

Water Committee Meeting
Wednesday, January 31, 2024 6:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

2. Field Demonstrations Update

Joe Luck - UNL gave an update on three projects that were conducted within the District. Two of the projects utilized Sentinel's variable rate nitrogen application with satellite imagery. The other site compared a field with manure application as the primary source of nitrogen.

Shane Ohlde from VariMax Realtime Crop Management conducted a demonstration on a field in the Schuyler-Richland Area using crop-based nitrogen and irrigation management. He presented information from his project utilizing satellite imagery.

3. REGULATORY

3.A. GROUND WATER MANAGEMENT AREA

3.A.1. Well Permit Program

3.A.1.a. Well Permit Application

A new well permit application from Merle Blum with Mike Conrad as tenant was submitted for the SWSE S2-T16N-8E, Saunders County. The tract of land is currently being irrigated by well G-037875 in the NE1/4 S11-16N-8E. There are 57.90 certified irrigated acres in Section 2, but they desire to have this pivot with its own well. The new well will be located in Woodcliff's Wellhead Protection Area, with the map attached. Attached is an AEM profile map along with a geological log from the well in Section 11. They would not be adding acres and a flow meter would be required. Well G-02123A is Woodcliff's water supply well.

Staff did reach out to Lonny Mahrt - President of Woodcliff's SID, which he plans on visiting with JEO as they are their engineers, but initially he did not have an issue. Lonny responded by email on Thursday, February 1st, asking for well depth, pumping and geological information which staff provided. He also asked about the possibility of utilizing this well for emergency fire protection well. Staff directed him to contact Mike Conrad for this as an option.

3.A.2. Special Quantity Subareas

Discussion and possible action on allocation overage. A producer in SQS #2 water use was 17.28 inches in 2022 and 11.53 inches in 2023. The 2-year total would be 28.81 inches for the 3-year rolling allocation.

The committee discussed the option of deducting the 6-inch penalty and the consequences. A motion at the December Board Meeting increased the allocation to 30 inches over 3 years. The Committee felt that if this producer is allowed to go to 30 inches, a requirement for soil moisture sensors is required and, if possible, work with the local extension on irrigation management. Staff will also investigate if the flow meter is working correctly and visit the producer.

Staff conducted an informational meeting for producers about the SQS#2 area at Humphrey. Jesse Korus presented information from the study conducted by his students. NRD staff presented current rules for this area and water level information. There were about 20 individuals and 1 Committee member in attendance.

Some of the comments from the meeting:

- Consider allowing banking of water not used, instead of a rolling allocation. A set amount would be given yearly.
- 4 year allocation instead of 3 years to allow 2 corn and 2 soybean years.
- Cost-share on variable rate irrigation systems.
- Domestic well users should understand the issues when living in a rural area.
- Assist in drilling domestic wells deeper.
- All areas of the district should have meters and allocations.
- NRD data is biased when showing certain water level information.

3.A.3. Phase Area Update for Schuyler-Richland Management Area

Received a flow meter invoice from Nathan Oelrich which is eligible for a \$1,000 NRD cost-share through the WSF grant.

Attached is an updated boundary and proposed rules and regulations for the proposed Phase 4 management area. The map shows nitrate results and the area that has uranium contamination over the MCL drinking water limit. One of the rules would require a producer's best management agreement. A draft of this agreement is attached for review. Staff recommends that the Committee considers approving the proposed boundary and rules, so information can be distributed to the public.

A public informational meeting is planned for Thursday, February 22nd, starting at 5 pm. The plan is to have tables and displays setup for people to visit with presentations at 6 pm.

Tentative Agenda for this meeting:

- Variable Rate Nitrogen Application
- Soybean Physiology and PH soils
- Proposed Phase 4 Boundaries and Rules
- Cost-share and Field Demonstrations Opportunities
- Question and Concerns from Public

Attached is a soil sample received with 2023 nitrogen reports. How should this be handled in Water Quality management areas?

Staff will be participating in a "test your well" event on February 18th at Schuyler High School during a Pancake Feed. (Flyer Attached)

3.A.4. Cost Share Programs

3.A.4.a. Conservation Practices Discussion

Committee members would like some discussion on the following practices.

- Updating irrigation nozzles that are over 10 years old. At the meeting in Humphrey, Bruno from Platte County Extension showed some demonstration fields where you could see dry strips in the field and then, after replacing them, increase the profitability of the field.
- Used pivots to replace gravity irrigation in the corners of the field.
- Reverse Osmosis (RO) Units Cost-share. NDEE has been offering cost-share for RO Units for nitrate water over 10 ppm. Some of the issues are getting the information out to the public that do not have registered wells and the initial cost of the unit and continuing maintenance.
- An idea was brought forward was to provide bottled water at a least expensive cost from a company that handles bottled water.
- NRD staff is planning on conducting an extensive water sampling project within areas that have shown higher nitrate results from NRD water sampling. Four Corners Health Department out of York has reached out to help in getting this information out to the public. Other health departments could also assist in this effort. An example of a door hanger is attached for individuals that might not be home.
- Giddings Soil Sampling Rig to assist in spot checks on fields and analysis of nitrate leaching. Attached is a picture.
- Other thoughts?

3.A.4.b. Flow Meter Maintenance Program

TRI CITY Meter was just in the process of starting the second week of January. They will get started when the fields are accessible.

The agreement is attached and ready for signatures.

3.A.5. LPNNRD Operator Certification

One of the requirements of the LPN Groundwater Rules and Regulations is that all producers that irrigate or apply nitrogen are required every 4 years to attend a NRD Operator Certification class.

Classes being held in 2024:

January 16 - Fremont Extension Office - done

February 1 - ENREEC Mead

February 8 - Lindsay Village Hall

February 16- Ag Park Columbus

February 22 - David City Butler County Event Center
 March 14- ENREEC Mead

3.A.6. Groundwater Management Plan

Staff and Jovan have reviewed the contract with LRE with signatures still needed.

During the interview process, a comment was given that the Water Committee should have some basic discussion on changes to the plan.

Groundwater Quality:

Current Trigger Levels:

- Phase I - 0 to 8 PPM
 - Phase II - 8 to 10 PPM
 - Phase III - 10 to 15 PPM
 - Phase IV - Greater than 15 PPM
1. Number of wells that need to be sampled
 2. Utilizing domestic wells for implementing regulations
 3. Where do health regulations get implemented?
 4. Other considerations

Groundwater Quantity:

Current Trigger Levels:

- Unconfined Aquifer
 - Level Two - 10% drop in saturated thickness
 - Level Three - 15% drop in saturated thickness
- Is 100 foot saturated thickness the same as 15 feet when considering declines?
- Confined Aquifer
 - Level Two - 7% drop in potentiometric-aquifer thickness
 - Level Three - 10% drop in potentiometric-aquifer thickness
- Should in-season pumping be considered in NRD regulations?
- Water use information.
- Stakeholder Group

The committee gave staff some direction on what changes should be considered.

4. GROUND WATER PROGRAMS

4.A. DECOMMISSIONED WELL PROGRAM

4.A.1. Well Estimates

new wells has been reviewed and approved for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County

4.A.2. Plugged Wells

wells have been plugged, reviewed, and ready for cost share payment approval this month.

Well Owner	Type of Well	Cost Share Estimate	County

4.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

4.B.1. Geological Interpretation Information

Staff had a request from a Committee Member to gather information for an UTV to collect geological information. Staff received some information from Jared of AGF about doing 80 acres or 25 miles.

Jared.'s response:

As long as there are not many obstacles and an UTV can drive over the area that is a one-day job. Depending on the crews location it could be a bit less or a bit more. You still need to be aware of powerlines and fences and other metallic objects as the towed systems area also impacted.

The best way I represent the technologies is the AEM is a township mapping tool, and the pulled systems are section mapping tools.

The Wallaby is out of service and Collier has switched to the tTEM, which is a good thing.

We have access to two systems that we can run and have all the software if you want to try it before going down that road. We are very happy with the system. It can only see ~ 60 meters (depends how much clay rich till).

It boils down to labor and skilled operator and processors.

Jared D. Abraham, MS, PG, PGP
Aqua Geo Frameworks, LLC
10848 Ridge Rd.

Fort Laramie, WY 82212
jabraham@aquageoframeworks.com
(303)-905-6240
www.aquageoframeworks.com

4.B.2. Eastern Nebraska Water Resources Assessment (ENWRA)
Annual dues are attached for \$30,000.

4.B.3. Conference Reports

Attached is a report from Daryl and Will (mostly Will).

5. SURFACE WATER PROGRAMS

6. OTHER

6.A. COMMENTS FROM THE PUBLIC



Valley View Golf Course

Platte River

Woodcliff Lakes

The Woodcliff

Woodcliff

Platte River

109

77

77

X

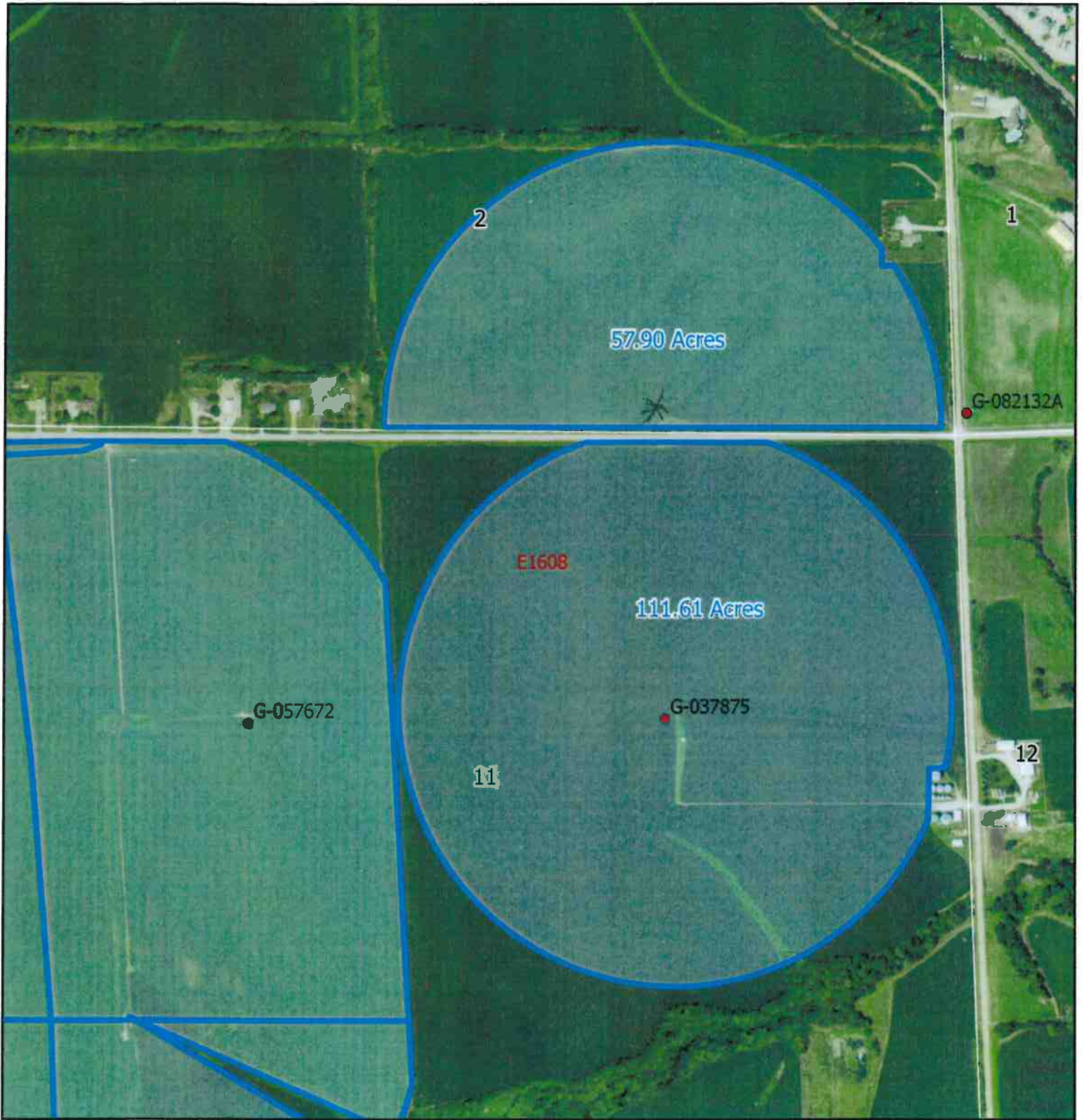
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Hwy-77

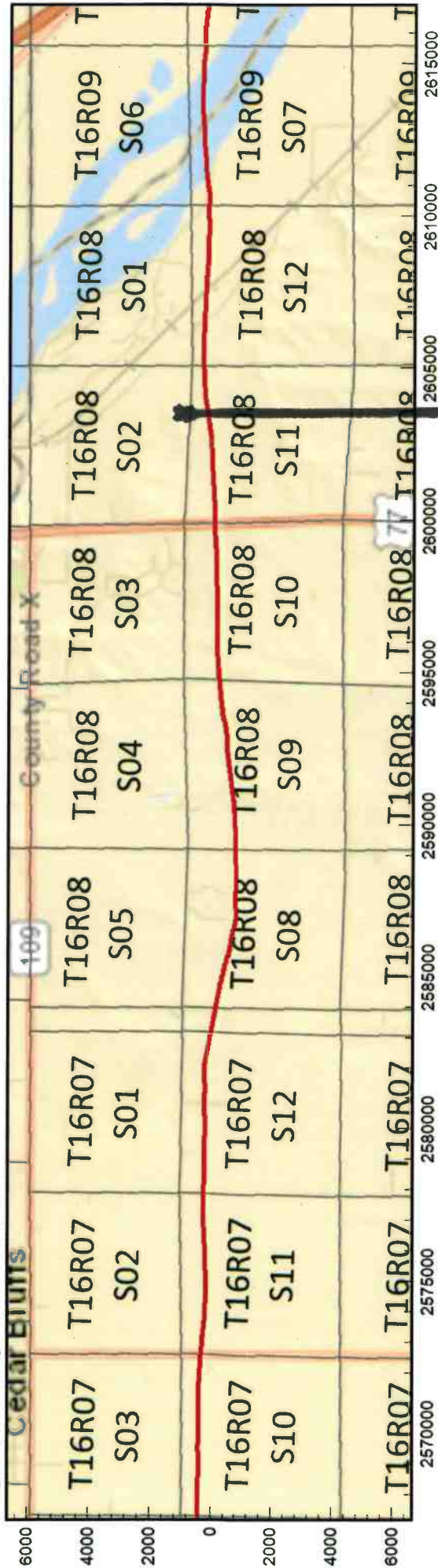
Nebraska 2246



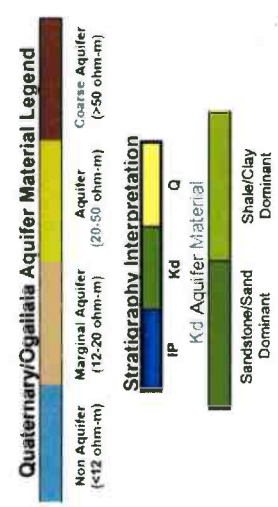
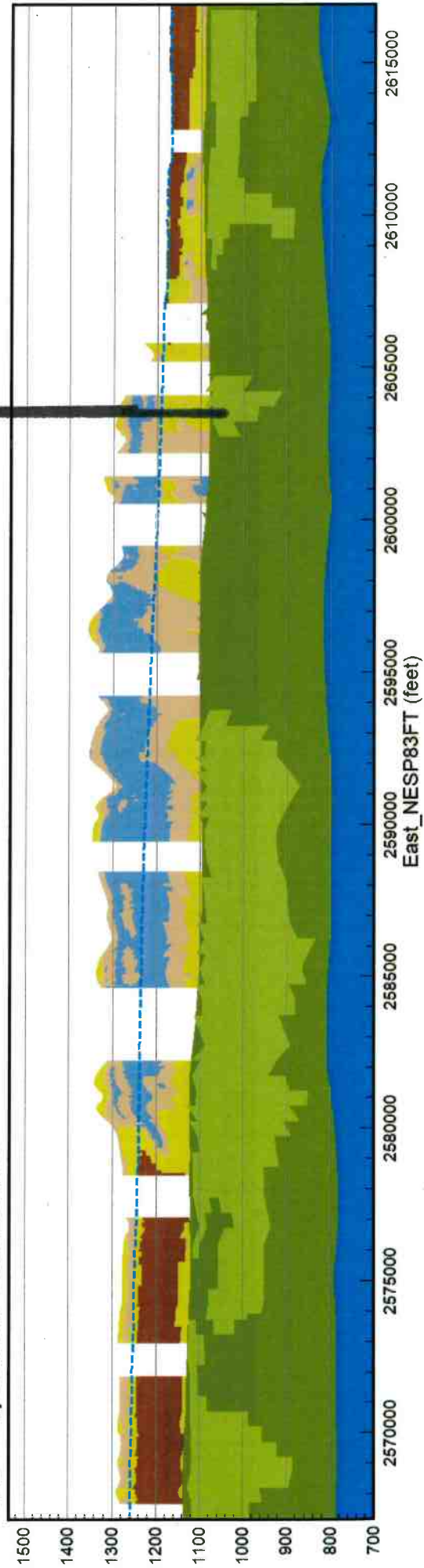
S1/2 SE 2-16-8E
& NE 11-16-8E
Dodge County

50/500

Flight Path Map Line L501500



AEM Interpretation Line L501500

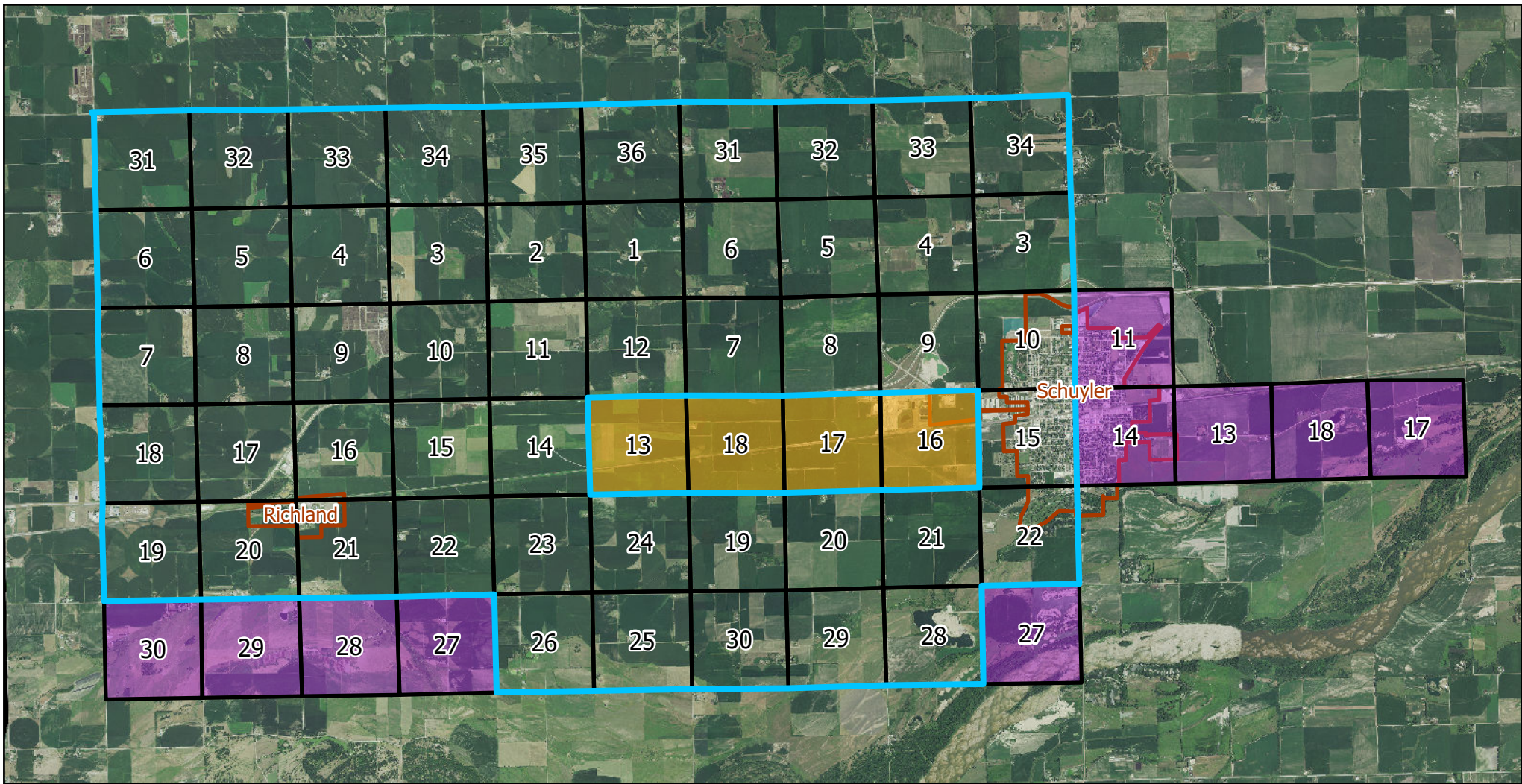


Interpreted geological sections from AEM data and flight path location map provided in conjunction with the Google Earth kmz file. The projected downline distance is equal for the flight path (top image) and the AEM data interpretation (bottom image). The flight path is displayed as a red line on the flight path map. The 1995 Conservation and Survey Division (CSD) water table is shown as a dashed blue line on the AEM data interpretation profile. The Quaternary (Q) section is divided into aquifer material categories as indicated by the legend. The Cretaceous Dakota Group (Kd) is split into Sandstone/Sand dominant and Shale/Clay dominant sections as indicated by the legend. The undifferentiated Pennsylvanian (IP) is indicated by the legend. Additional information regarding the use of this figure and the AEM data may be found in the report titled "Airborne Electromagnetic Mapping and Hydrogeologic Framework of Selected Areas of the Eastern Nebraska Water Assessment Area" chapter on the Lower Platte North Natural Resources District.

Registration# Well ID Permit Number	Use Status	County Name NRD Name Well Location Footage Latitude Longitude	Completion Date Filing Date Decommission Date Times Replaced Online Registration ID (NOLID) Well Driller License Number	Acres Irrigated Gallons/Minute Static Level Pumping Level Series	Pump Column Diameter Pump Depth Well Depth
G-037875 WellID: 45036	I - Irrigation A - Active Registered Well	Saunders Lower Platte North 16N 8E 11 NWNE 1280N 1360E	6/30/1969 11/1/1972 ---	160 1000 gpm 80 ft 115 ft PRO - Single Project	8 in --- 177 ft

Geo Logs

FromDepth	ToDepth	Description	Color	Density	Composition
0	80	CLAY			Other
80	97	SAND			Other
97	140	GRAVEL			Other
140	160	CLAY			Other
160	177	SANDSTONE			Other



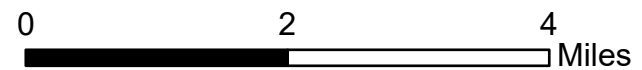
- Proposed Phase 4
- Phase 4 Uranium*
- Phase 3
- Sections
- City Boundaries

Proposed Phase 4 Management Area

*Average uranium concentration in 4 sections is 40.7 ppb (6 samples).

Nitrate samples in proposed phase 4 area

Year	Above 15.01	Samples	> 15.01	Avg
2019	20	47	43%	14.1
2020	29	58	50%	16.7
2023	48	80	60%	17.4



Created January 2024 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS



Notice to Proceed:

The Lower Platte North Natural Resources District (District) is proceeding to implement a Phase 4 Water Quality Management Area within the Schuyler-Richland Phase 3 Water Quality Management Area. A public informational meeting will be held February 22 to present the information and receive suggestions from the public. The Board will be following the rules and regulations outlined in the District Groundwater Rules and Regulations (June 15, 2018). A hearing will be conducted with implementation of the Phase 4 rules starting November 1, 2024.

The following describe the details of the Rules and Regulations being proposed:

Section I Groundwater Quality Management Area - Phase Four

Rule 1 Phase Four Criteria

When levels of nitrate-nitrogen exceed 15.01 parts per million, or levels of other human induced non-point source contaminants exceed 100% of the MCL or LHAL, a Phase Four area will be declared. Within the same aquifer; boundary setting for Phase Four Areas will be initiated when: water quality analytical results within a minimum 9 square mile area are at identified trigger levels for a minimum of 2 sampling events. The area must contain a minimum of 10 registered wells and contaminant trigger levels must be exceeded in over 50% of the wells. When irrigation wells are not available, other wells may be used. Initial investigation by the District will be to determine if the contamination is a result of point-source or non-point source pollution. If non-point source pollution is found to be the reason, more intensive investigation for boundary setting will ensue. If a Wellhead Protection Area should be established due to non-point source pollution, the District may set boundaries that are less than 9 square miles. After the establishment of a Phase Four Area, if non-point source contamination levels should decline, two consecutive sampling events below the trigger levels are needed before the Area could be placed in Phase Three, Phase Two or Phase One.

- **The criteria for the boundary have been met as shown by attached map, which includes sections with human induced non-point source contaminants exceeding 100% of the MCL concentration of uranium.**

Rule 2 Continuation of Phase One, Two and Three Rules

A continuation of Phase One Rules as defined in Section E, Rules 1-6, Section F, Rule 2, Phase Two Rules as defined in Section G, Rules 3, 4, 5, 8, 9, 10 and 11, Phase Three Rules as defined in Section H, Rule 4.

- **A 2-step reporting process for Phase 4 reports with March 15th for soil samples and District nitrogen recommendations with a December 15th deadline for reporting actual yields and nitrogen applications.**

Rule 3 Fertilizer Application On All Soils

Split application of commercial nitrogen fertilizer is required with 80 pounds maximum applied before May 1.

- **Encouraging split applications and utilizing the manure credit.**

Rule 4 Nitrogen Recommendations

Nitrogen applications must not exceed District Recommendations. Application data may be required to verify the amount of nitrogen that is applied to the field(s) within the management area.

- **The District will utilize the nitrogen recommendation formula that has been used since the management area was established. Emphasis will be given on correct soil sampling protocols and realistic yield expectations when calculating nitrogen recommendations.**

Rule 5 Well Metering

Flow meters are required on all high capacity wells.

- **All high capacity irrigation wells of 50 gallons per minute (GPM) or greater will require a properly installed District approved flow meter.**

Rule 6 Acre-Inch Allocations

A rolling acre-inch allocation, in 3-year increments, will be put into place by the District and will be based on the aquifer subarea, crop planted, irrigation distribution system, percent decline of the aquifer, water use of the aquifer, climatic conditions, net corn crop requirements, and discretionary factors.

- **The District will collect 3 years of water use information from all of the producers within the Phase 4 area and then consider if an allocation should be implemented.**

Rule 7 Staff Assistance

NRD Staff will work directly with individuals on Best Management Practices. Staff may spot check fields before May 1 by collecting a soil sample to monitor Rule 3.

- **Staff will work with producers to implement a Nutrient/Irrigation Agreement.**

Schuyler-Richland Phase 4 Best Management Agreement

THIS AGREEMENT is made this ____ day of _____, 2024, by and between the Lower Platte North Natural Resources District, a political subdivision of the State of Nebraska (hereafter referred to as "NRD"), and producer _____.

WHEREAS, the purpose of the agreement is to implement practices that could potentially curb the leaching of nitrates into the groundwater from practices that have been shown in certain situations to reduce nitrate leaching. The NRD is requesting the producer to implement at least one best management practice that has not already been implemented in the producer’s field. A 3-year period starting period for implementation will begin with the date of the producer signature. (Documentation required)

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree to one or more of the following practices:

- 1. _____ Split Application of nitrogen more than 2 times
- 2. _____ Variable Application of Nitrogen by analysis
- 3. _____ Variable Rate of Irrigation
- 4. _____ Cover Crops
- 5. _____ Soil Moisture Sensors for Irrigation Management
- 6. _____ Yield Goal Reduction
- 7. _____ Grid Soil Sampling
- 8. _____ Gravity to Pivot/SDI Conversion
- 9. _____ Updating Irrigation Nozzles
- 10. _____ Applying the Manure Credit for 3 years
- 11. _____ Tissue Sampling for Nitrogen
- 12. _____ Other Practice _____

**LOWER PLATTE NORTH NRD, a
Nebraska Political Subdivision**

By: _____

Producer Signature

By: _____

Date _____

Test Your Well

Schuyler FFA Members Water Testing Event

Sunday, February 18
9:00 a.m. - 12:00 p.m.

Schuyler Central High School during
the FFA Pancake Feed



Studies have shown long-term exposure of high levels in nitrates in conjunction with other contaminants in drinking water increase the risk for serious health issues at any age.

Proper Water Collection

- ◆ At least 2 cups of well water.
- ◆ Collected within 24 hours in a clean, sealed container.
- ◆ Keep water cool before testing.
- ◆ If you have a water treatment system, please bring a sample **before and after treatment**.

Schuyler FFA Members will test samples and provide nitrate level results **free of charge**.

Lower Platte North Natural Resources District staff will be available for additional information on testing water.

All results are confidential.

Event sponsored by

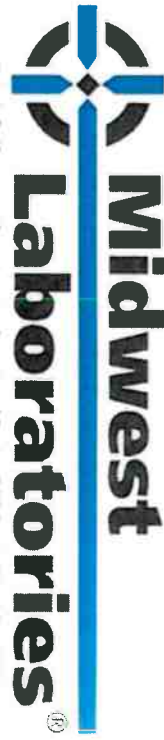


LOWER PLATTE NORTH
Natural Resources District

and Schuyler FFA Chapter

REPORT NUMBER
23-346-0596
 COMPLETED DATE
Dec 14, 2023
 RECEIVED DATE
Dec 12, 2023

ACCOUNT
997



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
 www.midwestlabs.com

IDENTIFICATION

COPY TO
26457 CENTRAL VALLEY AG
 2nd COPY TO **CENTRAL VALLEY AG-REG 3 M/**
66894

CENTRAL VALLEY AG
1362 3RD AVE
COLUMBUS NE 68602-

PAGE 1/1
 TODAY'S DATE
Dec 14, 2023

SOIL ANALYSIS REPORT

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. PERCENT RATE	PHOSPHORUS			POTASSIUM K ppm RATE	MAGNESIUM Mg ppm RATE	CALCIUM Ca ppm RATE	SODIUM Na ppm RATE	SOIL pH 1:1	BUFFER INDEX	CATION EXCHANGE CAPACITY CEC meq/100g	PERCENT BASE SATURATION (COMPUTED)								
			P ¹ MAX. BRAV 1:7 RATE	P ¹ STRONG BRAV 1:7 RATE	OSERN P BICARBONATE ppm RATE								% K	% Mg	% Ca	% H	% Na				
41047	MC10SW1																				
41048	MC10SW2																				
41049	MC10SW3																				
41050	MC10SW4																				
LAB NUMBER	SURFACE		NITRATE-N (FIA)				SULFUR S ppm RATE		ZINC Zn DTTVA ppm RATE		MANGANESE Mn DTTVA ppm RATE		IRON Fe DTTVA ppm RATE		COPPER Cu DTTVA ppm RATE		BORON B SOBEL DTTVA ppm RATE		SOLUBLE SALTS 1:1 mmhoes/cm RATE		
	lb/a	depth (ft)	ppm	lb/a	depth (ft)	ppm	lb/a	depth (ft)	Total lb/a	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE
428	90	0-36						972													
41047	90	0-36						972													
41048	79	0-36						853													
41049	26	0-36						281													
41050	30	0-36						324													

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days. Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.



#4-ATV

MODEL - GSRHATV

Hydraulic Soil Sampling, Coring and Drilling Machine

All fixtures are designed to be mounted on a Polaris Ace 4x4 All Terrain Vehicle. This model is self-powered by a 22 HP OHV V-Twin Honda Air Cooled Gas Engine, equipped with 12 volt starter and alternator. Coring machine power is completely separate from ATV engine and fuel system. Complete Coring/Drilling Machine is constructed of aluminum.



TEST YOUR WELL



Nitrates in water are
**COLORLESS,
ODORLESS AND
TASTELESS.**

TAKE ACTION

- Have your well water tested on a yearly basis.
- If your nitrate results are above 10 ppm, water can be treated by: distillation, reverse osmosis, or ion exchange.
- Continue yearly water testing to ensure equipment is working correctly.
- This test is for nitrate levels only. There are numerous parameters that can be tested. Please visit with Lower Platte North NRD staff for additional testing options.



LOWER PLATTE NORTH
Natural Resources District

Wahoo, NE • www.lpnrd.org • 402-443-4575

FLOW METER MAINTENANCE SERVICE AGREEMENT

THIS AGREEMENT is made this ____day of February, 2024, by and between the Lower Platte North Natural Resources District, a political subdivision of the State of Nebraska (hereafter referred to as "NRD"), and TRI CITY Meters, Inc., a Nebraska Corporation, doing business at 210 E. Front Street, P.O. Box 126, Alda, Nebraska 68810 (hereafter referred to as "TRI CITY");

WHEREAS, the NRD issued requests for proposals pursuant to the request attached hereto as Exhibit "A" and incorporated herein by reference, from area flow meter companies, irrigation system dealers, well drillers, and pump installers to establish a flow meter maintenance program within the LPNNRD District; and

WHEREAS, it is believed that there are approximately 1,000 registered wells throughout the LPNNRD including its Special Quantity Subareas (SQS) that have a District Approved Flow meter installed as Exhibit "C" and incorporated herein by reference, and the NRD plans for each of the installed flow meters on active wells to be inspected at least once every four (4) years to ensure that the meters are working properly; and

WHEREAS, NRD has authority under the Nebraska Groundwater Management Act and pursuant to its groundwater management rules and regulations to implement the aforementioned flow meter maintenance program; and

WHEREAS, TRI CITY presently owns and operates a flow meter maintenance program in Eastern Nebraska and did submit its proposal to the NRD on or before October 27, 2023 as attached hereto as Exhibit "B" and incorporated herein by reference; and

WHEREAS, the NRD's flow meter maintenance program will run from March 1, 2024 to March 1, 2028 (weather dependent) requiring performance of TRI CITY services on no fewer than 25% of the total number of flow meters installed throughout the LPNNRD District per year between the Dates of November 1st and March 1st as shown in Exhibit "B" and incorporated herein by reference; and

WHEREAS, NRD is willing to pay to TRI CITY \$80.00 flat fee per MECHANICAL METER site and \$95.00 flat fee per ELECTRONIC METER site for flow meter inspection services pursuant to its proposal in Exhibit A and subject to the express terms and conditions of this Agreement as stated in Exhibit B "Request for Proposals Flow Meter Maintenance Program Lower Platte North NRD; and

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree to the following:

1. TRI CITY's Performance. TRI CITY Meters, Inc. agrees to perform the following activities as an independent contractor for the NRD:
 - a. Evaluation of each water meter's current operating condition;
 - b. Compliance with minimum installation requirements;
 - c. Lubrication of bearings and replacement of mounting gaskets;
 - d. A digital photograph of the meter register;

- e. A digital photograph of the meter installation;
- f. Participate in and provide training for its employees to perform the tasks described above, as deemed necessary by the NRD;
- g. Provide electronic or paper report to the NRD for each meter site inspected and/or serviced pursuant to the NRD provided "Checklist for inspection of Propeller and Electronic Flow Meter" stipulated in Exhibit A, including but not limited to; date of inspection, well registration number, legal description of meter site, confirmation that meter is on approved NRD list, brand, model, serial number, current flow meter reading and units of measurement, operating condition of each flow meter, compliance with installation recommendations, and inspection sheet for each flow meter site;
- h. Provide an itemized monthly or quarterly invoice and inspection sheet for services provided represented by a flat fee of \$80 or \$95 for each site visited (which said fee includes travel and labor costs) as well as a cost breakdown for each site where any equipment is repaired or replaced as stipulated in "Contractor Inspection Schedule" and "Contractor Billing" in Exhibit A;
- i. Flow meters still under warranty and needing repair are not eligible for equipment replace cost in the NRD meter maintenance program and if meter needs to be sent back to the manufacturer, the landowner or tenant will be responsible for all costs;
- j. Cost of parts to repair mechanical flow meters is 100% responsibility of the landowner or person(s) for the District approved flow meter. The NRD will coordinate with TRI CITY and producer to repair the flow meter. TRI CITY will bill the producer for parts and labor with the NRD responsible for collecting non-payment from individuals.
- k. TRI CITY will replace batteries on all magnetic flow meters at least once every four years and bill the landowner or person(s) 100% for this battery replacement who is responsible for the District approved flow meter. The NRD will coordinate with TRI CITY and producer for battery replacement with NRD will be responsible for collecting non-payment from individuals.
- l. Attached a security tag and cable around serviced flow meters and piping system for each site inspected to ensure that the flow meter is not tampered or removed. The tag and cable, however, should not prevent the operator from reading the face of the register; and
- m. Provide proof of a \$2,000,000 per occurrence commercial liability insurance each year naming the NRD as an additional insured; and
- n. Hold the NRD and their agents and employees harmless from all suits, claims, actions, or proceedings, and to the extent permissible by law from and against the following; (1) all damages or liability of any character, including costs and attorney fees, to the extent caused by any negligent act, error or omission of TRI CITY or any person or organization for whom TRI CITY may be responsible, and arising out of the performance of services under this Agreement; and (2) all liability, damage,

demands, and costs sought by any local, state, or federal agency from which TRI CITY may be responsible, arising out of or in connection with the services contemplated herein.

2. NRD's Performance. The NRD agrees to perform the following activities pursuant to this Agreement:
 - a. Send written notification to landowners advising them of the flow meter maintenance program and inspections to be conducted under a general time-frame;
 - b. Give TRI CITY the approximate location of each meter to be serviced;
 - c. Provide TRI CITY with the crimping tools with the necessary inscription; and
 - d. To make timely payment to TRI CITY following submission of a satisfactory report and itemized invoice, as described above.
 - e. The NRD will be responsible for non-payment of an invoice.
3. Mutual Agreement. It is mutually agreed that the pricing for TRI CITY's inspections and services are properly delineated within the proposal attached hereto as Exhibit "B".
4. Representations and Warranties of TRI CITY. TRI CITY makes the following representations and warranties:
 - a. That it is a duly organized and validly existing corporation which is authorized to do business in the State of Nebraska;
 - b. That its duly empowered officers have authorized the execution and delivery of this Agreement, as well as any other documents deemed necessary to effectuate the purposes contemplated herein;
 - c. That its execution of this Agreement and all documents associated therewith will not constitute a breach of any articles of incorporation, bylaws, contract, regulation or ruling by which it is bound; and
 - d. That there are no known pending or threatened actions against the TRI CITY at law or in equity before any federal, state, county, municipal or other government court, department, commission, board, bureau, agency or instrumentality, wherein an adverse judgment, assessment or liability would have a material adverse effect on this Agreement or the services described herein.
5. Representations and Warranties by NRD. NRD represents and warrants the following:
 - a. That it is a political subdivision under the laws of the State of Nebraska, as defined in the Nebraska Revised Statutes, as amended;
 - b. That the execution of this Agreement and any other documents related thereto has been duly authorized by the NRD's board of directors; and

Exhibit A

Flow Meter Maintenance Service Agreement

The Lower Platte North NRD (LPNNRD) is requesting proposals from the area flow meter companies, irrigation system dealers, well drillers, and pump installers to complete flow meter maintenance throughout the whole LPNNRD District including the two allocated Special Quantity Subareas (SQS #1 & SQS #2). There are approximately 1,000 registered wells within the district that have a district approved flow meter installed with more being added yearly. The plan is to inspect each of the installed flow meters once every four years and perform any required maintenance to make sure the meters are in proper working order. The scope of work for each maintenance year shall be completed between the dates of November 1st – March 1st (weather dependent). The scope of work to be completed is listed below:

- The hired contractor will have a flat fee for each site visited. This will include travel and labor cost of the contractor to visit the sites.
- The contractor must also give a detailed report on maintenance and the inspection performed at each flow meter site.
- If any meter maintenance is required, the contractor shall perform that work and bill the LPNNRD for the labor associated with the work. The landowner is to be billed for any parts that are required for each site. The bill shall breakdown the cost for each site where any equipment is repaired or replaced.
- 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.
- The hired contractor will replace batteries on all magnetic and digital read flow meters at least once every four years. The landowner, who will be billed by the contractor, will be responsible for 100% of the battery replacement.
- Included in this letter is a list of the LPNNRD District approved Mechanical flow meters that are installed throughout the LPNNRD. New electronic read meters will be installed only on an extreme case-to-case basis. Currently there are approximately 85 battery powered meters.
- If interested in placing a bid or would like further details on the Flow Meter Maintenance Program, please contact the Lower Platte North NRD by October 25, 2023, at 402-443-4675.
- This will be a 4-year contract and expire in 2028 with the selected firm needing liability insurance for any damages.

If no further information is needed, please submit bid proposals to the Lower Platte North NRD by **3 pm on October 27, 2023**. These will be reviewed by the Water Committee on November 1, 2023 at 6 pm and the contract will be awarded at the November 2023 Board meeting. The LPNNRD has the right to reject all bids. Thank you.

Daryl Andersen
Water Resources Manager

Noah Franzen
Water Resources Specialist

Exhibit B



Flat Fee for each MECHANICAL METER site visited, including travel and labor cost: \$80.00 per site

Flat Fee for each ELECTRONIC METER site visited that requires a battery change: \$95.00 per site. (NRD Tech will be able to confirm when battery was replaced when he/she shows up on site, without breaking the seal of the meter.)

Meter Covers: \$25.00 each

Senninger Batteries: \$21.00 ea. (2 required per meter)

SeaMetrics Batteries: \$105.00 (one per meter)

Additional cost for the Electronic meters is to cover additional labor, additional parts, seals, dry packs, used in the battery replacement process. Batteries to be supplied by NRD, or NRD to reimburse TCM for price of batteries in addition to the labor bid above. (Battery cost is NOT included in our bid.)

Please feel free to contact me if you have any questions.

Mark Vanosdall
President
Tri City Meters, Inc.

Ph: 308-379-2013
Cell: 308-379-9989

Exhibit C

Lower Platte North NRD Mechanical Meter Approval List

Manufacturer	Model	Notes
McCrometer	McPropeller	All Propeller Models
Sparling	Propeller saddle meter	Model 312 propeller meter
ARAD Group	Saddle Water meter	Meter for irrigation applications
Geysler	Saddle meter	All propeller models for Farmland Irrigation

EMAIL ONLY

ENWRA

PO Box 83581
Lincoln, NE 68501-3581

INVOICE

INVOICE: #3080
Date: January 26, 2024

TO:

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

DESCRIPTION	AMOUNT
FY 2024 ENWRA annual dues	\$30,000
TOTAL	\$30,000

Make all checks payable to: **ENWRA**

THANK YOU!

GMDA Winter Conference – Nashville, TN

Last week Daryl, Dave Saalfeld, Joe Birkel and I were in Nashville at the GMDA Conference. Overall, it was a good conference with speakers from across Tennessee mainly. A number of presentations were about the Memphis or Sparta aquifer. This is a rather large aquifer with some areas stretching to 3000' thick. This aquifer provides west Tennessee with most of its drinking water. There is some concern over new industry (Ford) moving into the area. The Ford plant is expected to be a large water user, in an area that is almost solely dependent on groundwater. Quality concerns are also being brought forward by local groups interested in protecting the aquifer. A proposed oil pipeline running through a well field prompted the group to take action. This group said, "Informing the community is critical to water for the future." I thought this was a great quote for us here at LPNNRD.

There were some interesting presentations about the rehabilitation of streams and wetlands in Tennessee. Much of west Tennessee was worked over in the early 1900s to allow more room for people and agriculture. Many streams were channelized and rerouted, this caused a myriad of problems over the years including flooding, low flows in other streams, and less recharge into the aquifer. Tennessee has been working on several projects to return streams to more natural flow patterns and to begin recharging the aquifer.

The Army Corp of Engineers gave a presentation on the Mississippi river and how they continue to use innovative techniques to keep the channel open. The majority of U.S. agriculture relies on the river to transport goods around the globe. The Corp seems to be quite busy with levee repairs and placing of new weirs, some of the equipment they have is very impressive. Mississippi River Basin handles 41% of all the US. drainage.

A couple of conservation bills in Washington HR4902 and S2250 have some incentives for conservation easement payments and IRS credits. These bills could be part of the farm bill that the GMDA group is watching.

One thing I've taken away from a few GMDA conferences is how lucky we are to be in Nebraska where we are ahead of the curve comparatively to other states! Dr Waldron from University of Memphis commented "Do not take the aquifer for granted".

Nebraska Water Leaders Academy – Lincoln, NE

The first session of the Water Leaders Academy was held January 18th and 19th down in Lincoln. We went through introductions and our strength assessments we filled out prior to the sessions to start. It is interesting diving into the details of the strength assessment.

Other sessions included tips on how to communicate scientific information, how to reach people who may not know about the issues we have, and strategies to communicate with the public and amongst ourselves. We also had a talk on the Nebraska Legislature and a history of water law. I personally enjoyed the Nebraska geology and the climate talks. Lots of information to share and still learn, but a great first session and I appreciate the opportunity to be in the NWLA.