

Water Committee Meeting
Wednesday, October 27, 2021 7:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

2. REGULATORY

A. GROUND WATER MANAGEMENT AREA

1. Supplemental Well Permit

Ray Kucera Jr would like to drill a supplemental well in E1/2 SE1/4 26-15N-8E. The purpose of the well is to decrease the strain on the existing well in the NE¼. This land is already being irrigated but is within Mead's Wellhead Protection Area. Ray did receive an approved zoning permit from Mead.

Information is attached.

2. Variance Ranking Sheet Discussion

The 2 examples are a 40 acre field that is across the road from the existing well that already irrigates 135 acres. Example 1 & 2 show a picture of the scenario,

Questions:

Encourage drilling a new well or allowing expansion on an existing well?

What best management practices should be considered if the ranking sheet reflects practices?

Enforcement of best management practices after a certain time?

Committee and staff discuss what would be more efficient, drilling a new well or adding acres to an existing well. Another discussion was continuous and non-continuous tracts. The Committee felt adding best management practices to the scoring sheet would be a challenge to enforce by staff and the Board. The committee directed staff to develop a revised scoring sheet for review on new wells and expansion of acres.

3. Cost Share Programs

a. Flow Meter Maintenance Program

Tri City Meter's will be in year 2 of their contracted flow meter maintenance cycle (4 years). They will be starting meter maintenance within the next couple weeks depending on the weather in parts of Butler, Dodge, and Saunders Counties. Currently, they are scheduled to perform regular maintenance on 226 irrigation flow meters.

4. Nitrate Results

A GIS map showing nitrate results from 2021 water sampling. Also, maps from the Mead and Platte Center areas.

The committee would like staff to review nitrate results from previous sampling events to look for trends. Should consider public information and offer water sampling for domestic wells.

5. Bellwood Phase 2 Area

6. 2021 is the nineteenth year for this Phase 2 Area.

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		10.		16.	
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52	53	54	55	56	57

58	59	60	61	62	63
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82	83	84	85	86	87

88	89	90	91	92	93
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100	101	102	103	104	105
106	107	108	109	110	111
112	113	114	115	116	117

11	119	120	121	122	123
12	124	125	126	127	128

130. Richland - Schuyler Phase 3 Area

131. 2021 is the sixth year of this Phase 3 Area. This Phase 3 area went into effect September 1, 2015. The 55 sections of this area first went into a Phase 2 Area in 2004. The ten sections that were in Phase 2 are now in Phase 3. As such, the 2020 and 2021 numbers (at bottom of table) are for 65 sections.

132. Year	133. Nitrate-nitrogen Range	134. Percent Nitrate-nitrogen 0 to 8.0 ppm	135. Percent Nitrate-nitrogen 0 to 8.0 ppm	136. Percent Nitrate-nitrogen 0 to 8.0 ppm	137. Percent Nitrate-nitrogen 0 to 10.00 ppm
146. 2004	147. 0 to 47 ppm	148. 30% (42 of 139)	149. 10% (14 of 139)	150. 31.3% (74 of 236)	151. 10.2% (24 of 236)
152. 2005	153. 0 to 120 ppm	154. 28% (50 of 181)	155. 14% (26 of 181)	156. 32% (75 of 231)	157. 10% (22 of 231)
158. 2006	159. 0 to 53 ppm	160. 32% (75 of 231)	161. 10% (22 of 231)	162. 32% (75 of 231)	163. 10% (22 of 231)
164. 2007	165. 0 to 99 ppm	166. 32% (75 of 231)	167. 10% (22 of 231)	168. 32% (75 of 231)	169. 10% (22 of 231)

170.	2008	171.	0 to 46 ppm	172.	28% (53 of 190)	173.	12% (23 of 190)
176.	2009	177.	0 to 57 ppm	178.	33% (72 of 216)	179.	6% (13 of 216)
182.	2010	183.	0 to 57.5 ppm	184.	31% (70 of 229)	185.	7% (15 of 229)
188.	2011	189.	0 to 65.8 ppm	190.	28% (67 of 241)	191.	9% (21 of 241)
194.	2012	195.	0 to 52.6 ppm	196.	29% (70 of 241)	197.	9% (21 of 241)
200.	2013	201.	0 to 94.0 ppm	202.	25% (63 of 252)	203.	9% (23 of 252)
206.	2014	207.	0 to 101.0 ppm	208.	27% (68 of 251)	209.	9% (22 of 251)
212.	2015	213.	0 to 53.3 ppm	214.	23% (55 of 238)	215.	12% (29 of 238)
218.	2016	219.	0 to 50.5 ppm	220.	25% (58 of 228)	221.	10% (22 of 228)
224.	2017	225.	0 to 53.4 ppm	226.	25% (60 of 238)	227.	6% (4 of 238)
230.	2018	231.	0 to 56.9 ppm	232.	26.5% (50 of 189)	233.	6.3% (12 of 189)
236.	2019	237.	0 to 39.4 ppm	238.	25% (53 of 209)	239.	11% (22 of 209)
242.	2020	243.	0 to 50.8 ppm	244.	26% (69 of 261)	245.	6% (5 of 261)
248.	20 21	249.	0 to 43.0	250.	26% (67 of 255)	251.	8% (21 of 255)

254. LPNNRD Operator Certification

Attached are planned meetings for 2021-22.

255. Lower Platte River Basin Water Management Plan Coalition (LPRBC)

A \$10,000 invoice is attached for 2021-22 Coalition dues.

Shown are updates from a meeting staff had with The Flatwater Group. This is the process of determining data that will go into the Insight model. The Coalition is working on the next 5-year allotment starting in 2023.

Website: <http://nednr.nebraska.gov/INSIGHT/> - this is the INSIGHT model location

256. Water Transfers

Staff met with Don and Bill Wegener on transferring acres from Section 11-17-4E, west of Rogers. Don is working on obtaining more information to present to LPN. He claims that the certified irrigated acres that the sandpit obtained were still available to him. Staff have asked for documentation to that effect.

The committee was concerned about transferring previous certified irrigated acres from land that had been sold.

3. GROUND WATER PROGRAMS

A. DECOMMISSIONED WELL PROGRAM

1. Well Estimates

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

3. Well Owner	4. Type of Well	5. Cost Share Estimate	6. County
7.	8.	9.	10.
11.	12.	13.	14.
15.	16.	17.	18.

19. Plugged Wells

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

21. Well Owner	22. Type of Well	23. Cost Share Payment	24. County
25. Laska Land LLC	26. Stock	27. \$418.50	28. Platte
29. Dawson Farm & Ranch	30. Irrigation	31. \$1,000.00	32. Butler
33.	34.	35.	36.

B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

1. Phase Area Update

Staff gave a demonstration of the Nitrate Assessment Tool for the Nitrogen Management Areas.

2. Lower Platte River Consortium

An extension is being requested to continue for 1 year. This extension is not asking for any additional money, but will allow members to continue planning on a workable drought plan for the Platte River. This extension needs to be signed by October 28th to keep the existing agreement in place.

C. NEW MONITORING WELLS

Staff explained that Dvorak Well Drilling had not started because of personnel issues. The site east of Fremont is on hold until the owner decides if a payment is necessary.

D. GMDA Conference

GMDA conference is scheduled for January 18-20, 2022 in San Antonio, TX.

4. OTHER

Will's monthly report for October.

The November Board Meeting will be Monday, November 8, starting at 5 pm at Schuyler High School.

A. COMMENTS FROM THE PUBLIC

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

10/25/21

DNR & NRD USE ONLY			
Permit No. _____	Date Approved/Denied _____	NRD Representative _____	
Permit Type: New, Replacement or Late _____	Date Received _____	Paid: Cash or <u>Check</u> # 10102	
Date Post-inspected _____	Registration No. _____	Updated Form: May 2008	

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: <u>Ray Kucera Jr.</u> <u>1687 Co RJ V</u> <u>Cedar Bluffs, Mo 68015</u> Phone: <u>442-9214</u>	NAME AND ADDRESS OF CONTACT: <u>Same</u> _____ _____ Phone: _____
--	--

2. PURPOSE OF NEW WATER WELL (indicate one):

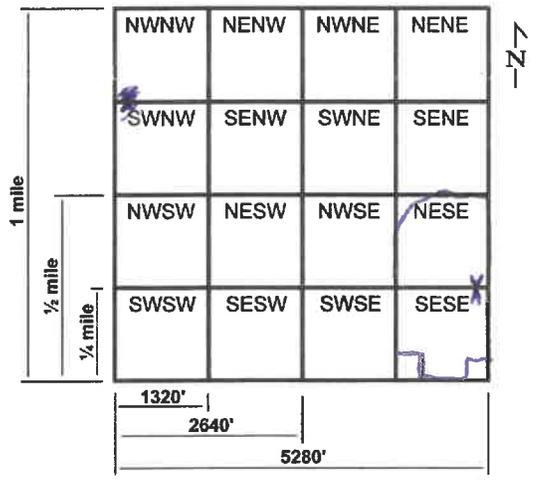
<input checked="" type="checkbox"/> Irrigation (Complete section A)	<input type="checkbox"/> Dewatering (Over 30 days, Complete section B)
<input type="checkbox"/> Livestock (Complete section C)	<input type="checkbox"/> Domestic (Irr. on one acre or larger, Complete section D)
<input type="checkbox"/> Industrial (Complete section E)	<input type="checkbox"/> Public Water Supply (Complete section F)
<input type="checkbox"/> Recovery or Remediation (Complete section G)	
<input type="checkbox"/> Other (specify) _____	(Complete section H)

3. IDENTIFY LOCATION OF PROPOSED WELL:

A. Saunders County, NESE 1/4 of the SE 1/4 of Section 26, Township 15 North, Range 8 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, _____ 1/4 of the _____ 1/4 of Section _____, Township _____ North, Range _____ East/West.

C. The well will be located 1300' feet from the North/South section line, and will be 50' feet from the East/West section line. Or enter Lat. / Long.
 Latitude Degree _____ Minute _____ Second _____
 Longitude Degree _____ Minute _____ Second _____



4. REPLACEMENT AND ABANDONED WELL INFORMATION:

A. Is this a replacement well? Yes, 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 _____ 1/4 of the _____ 1/4 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): 11/21
- B. Expected total well depth: 130 feet.
- C. Well Casing Diameter: 16 inches.
- D. Pump Column Diameter: 6 inches.
- E. Estimated pumping capacity: 700 GPM.
- F. Expected total annual water use in Acre Inches / Year 85-7 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 _____
List well registration number and legal description of each well in Section 6 below.
- I. Name of Well Driller: Webster Well (Please attach test hole log, if available.)

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

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 9-10-21 Signature of Applicant Ray Kucera Jr.
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.

**APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
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)

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.
-

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.
-

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

**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)**

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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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.
-

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.
-

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? 68 acres
- B. Crops to be planted: Corn Soybeans Crop rotation schedule Corn, Soybeans, Corn
- 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 5-7 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 contaminants _____
 - 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 _____
 - B. Will the well be used for one calendar year or less? Yes, 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. _____
 - C. 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 _____
-

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. ****



المنطقة

منطقة 2.5 كم

في المنطقة

Hwy 77

Mead High School

Mead

0

8

0

N

92

77

77

11

10

Handwritten text, possibly a signature or name, written in a cursive style. The text is oriented vertically and appears to be written in dark ink on a light background.



County Road 10

County Road N

County Road N



County Road 10

County Road 11



County Road M

County Road M



County Road 10

County Road 11

N 3rd Cir



N 1st St

Mead



W 3rd St



Draft Changes				
Application Number	Applicant Name	Date:	10/20/21 1:26 PM	
Example 1	John Smith		Total Score->	250.5
Category	Divisions	Points Available	Percent of Application	Points Received

Expansion of acres on existing well	WF= 1.0			
	Expand 1 to 20 acres	100	0	0
	Expand 21 to 40 acres	80	0	0
	Expand 41 to 80 acres	60	0	0
One continuous tract	Expand 81 to 120 acres	40	0	0
One continuous tract	Expand 121 to 160 acres	20	0	0
Non-continuous tract	Expand 41 to 160 acres	0	100	0
			Total ->	0

Expansion of acres on new well	WF= 0.75			
	Expand 1 to 34 acres	20	0	0
One continuous tract (wiper pivot)	Expand 35 to 160 acres	40	0	0
One continuous tract (full circle)	Expand 35 to 110 acres	80	0	0
One continuous tract (full circle)	Expand 111 to 160 acres	100	0	0
Non-continuous tract	Expand 41 to 160 acres	0	0	0
			Total ->	0

Irrigation System	WF= 1.0		New Numbers	
	Subsurface Drip	100	0	0
	Surface Drip	80	0	0
	Pivot	60	100	60
	Gravity, Gun, Other	10	0	0
			0	0
			Total ->	60

Land Class of field	WF= 1.0			
	Class 1	100	15	15
	Class 2	80	0	0
	Class 3	60	5	3
	Class 4	40	15	6
	Class 5	10	65	6.5
	Class 6-8/ not more than 20%	0	0	0
			Total ->	30.5

Stream Depletion Factor From DNR	WF= 1.25			
	10 to 20%	100	0	0
	21 to 30%	90	0	0
	31 to 40%	80	0	0
	41 to 50%	70	0	0
	51 to 60%	60	0	0
	61 to 70%	50	0	0
	71 to 80%	40	100	50
	81 to 90%	20	0	0
	>90%	10	0	0
			Total ->	50

Saturated Thickness	WF= 1.0			
	176 to 200 ft.	100	0	0
	151 to 175 ft.	90	0	0
	126 to 150 ft.	80	0	0
	101 to 125 ft.	70	0	0
	76 to 100 ft.	40	100	40
	51 to 75 ft.	20	0	0

26 to 50 ft.	10	0	0
0 to 25 ft.	0	0	0
Total ->			40

Specific Yield **WF= 1.0**

18.1 to 22 %	100	0	0
14.1 to 18 %	60	0	0
10.1 to 14 %	30	0	0
6.1 to 10 %	10	100	10
2 to 6%	0	0	0
Total ->			10

Transmissivity **WF= 1.0**

21331 to 23700	100	0	0
18961 to 21330	90	0	0
16591 to 18960	80	0	0
14221 to 16590	70	0	0
11851 to 14220	60	100	60
9481 to 11850	50	0	0
7111 to 9480	40	0	0
4741 to 7110	30	0	0
2371 to 4740	20	0	0
0 to 2370	10	0	0
Total ->			60

<p>Minimum Score of 300 is needed to be considered for variance approval Once a variance is submitted and not approved, it will be carried over for 3 years Land Classes 6-8, with slopes, greater than 20% of the parcel not eligible for a variance</p>	Total Score->	250.5
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Draft Changes				
Application Number	Applicant Name	Date:	10/20/21 1:34 PM	
Example 2	John Smith		Total Score->	310.5
Category	Divisions	Points Available	Percent of Application	Points Received

Expansion of acres on existing well	WF= 1.0			
	Expand 1 to 20 acres	100	0	0
	Expand 21 to 40 acres	80	0	0
	Expand 41 to 80 acres	60	0	0
One continuous tract	Expand 81 to 120 acres	40	0	0
One continuous tract	Expand 121 to 160 acres	20	0	0
Non-continuous tract	Expand 41 to 160 acres	0	0	0
	Total ->			0

Expansion of acres on new well	WF= 0.75			
	Expand 1 to 34 acres	20	0	0
One continuous tract (wiper pivot)	Expand 35 to 160 acres	40	0	0
One continuous tract (full circle)	Expand 35 to 110 acres	80	100	60
One continuous tract (full circle)	Expand 111 to 160 acres	100	0	0
Non-continuous tract	Expand 41 to 160 acres	0	0	0
	Total ->			60

Irrigation System	WF= 1.0		New Numbers	
	Subsurface Drip	100	0	0
	Surface Drip	80	0	0
	Pivot	60	100	60
	Gravity, Gun, Other	10	0	0
			0	0
	Total ->			60

Land Class of field	WF= 1.0			
	Class 1	100	15	15
	Class 2	80	0	0
	Class 3	60	5	3
	Class 4	40	15	6
	Class 5	10	65	6.5
	Class 6-8/ not more than 20%	0	0	0
	Total ->			30.5

Stream Depletion Factor From DNR	WF= 1.25			
	10 to 20%	100	0	0
	21 to 30%	90	0	0
	31 to 40%	80	0	0
	41 to 50%	70	0	0
	51 to 60%	60	0	0
	61 to 70%	50	0	0
	71 to 80%	40	100	50
	81 to 90%	20	0	0
	>90%	10	0	0
	Total ->			50

Saturated Thickness	WF= 1.0			
	176 to 200 ft.	100	0	0
	151 to 175 ft.	90	0	0
	126 to 150 ft.	80	0	0
	101 to 125 ft.	70	0	0
	76 to 100 ft.	40	100	40
	51 to 75 ft.	20	0	0

26 to 50 ft.	10	0	0
0 to 25 ft.	0	0	0
Total ->			40

Specific Yield **WF= 1.0**

18.1 to 22 %	100	0	0
14.1 to 18 %	60	0	0
10.1 to 14 %	30	0	0
6.1 to 10 %	10	100	10
2 to 6%	0	0	0
Total ->			10

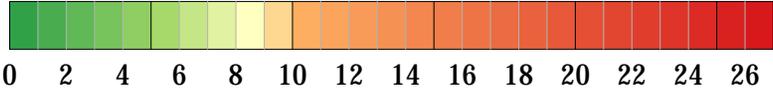
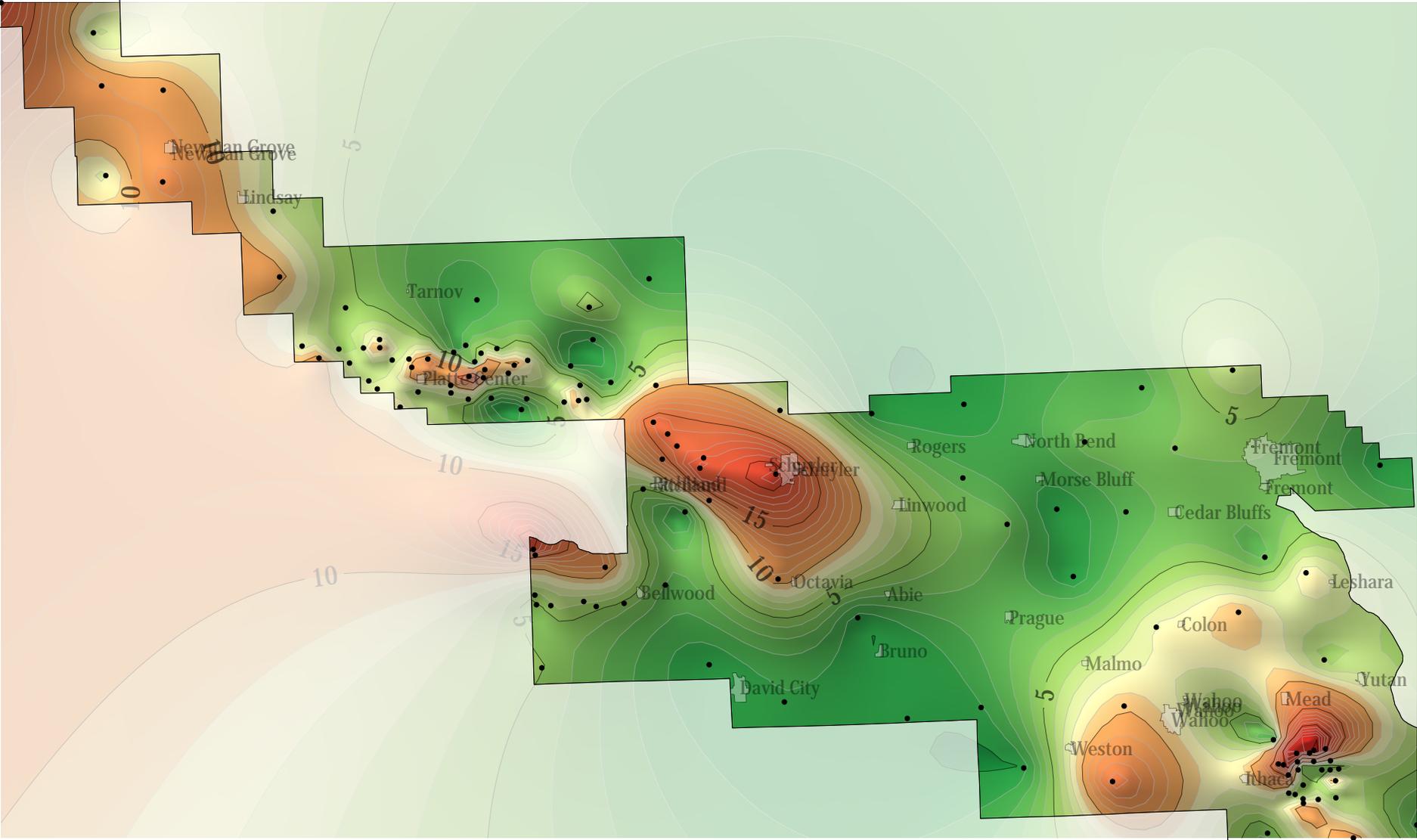
Transmissivity **WF= 1.0**

21331 to 23700	100	0	0
18961 to 21330	90	0	0
16591 to 18960	80	0	0
14221 to 16590	70	0	0
11851 to 14220	60	100	60
9481 to 11850	50	0	0
7111 to 9480	40	0	0
4741 to 7110	30	0	0
2371 to 4740	20	0	0
0 to 2370	10	0	0
Total ->			60

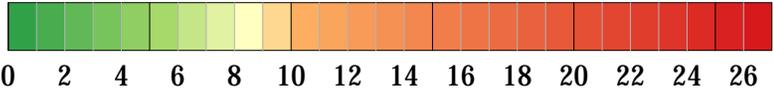
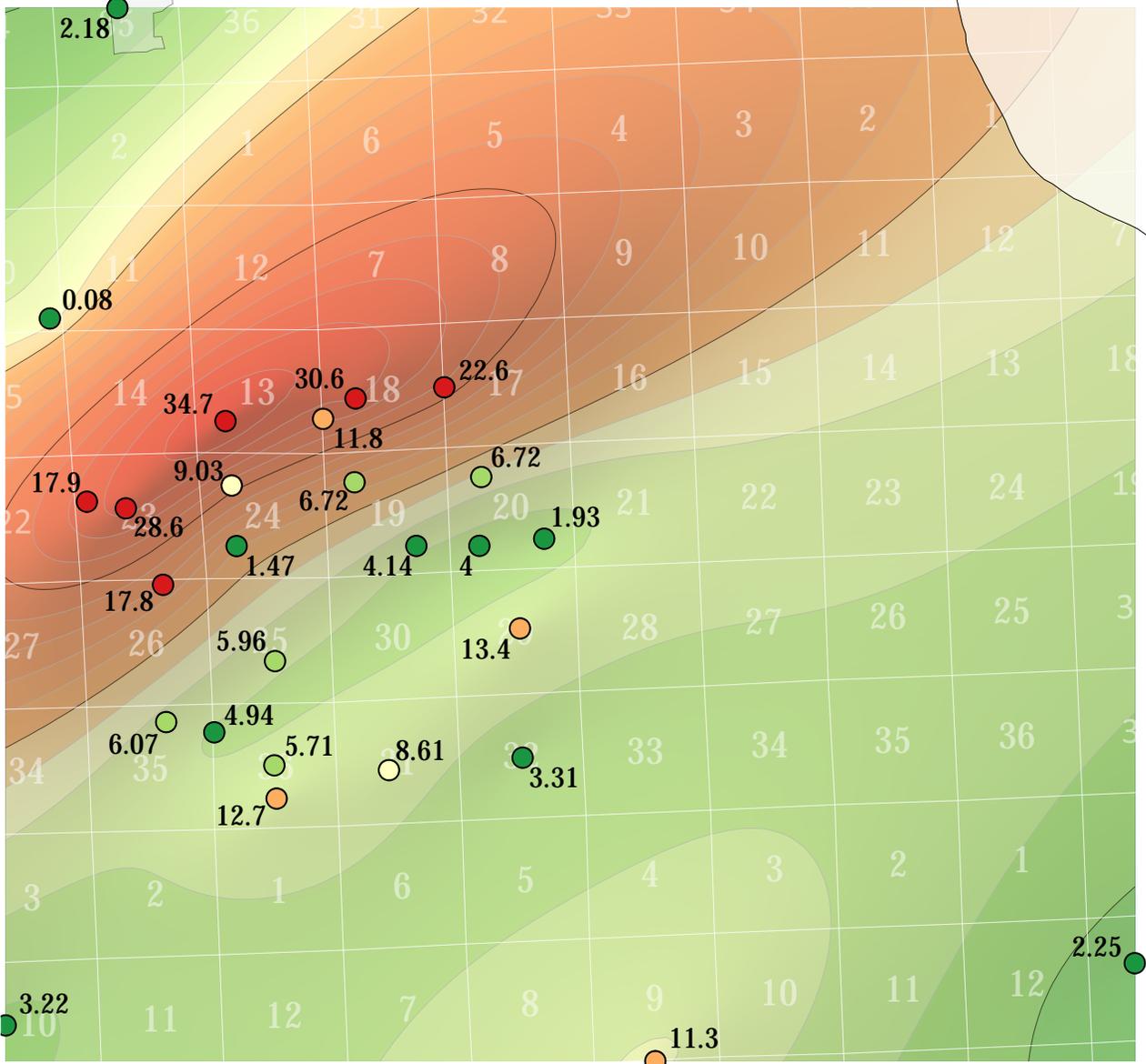
<p>Minimum Score of 300 is needed to be considered for variance approval Once a variance is submitted and not approved, it will be carried over for 3 years Land Classes 6-8, with slopes, greater than 20% of the parcel not eligible for a variance</p>	Total Score->	310.5
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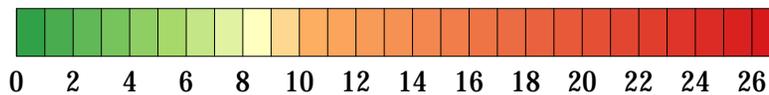
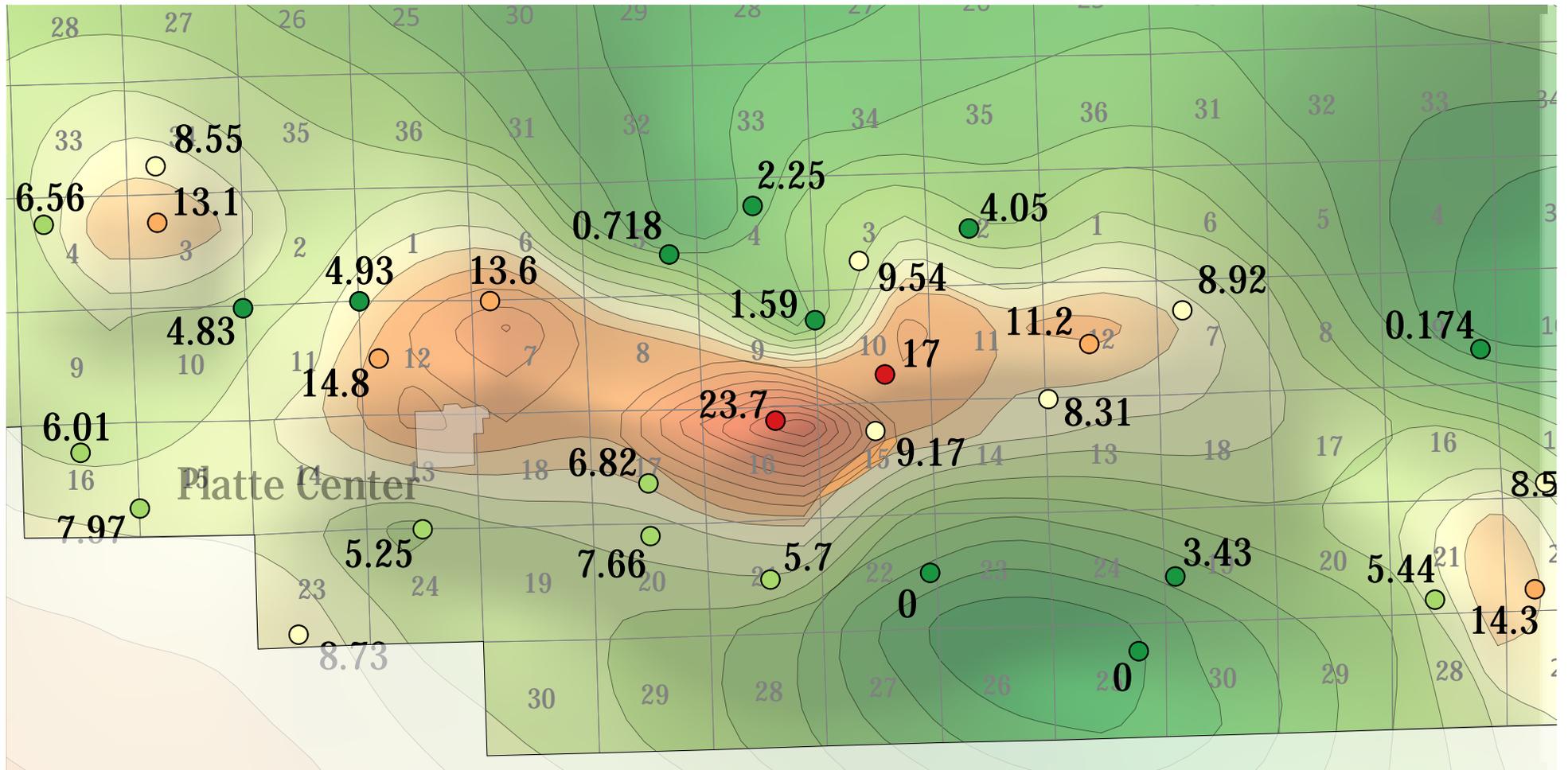
LPNNRD Nitrate Testing 2021



Mead Nitrate Testing 2021



Platte Center Nitrate Testing 2021



Producer & NRD Staff Connecting

Tentative Agenda

Nitrate Discussion

Best Management Discussion

Online Reporting Entry conducted by NRD staff

- Wednesday, November 17 – Schuyler Library starting at 1:30 pm
- Wednesday, November 17 – Schuyler Library starting at 6:00 pm
- Monday, November 22 – Schuyler Library starting at 1:00 pm
- Tuesday, November 30 – David City Library starting at 3:30 pm
- Thursday, December 2 – Schuyler Library starting at 2:00 pm
- Thursday, December 9 -Schuyler Library starting at 10:30 am
- Thursday, December 9 – Schuyler Library starting at 1:30 pm
- Tuesday, December 14 – David City Library starting at 10:30 am
- Wednesday, December 15 – Schuyler Library starting at 1:30 pm
- Wednesday, December 15 – Schuyler Library starting at 4 pm

Nitrogen/Irrigation Certification Meetings

- Friday – January 7 in David City - 10 am
- Wednesday – January 12 in Fremont – 9 am pesticide meeting, 1 pm NRD certification meeting, 6 pm pesticide meeting
- Tuesday – February 1 in Schuyler – 10 am to 2:30 pm

Tentative Agenda

Vadose sampling Report – Dan Snow - UNL

Shell Creek Report from the students

Health and Contaminations – Jesse Bell - UNMC

Cover Crop and Nutrition Management – Joe Luck - UNL

- Wednesday – February 2 – Soil Health and Cover Crops Conference – David City (UNL Program) - 9 am – 3 pm
- Thursday – February 3 in Wahoo (Educational Building) - 10 am
- Monday – February 7 in Lindsay - 9 am pesticide meeting, 1 pm NRD certification meeting
- Tuesday – February 15 in David City (Part of the AG EXPO) - 10 am NRD Certification meeting, 1 pm pesticide meeting
- Thursday – February 24 in Columbus - 10 am NRD certification meeting, 1 pm chemigation meeting, 6 pm pesticide meeting
- Monday - March 7 in Wahoo (Educational Building) 6 pm NRD certification meeting
- Tuesday – March 15 in Columbus for a night meeting. 9 am and 1 pm pesticide meeting, 6 pm NRD certification meeting

Invoice



Bill To
Lower Platte North NRD PO Box 126 Wahoo, NE 68066

Date	Invoice #
10/13/2021	152

Quantity	Description	Rate	Amount
	Lower Platte River Basin Water Management Plan Coalition Dues FY 21-22	10,000.00	10,000.00
Please remit payment to NARD Research - 8100 S. 15th St., Suite B, Lincoln, NE 68512		Total	\$10,000.00

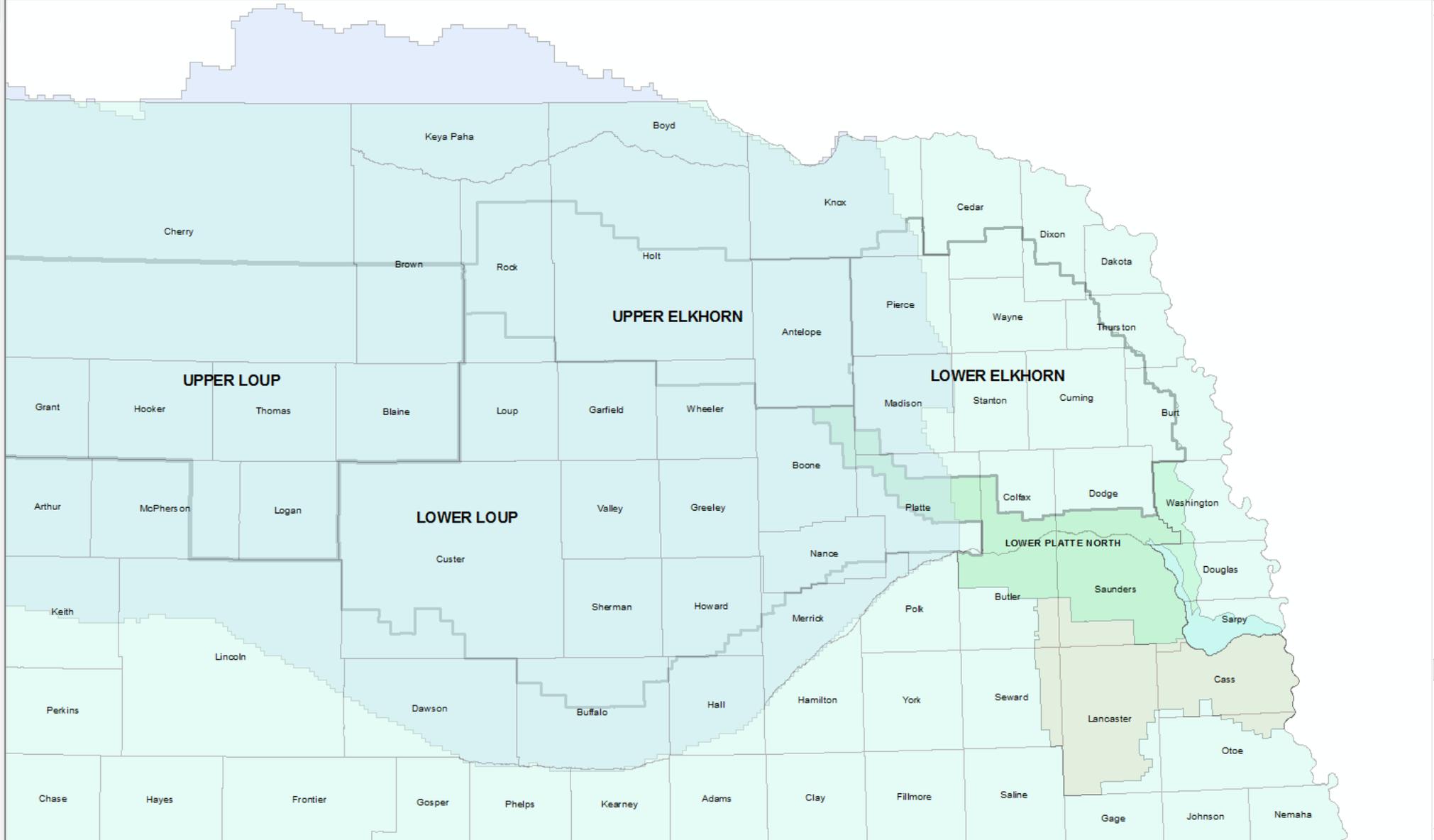


Analytic Model

October 2021

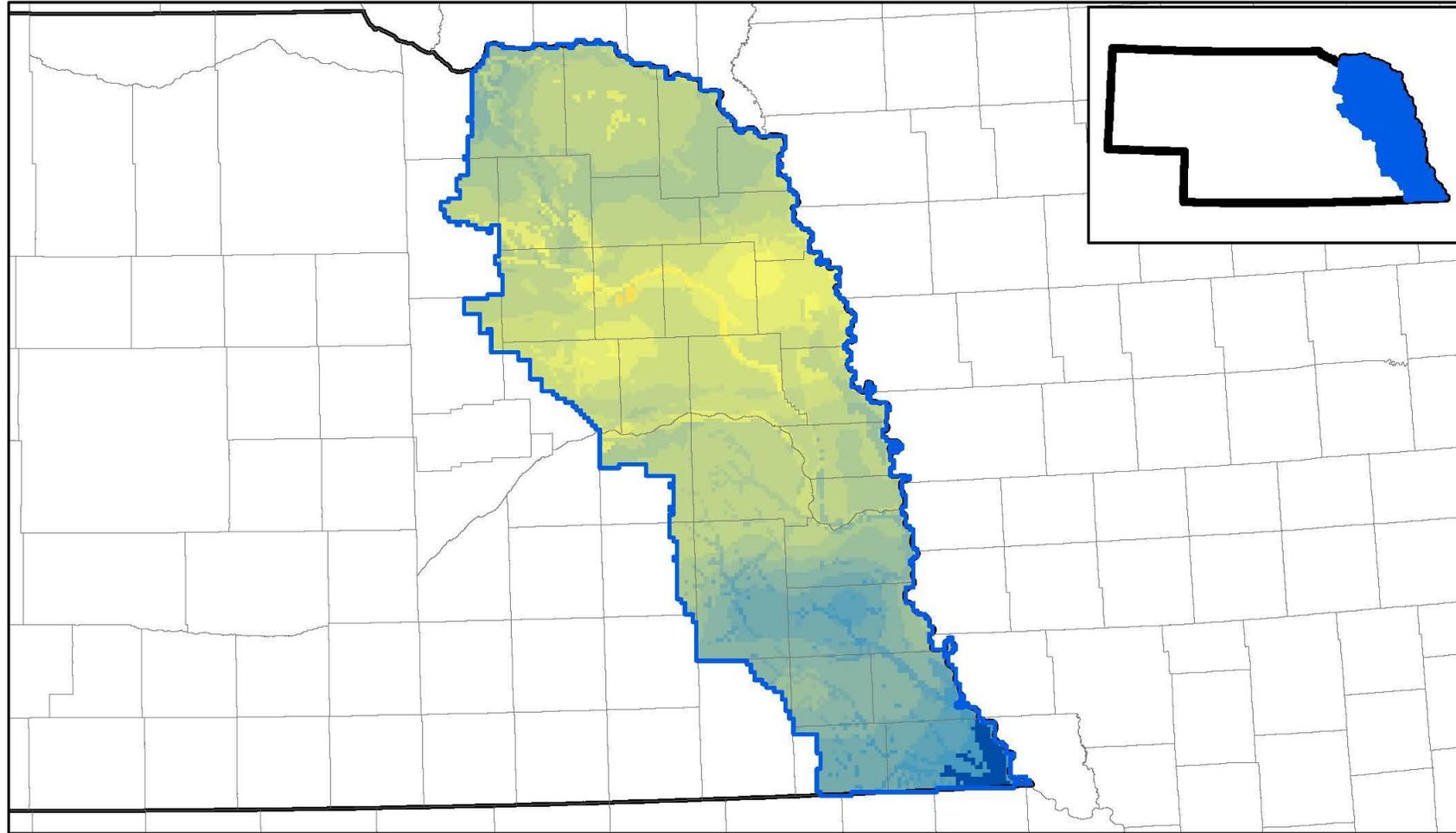
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 - M:\ShapeFiles
 - Counties
 - M:\COHYST\ModelPrep
 - COHYST
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 - WWUM Boundary
 - CNEB
 - M:\UNWNRD\ModelPrep
 - ActBoundary_UNW
 - M:\LPMT\ModelPrep
 - Model_Boundary_LPMT
 - F:\Clients\LPRBC\Contract4606_001-InsightSupport\
 - CNEB_FAB_Grid
 - LLNRD_Flowmeter_Locations
 - CNEB_FAB_Grid_NRD
 - LPBasins
 - < all other values >
 - INSIGHT_Su
 - Beaver Creek
 - Elkhorn River Above Norfolk
 - Elkhorn River Norfolk to Waterloo
 - Lower Loup River
 - Lower Platte River Above North Bend
 - Lower Platte River North Bend to Louisville
 - Middle Loup River
 - North Loup River
 - South Loup River
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 - UL_CertAcres2020
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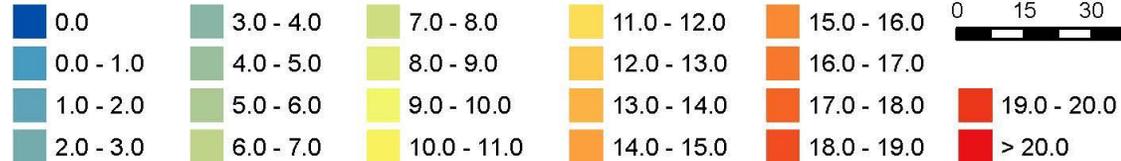


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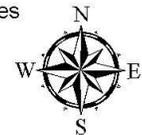
Annual NIR - Corn (in): 2020



NIR (in)

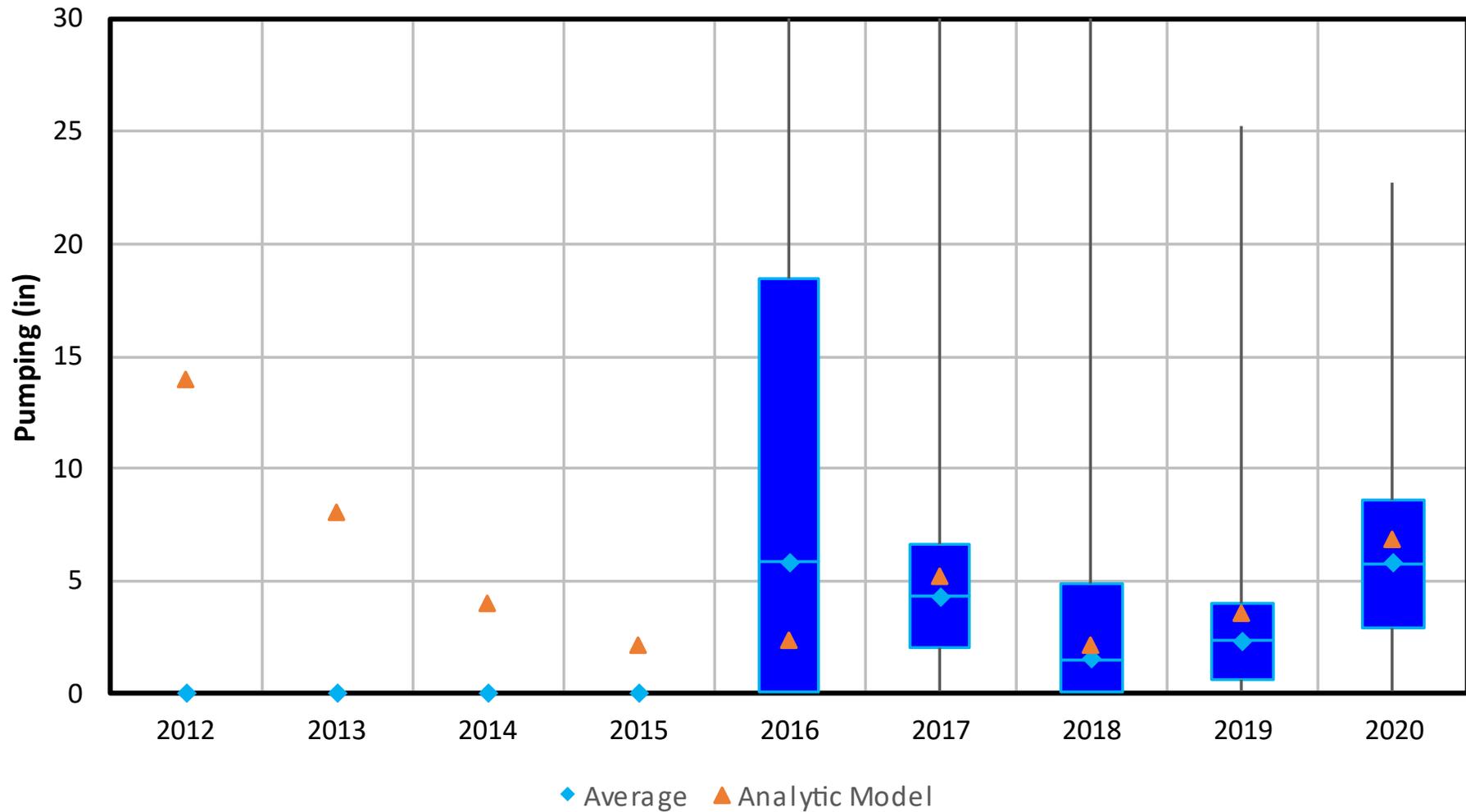


0 15 30 60 90 120 Miles



LPNNRD Analytic Model

LPNNRD - Metered Pumping: Corn





Lincoln Hwy

30

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18

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LOWER PLATTE RIVER CONSORTIUM AMENDMENT

DNR Contract # 918

This Amendment to the original agreement is entered into by and between the following members, all of which are political subdivisions of and are situated in the State of Nebraska or an Agency of the State of Nebraska, and are collectively referred to as "Parties".

The Parties to this Amendment are identified as follows:

Nebraska Department of Natural Resources
Lower Platte South Natural Resources District
Lower Platte North Natural Resources District
Papio-Missouri River Natural Resources District
City of Lincoln
Metropolitan Utilities District

WHEREAS, the Lower Platte River Basin is geographically large and diverse in its geology, land use, ground and surface water supplies, and water uses. Each of the parties is charged with responsibilities for planning, managing, and/or supplying water resources. These Parties are located and carry out their functions in the lower sub-basin of the Lower Platte River Basin, but much of the water supplies that support these functions are derived from the upper sub-basins of the Lower Platte River Basin. The Parties desire to work together to evaluate the water supplies available to the Lower Platte River subbasin during times of shortages.

WHEREAS the original three-year term of this Interlocal Agreement was extended for an additional year and may be extended again by mutual agreement of the Parties pursuant to Provision 8 of the original Agreement, the Parties now wish to extend the term.

Therefore, in consideration of the mutual covenants expressed herein, good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree to Amendment of the original Agreement as follows:

1. DURATION:

This Agreement to extend the term shall become effective and binding upon its approval by appropriate action of all of the Parties. The term of this Interlocal Agreement shall be one (1) year from the effective date of this amendment, unless further extended by the mutual agreement of all Parties.

2. All other provisions of the original Agreement remain in force.

LOWER PLATTE RIVER CONSORTIUM AMENDMENT

DNR Contract # 918

3. DUPLICATE COUNTERPARTS

This Agreement may be executed in any number of counterparts, each of which shall be an original, but all such counterparts shall constitute one and the same instrument. This Agreement Is hereby approved and executed by the following Parties on the dates shown below.

NEBRASKA DEPARTMENT OF NATURAL RESOURCES

BY: _____

DATE: _____

METROPOLITAN UTILITIES DISTRICT

BY: _____

DATE: _____

CITY OF LINCON

BY: _____

DATE: _____

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT

BY: _____

DATE: _____

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT

BY: _____

DATE: _____

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

BY: _____

DATE: _____

Projects being worked on:

Field Climate/Metos

Monitoring Metos units out in the field/diagnosing problems if possible

Helping other water staff with firmware updates/Teraterm checks out in the field.

Hopefully after harvest we can get out to a few more of these to check firmware/problems.

Phase Area/Schuyler Training in Phoenix

Worked on producer side with Daryl to make demonstration on how to use Phoenix when we have producer meetings/phase meetings.

Helped Daryl out in getting things ready for the online training at the Schuyler library.

Getting data for producer meetings ready/checking logins.

Yield Goal vs. Actual Yield.

Are yield goals appropriate for the actual yield producers are seeing?

Putting together 3-5 year Yield averages

Get fertilizer prices on average and build excel calculator for producers.

Still working on this as we get closer to producer meetings.

General Database Work

Cleaning up tasks/workflow dashboard as things get done. Start working with new reports coming in for this reporting year.

Clean up People database

Work with producer side of site as things go from beta site to live site.

Enter and check GWEL from last couple of weeks.

Checking flow meter reports as they come in

Finding and fixing mistakes in the database.