

Water Committee Meeting
Wednesday, October 28, 2015 5:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. REGULATORY

1.A. GROUND WATER MANAGEMENT AREA

1.A.1. Variance Request in the Hydrologically Connected Area (Limited Development Area)

Approval and denial letters have been sent to the applicants. One well permit application has been reviewed and approved.

Due to a tie score of 385 each between James Mick and Ronald Sladky, neither one of these was awarded new acres. Ronald Sladky has indicated he may apply for a transfer instead of a variance, therefore the new well and 150 acres could be awarded to James Mick.

1.A.2. Variance Requests in the Non-Hydrologically Connected Area (Normal Development Area)

All approval and denial letters have been sent to the applicants.

1.A.3. Variance Requests in the Restricted Development Areas

No new updates.

1.A.4. Well Permit Program

1.A.4.a. Well Permits Approved

Wells Permits Approved: 1

Landowner	Number of Wells	Number of New Irrigated Acres	Type of Well	County	Subarea
Irene Martischang	1	133	Irrigation	Platte	Platte Center

The total number of approved permits for 2015 is 37

Location of Approved Well Permits for 2015: Correct as of 10/28/2015

County	Irrigation - New	Irrigation - Replacement	Stock	Commercial	Municipal	Other	Total
Butler	1	2	1	0	0	0	4
Colfax	1	3	1	0	0	0	5
Dodge	3	3	0	0	0	0	6
Boone	1	2	0	0	0	0	3
Madison	0	0	0	0	0	0	0
Platte	4	2	1	0	0	0	7
Saunders	5	3	0	1	0	3	12
Total	15	15	3	1	0	3	37

1.A.4.b. University of Nebraska ARDC EW-18 Class 4 Well Permit Application

Matthew Wilson, of HydroGeoLogic, has submitted a Class 4 well permit for a new extraction well on the behalf of the University of Nebraska ARDC. The well will be drilled in the NE 1/4 of the SW 1/4 of Section 32-T14N-R9E in Saunders County (Todd Valley Subarea).

The application was reviewed by James Schneider of Olsson and Associates. He concluded that "the information provided in support of the well permit and specifically the groundwater model input parameters, the conclusions of the model are reasonable."

Attached:

- Section map of proposed site
- Olsson letter from James Schneider

1.A.5. Special Quantity Subareas

1.A.5.a. Butler - Saunders SQS (#1)

All 30 of the irrigation well sites have been visited by staff. Staff began collecting a fall water level measurement and reading the flow meter for the wells of this SQS area last week. A letter was sent to these producers earlier this month reminding them that their

flow meter readings are due in our office by November 2nd this year. Many of the irrigation wells in this SQS didn't even run this last summer.

The LPNNRD needs to purchase equipment from McCrometer for our Flow Meter Maintenance Program (FMMP). Staff plan to start inspections of flow meters in this SQS over the winter and next spring. A price quote from McCrometer is attached, but the NRD will request extra grease and 2 sealing tools for total of \$4,686.13. Need motion to approve.

Discussion took place whether the NRD should be in the meter repair business even though the board had previously discussed this and decided to proceed with flow meter inspections and servicing. It was suggested to hire a contractor to preform this task and have the contractor from UBBNRD give a presentation at the next committee meeting. To approve payment of \$4,686.13 to McCrometer for flow meter parts inventory, grease and sealing tools was moved by Johannes, but motion died for lack of a second.

1.A.5.b. Platte - Colfax SQS (#2)

SQS operator certification classes will be held over the winter and early spring of next year. This SQS area is scheduled to start in 2016.

Allocation needs to be set by December 15th or the default rolling allocation amount of 27 acre inches in a three year period shall take affect.

Discussion took place by the members of the Water Committee and they will likely go with the default rolling allocation amount.

Staff is looking into submitting a grant request to the Water Sustainability Fund for cost share on flow meters for irrigation wells in the Platte-Colfax SQS area.

1.A.6. Lower Platte River Basin Water Management Plan Coalition (LPRBC)

Papio, LPS, and LPN NRD's met at Mahoney State Park on October 14, 2015 to discuss sub-basin issues concerning the LPRBC. The two other sub-basins (Loup and Elkhorn) have also met.

The next basin-wide meeting is scheduled for November 17th in Columbus NE at the Community College starting at 11:00 am. This is scheduled to be the last water banking workshop.

The next Technical Committee meeting is scheduled at LLNRD in Ord on December 1, 2015.

1.A.7. Voluntary Integrated Water Management Plan - LENRD and LPNNRD

No new update.

1.A.8. Cost Share Programs

1.A.8.a. Irrigation Well Sample Kits

A total of 325 kits have been mailed out this year. Seven are still with the producer - Ben Klug (six) and Mark Horejsi (one). Five kits were requested the morning of the Water Committee (Oct. 28, 2016) and six kits were received in the mail. The results for 314 samples have been received from the lab and these have been mailed to the producers.

1.A.8.b. Domestic Well Sample Kits

No domestic nitrate-nitrogen kits have been requested.

1.A.9. Bellwood Phase 2 Area

2015 is the thirteenth year for this Phase 2 Area. Earlier this year this area was reduced from 32 sections to 21 sections - to be in compliance with **Section G Ground Water Quality Management Area - Phase Two Rule 1 Phase Two Criteria**.

Year	Nitrate-nitrogen Range	Percent Nitrate-nitrogen 0 to 8.0 ppm	Percent Nitrate-nitrogen 8.01 to 10.00 ppm	Percent Nitrate-nitrogen greater than 10 ppm
2004	0 to 25 ppm	46.3% (44 of 95)	8.4% (8 of 95)	45.3% (43 of 95)
2005	0 to 25 ppm	47% (44 of 94)	15% (14 of 94)	38% (36 of 94)
2006	0 to 24 ppm	41% (29 of 71)	14% (10 of 71)	45% (32 of 71)
2007	0 to 31 ppm	48% (48 of 100)	9% (9 of 100)	43% (43 of 100)
2008	0 to 28 ppm	53.75% (43 of 80)	7.5% (6 of 80)	38.75% (31 of 80)
2009	0 to 22 ppm	45.5% (41 of 90)	15.5% (14 of 90)	39% (35 of 90)
2010	0 to 35.7 ppm	48.65% (54 of 111)	11.71% (13 of 111)	39.64% (44 of 111)
2011	0 to 26.6 ppm	51% (56 of 110)	6% (7 of 110)	43% (47 of 110)
2012	0 to 28.9 ppm	57% (61 of 107)	9% (10 of 107)	34% (36 of 107)
2013	0 to 25.8 ppm	50% (53 of 107)	9% (10 of 107)	41% (44 of 107)
2014	0 to 22.3 ppm	51% (55 of 108)	13% (14 of 108)	36% (39 of 108)
2015	0 to 32.3 ppm	43.5% (30 of 69)	7.2% (5 of 69)	49.3% (34 of 69)

1.A.10. Richland - Schuyler Phase 2 Area

2015 is the twelfth year of this Phase 2 Area. The 55 sections of this area went into a Phase 3 Area to be in compliance with **Section H Ground Water Quality Management Area - Phase Three Rule 1 Phase Three Criteria**, effective September 1, 2015.

Year	Nitrate-nitrogen Range	Percent Nitrate-nitrogen 0 to 8.0 ppm	Percent Nitrate-nitrogen 8.01 to 10.00 ppm	Percent Nitrate-nitrogen greater than 10 ppm
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2004	0 to 47 ppm	30% (42 of 139)	10% (14 of 139)	60% (83 of 139)
2005	0 to 120 ppm	31.3% (74 of 236)	10.2% (24 of 236)	58.5% (138 of 236)
2006	0 to 53 ppm	28% (50 of 181)	14% (26 of 181)	58% (105 of 181)
2007	0 to 99 ppm	32% (75 of 231)	10% (22 of 231)	58% (134 of 227)
2008	0 to 46 ppm	28% (53 of 190)	12% (23 of 190)	60% (114 of 190)
2009	0 to 57 ppm	33% (72 of 216)	6% (13 of 216)	61% (131 of 216)
2010	0 to 57.5 ppm	31% (70 of 229)	7% (15 of 229)	62% (142 of 229)
2011	0 to 65.8 ppm	28% (67 of 241)	9% (21 of 241)	63% (153 of 241)
2012	0 to 52.6 ppm	29% (70 of 241)	9% (21 of 241)	62% (150 of 241)
2013	0 to 94.0 ppm	25% (63 of 252)	9% (23 of 252)	66% (166 of 252)
2014	0 to 101.0 ppm	27% (68 of 251)	9% (22 of 251)	64% (161 of 251)
2015	0 to 53.3 ppm	22.31% (52 of 233)	12.45% (29 of 233)	65.24% (152 of 233)

Also on September 1, 2015, the ten sections immediately north of this area became a Phase 2 Area. These sections are: Township 18 North, Range 2 East, sections 31 to 36; Township 18 North, Range 3 East, sections 31 to 34. Though reports for the 2015 crop year aren't required these producers will need to have soil samples prior to their 2016 corn crop.

1.A.11. LPNNRD Operator Certification

1.A.11.a. LPNNRD Operator Certification Classes

No on-line test requests since the last committee meeting. A meeting will be set up with UNL County Extension Educators after the completion of Fall GWELs. The number of producers to certify in 2016 will be smaller; approximately 270. This will be the third year in our four year cycle were our number of people needing certification is usually the lowest.

1.A.12. LPNNRD Acre Certification

Landowner Brach Johnson attend the Water Committee on October 28, 2015 with the same issue we have discussed twice before concerning his request for certified irrigated acres in the Platte - Colfax SQS area (please see attached document). The acres in question were granted irrigation permission in 2010 (this area was open to additional irrigated acres). The land was and remains in CRP. The acres were originally certified along with the adjoining 120 acres (to complete the circle), however no crop was ever planted and the tract was never irrigated. Since the land was not irrigated within two years of approval the acres were de-certified. Since this tract is in the SQS we would leave ourselves open to criticism (and potential legal action) if we would allow this tract to be irrigated when it has no irrigated history. Lausterer agrees that we should not allow this tract to be irrigated and related similar circumstances in the Lower Elkhorn NRD where the district court upheld that LENRD's identical definition was legal and appropriate.

1.B. CHEMIGATION

For 2015 we currently have 521 chemigation permits in our District. With our rules update, all permits scheduled for inspection this year need to be approved by November 1 or the permit shall lapse. The previous deadline was December 31st.

1.C. LIVESTOCK WASTE PERMITS

The LPNNRD has received two livestock permit modifications from DEQ since the last Water Committee meeting.

Name	Livestock	Type of Permit	Legal Description	County
Arlynn Runge Livestock	Cattle	Modification of land application sites	Sections 17, 18, 19, 20, 27, 34, T18N, R1E	Platte
John Schwartz Schwartz Wilke Farms 32296 190th Street Sleepy Eye MN 56085	Swine 7,882 Head 2,937 A.U.	Expansion of existing operation	NE1/4, NW1/4, Section 12, T19N, R1E	Platte

John Schwartz operation has 7,282 head of swine over 55 pounds (2,913 A.U.) and 600 head of nursery pigs less than 55 pounds (24 A.U.).

2. GROUND WATER PROGRAMS

2.A. DECOMMISSIONED WELL PROGRAM

2.A.1. Well Estimates

One new well has been reviewed and approved by Gottschalk for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County
Tom Kasik	Domestic	\$209.83	Colfax

2.A.2. Plugged Wells

No wells have been plugged or ready for cost share payment approval this month.

2.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

2.B.1. Eastern Nebraska Water Resources Assessment (ENWRA)

LPNNRD is asking area NRD's if they are interested in pursuing a joint grant request to the Water Sustainability Fund for future AEM flights in their districts. LPN is interested in flying our special quantity subareas with ~300 to 1,000 meter grid spacing.

Since Committee meeting five NRDs have expressed interest in joining together to perform AEM flights and applying for WSF funding. The plan has FYRA Engineering prepare the applications that will be similar for each district. Attached is a contract to have FYRA prepare our application at a lump sum cost of \$4,000.

The recommended motion is: To approve and authorize the board chair to sign the FYRA contract for preparation and submittal of the WSF grant application for AEM flights within our district as attached to the Water Committee Minutes at a cost of \$4,000.

2.B.2. Tile Drain Study

A meeting was held with USGS on Friday October 30, 2015 to discuss the details of a potential study with USGS and the LENRD on tile drains in both Districts and their effect on stream flow and ground water levels. The proposal would be submitted to the Water Sustainability Fund in mid-December and would be a 4 year project. USGS would generate a map of tile drains in our District, soil type, land slope, subsurface drainage to streams, and percent of rainfall that is intercepted by these tile drains. To answer these detailed measurements, they propose to have 3 or 4 monitoring sites that would be instrumented for at least 2 years to measure flow rates and to start by July 2016. To answer the question on percent of rainfall intercepted by tile drains, USGS proposes using aerial infrared imagery after a 1 inch rain to determine the amount of water that is intercepted by tile drains. Estimated cost is \$125,000, but would be contingent on obtaining funding through the Water Sustainability Fund.

2.B.3. LPNNRD Master Database

Jovan Lausterer has informed us that we do not need to go through the formal bidding process since we have received informal bids from three companies: GIS Workshop, Beehive, and Phoenix Group. We could accept the Phoenix Group bid if we state in the motion to waive our normal bidding procedures.

Phoenix Group bid and proposed contract is attached.

2.B.4. Siting of LPNNRD Monitoring Wells

With all the new data becoming available (Olsson Water Inventory Study and ENWRA Flight lines), information for better siting of monitoring wells to study the bedrock (both quality and quantity) is becoming available. A grant request to the Water Sustainability Fund is being considered (motion is needed at board meeting if we wish to pursue a WSF grant).

2.C. GROUND WATER ENERGY LEVELS

Staff began the collection of the Fall GWEL readings last week. Weather-permitting we should complete these readings before mid-November.

2.D. FORMER ORDNANCE PLANT NEAR MEAD

The next meeting for the COE clean up operation at the Former Ordnance Plant near Mead is scheduled from 4:30 to 7:30 pm at the Yutan VFW hall on Wednesday November 19, 2015.

3. SURFACE WATER PROGRAMS

3.A. USGS WATER QUALITY MONITORING ON SHELL CREEK

We have received an invoice from USGS for water quality monitoring on Shell Creek as part of our effort to curb dumping of livestock waste into the stream. The amount is \$5,250 and invoice is attached. This amount is billed to the LPNNRD on a quarterly basis and will be up for funding review in September of 2016.

4. OTHER

4.A. GMDA ANNUAL CONFERENCE

Staff have been busy on mass mailings of fliers to different States, and developing sponsor's and presenter's packets for the upcoming GMDA Conference in Sacramento CA. The GMDA website has also been updated www.gmdausa.org .

4.B. COMMENTS FROM THE PUBLIC

Brach Johnson addressed the Water Committee on his irrigated acre request to the LPNNRD.