public's curiosity when these monitoring wells are being constructed. It is a good opportunity to answer questions about why the monitoring wells are being put in and will help put water sustainability at the forefront of their minds.
The last goal deals with the protection of municipal wells. These monitoring wells will be placed on time-of- travel paths that are modeled within WHP areas. That way, if there is a rise in contaminants that would indicate it will eventually pass the maximum contaminant level (MCL), the district would be able to notify the municipality, so they have time to figure out the solution to their problem. With this type of early warning system, the municipalities will have time to decide what they are going to do, since most do not have the financial resources to treat their water and must rely on grants to achieve their water sustainability goals and updates to their public water system.
The long-range forecast of the benefits of this project is better water sustainability throughout the WHP areas in the LPNNRD as well as getting the district the data it needs to make better management decisions. If the district were to continue its current path, communities would not necessarily have that early warning system of monitoring wells, so they would need to make their decisions faster and may not have the time to figure out what choice in remediating their drinking water is right for them.

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.

Goal 1, Objective 1.2.3 of the voluntary IMP states that the district identifies data gaps in monitoring networks (precipitation, stream flow, groundwater level networks, etc.). In that regard, this project would aim to fill those gaps that occur in WHP areas. This will give the district more monitoring capabilities on water levels and water quality in WHP areas. This can also be used as an educational component, to show both citizens of communities and landowners in WHP areas the impacts of their water usage on the local aquifer to raise awareness of the importance of water conservation. LPNNRD does not foresee any beneficial uses that will be reduced from the implementation of this proposed project.

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.

The costs of the project are listed in the table under the Project Tasks and Timelines. When comparing the cost of the project compared to the alternative options, it really comes down to telemetry. Being able to continuously collect data from a site and have it sent wirelessly to the LPNNRD office is cheaper than having an employee go to each site and download data from a logger. It saves the district on time, employee pay, and the costs of driving and maintaining a vehicle.

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.

Federal law (Safe Drinking Water Act) requires that municipalities provide drinking water that is clean and safe. This importance of clean drinking water is what brought the idea of this project to the forefront. Having these monitoring wells installed upgradient of municipal wells means they will see rises in contaminants before the municipality will. The LPNNRD will be able to track these contaminants long term and allow the district to perform

trend analysis to see if any contaminants have the potential to go above the maximum contaminant level. This will give the municipality time to prepare a solution and have the defendable data to back up that decision. The monitoring wells will also be continuously collecting water level data, so during drought municipalities will have more data on how the aquifer is reacting to the stress of high pumping, allowing them to have more defendable data when enforcing water restriction ordinances.

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 United 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.

   One of the main duties of the districts is to monitor water levels and water quality of the state's groundwater resources. Water, and specifically, groundwater, for the state of Nebraska is a critical resource not only for drinking water, but for agricultural and industrial use as well. The monitoring network established and the proposed installation of monitoring wells in source water areas work to ensure the district will have high-quality data and be alerted to any contamination or depletion that is happening in the area. The LPNNRD would then be able to warn the public water system of what is occurring. This will help protect current water infrastructure from having to be replaced immediately and give the public water system time to make defendable management decisions. Long-term sampling data collection and the test hole data taken at the beginning of the project will help public water systems in making future water infrastructure decisions. If anything were to happen to Nebraska's groundwater, it would cause major instability not only in our state's economy, but it would erode the trust of the citizens living here due to the uncertainty of water.

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.

The LPNNRD has Phase Areas for nitrate concentration in the district. See the attached link for current Quality and Quantity management areas of the LPNNRD (https://lpnnrd.org/wp-content/uploads/2025/01/Groundwater-Quality-Quantity-Map-2024.pdf). Currently, the whole district is in a Phase I for drinking water with one area in a Phase II by Bellwood, NE and another area in Phase III/IV in the Richland-Schuyler area. Putting more monitoring wells into Wellhead Protection Areas is extremely important to water quality, especially in those protection areas that are at elevated management phases for nitrate. We currently have 5 monitoring wells that read at or above the maximum contaminant level (MCL) and 13 that are in the 8.01 to 9.99 ppm range. By installing these monitoring wells in line with the groundwater's time to travel based off wellhead protection area modeling, the LPNNRD will be able to collect continuous high-quality data on water quantity as well as collecting high-quality water sampling. Through this long-term data collection, the LPNNRD will be able to perform trend analysis on the area to support management decisions that improve water quality.

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.

The local jurisdiction that is in support of this project is the LPNNRD. The approval to apply for this application and the estimated cost to the district was approved by the board as noted under section 5 Ground Water Programs subsection c in the board minutes for March 2025 (https://lpnnrd.org/wp-content/uploads/2025/03/03.10.25.pdf). Aside from approval, the LPNNRD has already procured cost estimates for the proposed project and has the option to support the project through their tax levy authority. The Lower Platte North NRD is financed by a tax levy which may be up to four and one-half cents per $100 valuation for general purposes and another one cent for water programs. The FY 2025 tax levy is 0.025767cents per $100 valuation.

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.

The LPNNRD has multiple plans and programs that stem from those plans in place that support sustainable water use. The current GWMP was passed in 1995, and the LPNNRD is in the process of updating the GWMP. As far as supporting water sustainability goes, both the new and proposed GWMP support water sustainability. For purposes of this application, only the goals and objectives of the GWMP that was passed in 1995 are being used. Along with the district's GWMP, the LPNNRD also has an IMP which went into effect in June of 2018. also aligns with the goals of our voluntary Integrated Management Plan (IMP) which went in effect in June of 2018.

<u>GWMP Goals and Objectives</u>

Goal 1: To provide a sustained groundwater supply of quality water adequate to support reasonable and beneficial uses, and maintain long-term quality yields

Objective 7: Maintain groundwater quality and quantity programs

<u>Voluntary IMP Goals and Objectives</u>

Goal 3: Develop and implement water use policies and practices with the purpose of achieving and sustaining a balance between water uses and supplies

Objective 3.2.1: Where feasible, implement cost-share programs for irrigation conservation by partnering with producers in technologies that improve irrigation efficiency and track water usage over time.

The GWMP for the LPNNRD states in Objective 7 the need to maintain groundwater quality and quantity programs. Maintaining the LPNNRD's monitoring network is vital to water sustainability. Without it, the district would not be able to make water management decisions backed up with high-quality data. Without high-quality data to support those decisions, the LPNNRD would not be able to implement any programs, such as the district's flowmeter program. Flowmeters are required in the areas of the district where water consumption is regulated. Flowmeter reporting allows producers to see how much water they are using and allows the district to know too. Producers will use flowmeters throughout the season to check water usage, ultimately enabling a level of water sustainability. The district also gets this data through reporting, so the LPNNRD

will have a general idea of how much water is being used in different areas of the district.

Along with the GWMP, the LPNNRD also implemented its voluntary IMP in 2018. Goal 3 of the IMP states, "Develop and implement water use policies and practices with the purpose of achieving and sustaining a balance between water uses and supplies." Goal 3 outlines the importance of water sustainability within the district. The LPNNRD has many programs that are aimed towards achieving better water sustainability throughout the district. Within goal 3 is the objective 3.2.1 which states, "Where feasible, implement cost-share programs for irrigation conservation by partnering with producers in technologies that improve irrigation efficiency and track water usage over time." Many of the LPNNRD's water sustainability programs revolve around cost-sharing with producers. One example is the flowmeter cost-share program within the Special Quantity Subareas (SQS). These SQS have concerns of in-season water decline, causing the district to enforce a rolling allocation of 27 inches within a 3-year period and require flowmeters to track water usage. In these areas, water sustainability is crucial for agricultural and municipal use. Cost-share programs help producers with the initial burden of adding this extra equipment to their pivots and shows the district is willing to help to create water sustainability in the area.

The project will contribute to water sustainability in the district by adding monitoring wells with data loggers and telemetry into WHP areas where there is a lack of monitoring wells. This will give the district high-quality water level data and high-quality water sampling data to make the most informed water management decisions when it comes to water sustainability. This will benefit not only the municipalities in these source water areas, but also the agricultural producers within the source water areas as well. They will be able to see how water levels within their groundwater react to the stresses of high pumping years and will have the ability to change their water usage habits during those times, creating better water sustainability.

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.

This project will be installing monitoring wells in multiple WHP areas throughout the district. The district has a population of 65,447 people, covering 1,031,000 acres (https://www.nrdnet.org/nrds/lower-platte-north-nrd). With the increase of contaminants, such as nitrates, in the state, it is

vital to improve the LPNNRDs monitoring well network to monitor concentrations and trends in WHP areas. This will allow the district and communities to see problems that will eventually make their way to municipal wells and give those municipalities the time to prepare for whatever issues could arise from a water quality standpoint. The project will also be constantly monitoring water levels, so if there is a significant decrease in said levels, the district would be able to notify the communities and have them implement their water restriction ordinances faster than they may have been able to before. This is a significant benefit to the state. With the ability to have an early warning system for water quality and quantity issues, these communities in WHP areas can be proactive in how they handle their water management decisions. This will ultimately save the public water systems money, since they will be able to remediate the problem before it becomes an emergency.

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.

The LPNNRD will pay 40% of the proposed project cost of the WSF application for a total of $165,871. LPNNRD has already determined the estimated cost of the project and will be reflected in the next budget cycle. The motion to apply for the WSF and pay 40% of the proposed project was approved on March 10, 2025. This can be found in the board minutes for March under Ground Water Programs subsection c (https://lpnnrd.org/wp-content/uploads/2025/03/03.10.25.pdf).

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.

With this proposed project, the LPNNRD would be putting monitoring wells into multiple different watersheds including the Shell Creek Watershed, and Wahoo Creek watershed. Monitoring water quality and quantity in these watersheds is vital to understanding the current health and function of said watersheds. It gives the district the tools to be proactive in the management of these areas by giving the district earlier warnings of possible contaminants that are working their way through the watershed.

With that ability, the district will be able to figure out how to deal with the potential problems that could arise from rising contaminant sources. It also gives the district more real time data on water levels in the watershed, allowing LPNNRD to see recharge rates and how the watersheds are affected by drought and high pumping seasons.

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.

    Looking at the goals from the 2024 Annual Report, this project best aligns itself with goal 5 which states, "Protect existing water uses through collaborative investments in water resource projects, planning, administration, and permitting of surface water rights, and the registration of groundwater wells." The LPNNRD has worked collaboratively with communities in WHP areas by meeting with them and asking questions about their public water systems to determine the need for more monitoring wells in WHP areas. While the NRD is the entity that will be taking responsibility for these monitoring wells, communities will benefit by having extra water quality and quantity sampling taking place to help warn them of any potential issues heading their way.

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.

    N/A

Quote – Q-141934

In-Situ, Inc.
221 E. Lincoln Avenue
Fort Collins, CO 80524
U.S.A.

Tel: (800) 446-7488
Fax: (970) 498-1598
Email: sales@in-situ.com
Web: www.in-situ.com

Issued By: Elizabeth Cook
Date: March 27, 2025
Quote Valid for 30 days

Sales Manager	Customer ID	Payment Terms	Shipping Method	INCO Terms	Final Destination
Robb Hickey	C004961	NET 30 DAYS	FedEx Ground		United States Nebraska

Quote To:	Ship To:
Lower Platte North NRD 511 COMMERCIAL PARK ROAD P.O. BOX 126 Wahoo, Nebraska 68066 United States	Lower Platte North NRD 511 COMMERCIAL PARK ROAD WAHOO, Nebraska 68066 United States
Attn:	**Comments:**
Jake Maslonka jmaslonka@lpnnrd.org (402) 8701158	

Equipment

Line	Product Description	Part Number	Unit of Sale	Qty.	Unit List Price	Total List Price	Disc.	Customer Total Price
1.	Level TROLL 500, Level Sensor Range - 21m, 69 ft (30 Psig)	0089020	Each	1	$1,335.00	$1,335.00	15.00%	$1,134.75
2.	Rugged Twist-Lock Cable, Vented, TPU, SM Spool, Twist-Lock,	0052000-POLY-SM_SPOOL-TWISTLOCK-	330ft	1	$1,557.90	$1,557.90	15.00%	$1,324.22
3.	VuLink CI (Global Cellular, does not include antenna)	0094840	Each	1	$995.00	$995.00	15.00%	$845.75
4.	HydroVu Professional Prepaid Code (Months)	0102510	Each	12	$22.00	$264.00	15.00%	$224.40
5.	VuLink 4G/LTE/2G Cellular Antenna with 1.5m cable (IP67, recommended for VuLink CI)	0043630	Each	1	$39.00	$39.00	15.00%	$33.15
6.	VuLink Lithium Battery Set (Lithium MnO2)	0103050	Each	1	$87.00	$87.00	15.00%	$73.95
							Subtotal:	**$3,636.22**

Quote Total

Tax is not normally quoted due to State & local variability. If you need to have Tax included in this quotation, please contact us.
If your organization is a tax-exempt entity, please email or fax a copy of your tax-exempt certificate to taxcerts@in-situ.com or fax to (970) 498-1598.
Tax rates will be based on delivery address of the order. If your organization qualifies for GSA pricing, please verify eligibility requirements on the GSA website at GSA Eligibility Determinations and confirm if you intend to use the GSA contract for this purchase.

Sales Tax: **$0.00**

For further information regarding the Warranty or Terms and Conditions, please refer to our website at https://in-situ.com/us/terms-conditions/

All quoted product & service prices are in U.S. Dollars unless specifically noted otherwise.

Shipping: **$0.00**

Total Amount (Excludes Optional Items): USD $3,636.22

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221 E. Lincoln Avenue
Fort Collins, CO 80524
U.S.A.

Tel: (800) 446-7488
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Managing your data has never been this easy!
Our intuitive VuSitu Mobile App allows you to view data from the field on your smartphone or tablet. For long-term or remote sites, integrate In-Situ instruments with our remote wireless monitoring and cloud-based HydroVu Data Services for real-time, decision-quality data. Ask your sales rep for more information.

Service Fees and Professional Services

Longitude 103 HydroData Application Service Fee and Professional Services

The following fee structure is presented to **Lower Platte North Natural Resources District** (District), 511 Commercial Park Road, Wahoo, NE 68066, for the Annual Subscription to the HydroData Application Suite, the optional Dams Feature add-on, and additional professional services requested below. The fee is as presented, but annual renewal fees for the HydroData Application Suite and the optional Dams Feature add-on, not defined below, are subject to changes at the discretion of Longitude 103 before each renewal invoice.

The software product subject to this fee structure is the HydroData Application Suite (previously known as NRDapp). This Suite includes the HydroData Web Application accessed through hydrodata.long103.io and consists of supporting systems such as servers and databases. In addition, the HydroData Application Suite includes mobile applications that are available to access data and collect information. Other products may be offered as part of the HydroData Application Suite and may be included at the discretion of Longitude 103, but at a minimum, the Suite will include the HydroData Web Application and supporting systems that enable its operations.

The optional Dams Feature add-on provides storage of NRD-collected dam information, entry of new inspections through either web or mobile applications, and dam-specific reports. This add-on will be activated if the NRD subscribes to this feature.

Annual Service and Optional Add-On Fees

The initial Annual Service Fee for the HydroData Application Suite is $16,000.00.

An optional service within HydroData is the Dams feature. This feature houses information on the high-hazard dams owned/inspected by a District and includes a dam inspection data collection feature in the mobile apps. The Dams Feature add-on has an initial annual cost of $3,000 for Districts with over 100 dams or $1,500 for Districts with up to 100 dams. The District would like to utilize this option, and it has less than 100 dams, so the initial annual fee will be $1,500.

LPNNRD has requested that the HydroData service start on July 7th, 2025. The initial annual fees will be invoiced in early July and invoiced each subsequent year as described under the Fees and Payments section of “The Software Agreement.”

Professional Services

Professional services are those performed by Longitude 103 outside the normal scope of service defined for the Annual Service Fee.

Data Migration

In accordance with the Professional Services section of “The Software Agreement,” data migration is to transfer data from files the District provides for access within the web application or other associated applications. Longitude 103 will receive the data in various formats and attempt to associate the data types to existing fields within the application’s data structure. A bulk data transfer will be completed to the greatest extent possible with every effort made to complete the transfer. The migration does not include any alteration of the HydroData Application database, server, or user interface. If an alteration is required for data not tracked by the HydroData Application, a new professional services component will be scoped, and a fee will be agreed upon to migrate and make available that data in accordance with the Professional Services section of “The Software Agreement.”

Any remaining data that cannot be transferred, for reasons explained by Longitude 103, will be indicated. Importing any remaining data will be either completed by the client using the tools available within the HydroData Application, or an amendment for additional services from Longitude 103 will be created with a newly defined scope of professional service and fee as defined under the Professional Services section of “The Software Agreement.”

Additionally, the District has opted into the Nebraska Department of Natural Resources (NeDNR) cost-share program to pay up to $10,000 of the one-time data migration fee in return for the District providing an annual GIS file representing the lands that can be legally irrigated in the District (certified irrigated acreage). The GIS file will be created through a custom

report and provided to NeDNR by Longitude 103 each subsequent January for 10 years after the data migration is completed. Additionally, if the District decides not to continue the HydroData subscription at any time in the future, the creation of the annual GIS file provided to NeDNR will no longer be the responsibility of Longitude 103.

The one-time data migration fee is $17,500.00, which includes the data migration of the District's dam inspections. Once the data migration is completed, $10,000.00 will be invoiced directly to NeDNR and the remaining $7,500.00 will be invoiced to the District.

Presented By:  Accepted By: _____

Thad A. Kuntz, P.G., Vice President — Lower Platte North NRD

Date: _____

TERMS OF SERVICE

By opting in to receive text messages or emails from the Lower Platte North Natural Resources District (LPNNRD), you agree to the following terms and conditions.

Consent to receive text messages from the Lower Platte North Natural Resources District

Using the form linked above to voluntarily provide your name, address, email address, and mobile phone number the user can opt-in to receive messages from the Lower Platte North Natural Resources District (LPNNRD). The form requests your name, address, email address, and mobile phone number. Once opted-in you will receive text messages (SMS/MMS) to your mobile phone number provided with updates pertaining to important LPNNRD functions such as public information meetings, public hearings, upcoming events, water use report information, chemigation information, well sampling information and other information relevant to important LPNNRD activities or services. The frequency of these messages will vary depending on the area of the user, specifically relating to groundwater quality and groundwater quantity areas. By opting in, you acknowledge that you may receive multiple messages per month, depending on your interactions with us. At most, you may receive three messages per month.

Message and Data Rates

Message and data rates may apply for any messages sent to you from the Lower Platte North Natural Resources District and to any replies that you send. If you have any questions regarding your text plan or data plan, please contact your wireless provider. Carriers, such as Verizon or Viareo, are not liable for delayed or undelivered messages.

Changes of Terms

We reserve the right to update or modify these Terms of Service at any time. If any changes are made, you will be notified, and continued receipt of messages after such changes will constitute your acceptance of the updated terms.

Opt-Out of Text Messaging

The user can opt-out at any time texting "STOP" to the number that you receive the messages from. After texting "STOP" to the number, you may receive a reply confirming that you have unsubscribed. After that reply, you will no longer receive text messages from us.

Help

If you experience any issues, you can reply with the word "HELP" for support.

Consent to receive emails from the Lower Platte North Natural Resources District

Using the form linked above to voluntarily provide your name, address, email address, and mobile phone number the user can opt-in to receive messages from the Lower Platte North Natural Resources District (LPNNRD). The form requests your name, address, email address, and mobile phone number. Once opted-in you will receive email messages to your email address provided with updates pertaining to important LPNNRD functions such as public information meetings, public hearings, upcoming events, water use report information, chemigation information, well sampling information and other information relevant to important LPNNRD activities or services. The frequency of these messages will vary depending on the area of the user, specifically relating to groundwater quality and groundwater quantity areas. By opting in, you acknowledge that you may receive multiple messages per month, depending on your interactions with us. At most, you may receive three messages per month.

Unsubscribe from emails

The user can unsubscribe at any time by clicking on the unsubscribe option at the end of the email message. After unsubscribing, you may receive a reply confirming that you have unsubscribed. After that reply, you will no longer receive email messages from us.

By opting in, you acknowledge that you have read and understood these Terms of Service.

Lower Platte North Natural Resources District SMS Privacy Policy

Information Collection

The Lower Platte North Natural Resources District will only collect information that is volunteered on the initial sign-up form (name, address, email, and phone number). We may use your personal information for the following reasons:

- Internal record keeping
- Provide services you request and process transactions
- We will never sell or disclose your personal information.

You may request the information you supply to us be edited or deleted by contacting us at lpnnrd@lpnnrd.org or by phone at (402) 443-4675

Use Of Personal Information

The information that the Lower Platte North Natural Resources District collects (name, address, email, and phone number) will only be used to send messages and emails

pertaining to important LPNNRD functions such as public information meetings, public hearings, upcoming events, water use report information, chemigation information, well sampling information and other information relevant to important LPNNRD activities. You will not receive spam materials from the Lower Platte North Natural Resources District as part of this program.

Disclosure of Personal Information

The Lower Platte North Natural Resources District will not disclose your information to any third parties. The Lower Platte North Natural Resources District uses DialMyCalls for management of SMS mailing lists and for distribution of texts. You may review DialMyCalls' Privacy and Security Compliance Statement at this link:
https://www.dialmycalls.com/privacy-security-compliance
The Lower Platte North Natural Resources District uses Brevo for management of email marketing lists and for distribution of emails. You may review Brevo's Privacy Policy at this link: https://www.brevo.com/legal/privacypolicy/

Need help? Text HELP to (844) 614-3120 for additional information, email Daryl Andersen, LPNNRD Water Resources Manager, at dandersen@lpnnrd.org, or call the Lower Platte North NRD office at 402-443-4675.

Ready to opt-in?
Text LPNWATER to (844) 614-3120 to opt-in. A follow up message will be sent to confirm your subscription.

Want to opt-out from your text subscription?
Text STOP to (844) 614-3120 to opt-out from your text subscription.