

Water Committee Meeting
Wednesday, September 28, 2016 5:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. POSTPONED MOTIONS

None

2. REGULATORY

2.A. POLICY ON IRRIGATED ACRES AND SOIL CLASSIFICATION

The proposed policy on the number of irrigated acres to award due to soils classification is attached.

After much discussion it was decided to leave the current policy of the number of irrigation acres for class 6,7, and 8 soils due to slope to stay the same.

2.B. GROUND WATER MANAGEMENT AREA

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

Attached is the final ranking for all applications in the Hydrologically Connected Area. Section M Rule 1 of the LPNNRD Groundwater Management Area Rules and Regulations states "...The District (LPNNRD) shall limit development of new irrigated acres with a goal of no more than 2,500 acres per year in the hydrologically connected area."

The line is set as close to the threshold without exceeding the 2500 acre limit.

The variance request LPN-V-015-0427 for Martin Erickson is in the Restricted Development Area but within one mile of the border with the Hydrologically Connected area. Therefore following LPNNRD policy, letters will be sent to adjacent landowners giving them notice that they can testify in favor or opposition to this request and in addition 3 test holes are required.

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

Approval letters have been sent to landowners.

2.B.3. Variance Requests in the Restricted Development Areas

No new updates.

2.B.4. Well Permit Program

2.B.4.a. Well Permits Approved

3 new permits were approved since the last Committee meeting.

Landowner	Number Of Wells	Number Of New Irrigated Acres	Type Of Well	County	Subarea
Loran Houska	1	0	Irrigation	Saunders	Todd Valley
Mead Cattle Company	1	0	Livestock	Saunders	Todd Valley
Douglas Ritthaler	1	0	Irrigation	Saunders	Leshara Uplands

The total number of approved permits for 2016 is 15.

Location of Approved Well Permits for 2016: Correct as of 9/27/2016

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

2.B.4.b. Tim Bartek Well Permit Application

Tim Bartek would like to know the Water Committee's feelings on a new well to irrigate no new acres in S16-T13N-R8E Saunders County, Swedeburg Subarea. He is currently irrigating ~260 acres off of one well but due to a change in the operation he is requesting a well of his own for the north 133 acres. Mr. Bartek does not want to invest any money

if there isn't a chance for approval. Attached is the policy for Irrigation Development in the Restricted Development Area as well as a section map.

Since no new acres are involved and the new well (or supplemental well in this case) would be due to a change in ownership it is felt that Water Committee may look favorable at this situation. LPNNRD policy on development of irrigation within the Restricted Development Area would also have to be followed.

2.B.5. Potential Violation of Expanded Irrigation

Inspections in mid August 2016 indicated that land in the SE1/4, Section 25, T18N, R4E, Colfax County had been irrigated in violation of LPNNRD GWMA Rules and Regulations since this land was not certified by the District for irrigation nor was an approved variance issued for this property.

Certified letters with notice to issue Cease and Desist Order were sent to M-G Agri Properties and John Snover on September 20, 2016. According to Nebraska State Statute they have three days to request a hearing. No request was made. The Water committee also requested their attendance at the September 28, 2016 committee meeting, but no one showed up.

Certified letters issuing the Cease and Desist Order were sent September 28, 2016 to the landowner M-G Agri Properties and the tenant John Snover.

2.B.6. Special Quantity Subareas

Platte - Colfax SQS (SQS #2)

Staff has continued checking flow meters and measuring ground water levels. Flow meter cost-share applications are being received in the mail each day and will be discussed under the Cost Share Programs.

2.B.6.a. Flow Meter Maintenance Program

The LPNNRD is ready to request proposals for our Flow Meter Maintenance Program (see attached).

This will be sent to area meter companies, irrigation equipment dealers, well drillers, and pump installers.

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

The next Board of Directors meeting for the LPRBC is scheduled for October 17, 2016 in Ord at LLNRD. Bob Hilger (Chairperson) and Jim McDermott should attend. John Miyoshi and Larry Angle also plan to attend.

Hilger said he won't be able to attend so Frank Pollard has volunteered to temporarily fill that vacancy.

2.B.8. Voluntary Integrated Water Management Plan - LENRD and LPNNRD

The next Stakeholders meeting for the LPNNRD voluntary Integrated Water Management Plan is scheduled for October 5, 2016 at the LPN office at 10:00 am. DNR has made comments to the most recent goals and objectives, which will be discussed at the meeting. DNR is still reviewing the District's Plan, which includes the goals and objectives, but also outlines the more detailed roles of the LPNNRD and DNR.

2.B.9. Cost Share Programs

2.B.9.a. Irrigation Well Sample Kits

Requests for 343 irrigation kits have been received for the year. A total of 328 water samples have been returned from producers (ten samples received last week) and sent to the HHS lab. Sample results from the lab have been forwarded to 297 producers and this includes 20 water sample results that were mailed the day of the Water Committee meeting.

2.B.9.b. Flow Meter Cost Share in SQS #2

So far we have received approximately 70 cost share applications for flow meters in the Platte - Colfax SQS (SQS #2).

These need to be inspected to make sure these are LPNNRD approved meters, installed properly, and matches the additional information provided on the application. Some of these should be ready for cost share at the next Committee meeting.

2.B.10. Bellwood Phase 2 Area

2016 is the fourteenth year for this Phase 2 Area. Phase 2 information packets with order were mailed to producers in June, before the start of irrigation.

This area was reduced from 32 sections to 21 sections in 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
2015	0 to 32.3 ppm	43% (31 of 72)	8% (6 of 72)	49% (35 of 72)
2016	0 to 35.1 ppm	37% (25 of 68)	12% (8 of 68)	51% (35 of 68)

Hough Farms water sample of G-065461 collected in August had a **93.6 ppm** result for G-065461. After talking with Tommy Hough it was determined that this sample was collected while they were chemigating at this well. Oaklund arranged with Tommy Hough to re-sample this well. The result of the second sample was 13.6 ppm, which is within the range of previous sample results (3.70 to 18.5 ppm). *[Note: The 93.6 result was removed from the above table.]*

2.B.11. Richland - Schuyler Phase 2 Area

2016 is the first year of this Phase 2 Area. There are 45 registered active irrigation wells in the ten sections of this new area.

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
2016	1.47 to 24.8 ppm	33% (8 of 18)	6% (1 of 18)	61% (11 of 18)

2.B.12. Richland - Schuyler Phase 3 Area

2016 is the first 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.

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
2015	0 to 53.3 ppm	23% (55 of 238)	12% (29 of 238)	65% (154 of 238)
2016	0 to 49.5 ppm	25% (52 of 207)	10% (20 of 207)	65% (135 of 207)

Oaklund contacted Larry Ruzicka [RBS Farms] after receiving the **75.1 ppm** result for G-026330. Oaklund arranged with Doug Ruzicka to re-sample this well, which was done in mid-September. The result of the second sample was 49.1 ppm which is within the range of previous sample results (40.0 to 57.5 ppm). *[Note: The 75.1 result was removed from the above table.]*

2.B.13. LPNNRD Operator Certification

No test requests have been received in September. Staff will be meeting with extension personnel in the next couple of months to schedule certification classes for 2017.

2.B.14. Certifying Acres in Saunders and Dodge Counties

From Chris Poole on Acre Certification in Dodge County:
Attached you will find a list of landowners in Dodge County that have not returned their Acre Certification forms or that we have not had contact with in regards to those forms. A total of 58 Letters, comprising 93 Acre Certification packets, were sent at the end of August with a due date of 9.28.2016. To date, we have received a little more than half back. There are 27 unique landowners responsible for the outstanding 41 Acre Certification packets. In Saunders County I was extremely successful in locating tenants for the landowners that

never contacted LPNNRD by calling adjacent landowners. However with harvest upon us everyone is busy. This leaves two options, issue a Notice of Cease and Desist now against any field that has not returned, or postpone the Notice of Cease and Desist until after Harvest and attempt to contact the tenant to complete the certification. if the later fails then send a Notice of Cease and Desist prior to next irrigation season.

After some discussion, Water Committee members recommended to wait until after harvest before pursuing any compliance issues.

On a related note, staff met with NDNR officials about the modification of irrigation wells. The people in the Registration Division like our system of modification so well they want to implement it as a standard for all NRDs to follow. They also mentioned that our Acre Certification form was by far the most comprehensive and well thought out form they have seen to date and would like to use it as a model for future efforts.

2.C. CHEMIGATION

No new updates. For 2016 we have 478 renewals and 98 new permit applications for a current total of 576. Inspections for 134 renewal permits and 95 new permit applications have been completed.

2.D. LIVESTOCK WASTE PERMITS

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

Name	Livestock	Type of Permit	Legal Description	County
Arlynn Runge 2358 East 83rd Steet Columbus NE 68601	Swine 14,870 Head 3,943 A.U.	Modification of Existing Permit	SE1/4, Section 27, T18N, R1E	Platte
Schwartz Wilke Site 1 32296 190th Street Sleep Eye MN 56085	Swine 1,666 Head 666.4 A.U.	Modification of Existing Permit	SE1/4 of SE1/4, Section 1, T19N, R1E	Platte

Description of permit application

- Arlynn Runge is expansion on existing operation of Swine >55 pounds of 4,800 head (1,920 A.U.) with additional 4,500 head (1,800 A.U.) to a new total of 9,300 head (3,720 A.U.). They also will have Swine <55 pounds of 5,570 head (222.8 A.U.) Received August 30, 2016)
- Schwartz Wilke Site 1 is just adding 6 head of Swine >55 pounds. (Received September 8, 2016.) This is believed to be a misprint and likely is really expanding by 600 head or more.

3. GROUND WATER PROGRAMS

3.A. DECOMMISSIONED WELL PROGRAM

3.A.1. Well Estimates

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

3.A.2. Plugged Wells

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

3.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

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

Katie Cameron, ENWRA coordinator, recently finished sampling the bedrock monitoring wells being installed by the COE as part of their clean up efforts of the Former Ordnance Plant near Mead.

3.C. NEW MONITORING WELLS

The Phoenix Group is working to provide a less expensive data link between our monitoring wells and the office. The monitoring well at the north edge of Swedeburg is currently undergoing testing.

3.D. GROUND WATER ENERGY LEVELS

3.D.1. GWEL SQS #1 Summer Measurements

SQS #1 Summer Measurements

Measurements were taken in early August

Inside the SQS #1 boundary

Number of GWEL wells	10.0
Range (Comparing Spring to Summer)	+3.22 to -49.51
Median value	-46.95

Outside the SQS #1 boundary	
Number of GWEL wells	3.0
Range (Comparing Spring to Summer)	+0.64 to -61.77
Median value	0.26

Only 3 different sites were measured outside the SQS #1, so not a good sample size for comparison.

3.D.2. GWEL SQS #2 Summer Measurements

SQS #2 Summer Measurements

Measurements were taken in early to mid August

Inside the SQS #2 boundary	
Number of GWEL wells	15.0
Range (Comparing Spring to Summer)	+1.53 to -30.37
Median value	-9.41

Outside the SQS #2 boundary	
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Number of GWEL wells	12.0
Range (Comparing Spring to Summer)	+5.05 to -17.20
Median value	-0.70

It was a good summer for rainfall in this subarea and some wells had not been turned on yet.

3.D.3. GWEL Wann Basin Subarea

The multi-agencies with monitoring wells in the Wann area north of Ashland NE coordinated our measurements for August 25, 2016. Attached are three key hydrographs located between the MUD well fields and the contaminate plumes from the Former Ordnance Plant near Mead showing the ground water level changes since 2003. The MUD well field came on-line in 2008.

3.E. FORMER ORDNANCE PLANT NEAR MEAD

The COE has finished the sampling and installation of deep monitoring wells into the bedrock at the Former Ordnance Plant. Only partial results so far but most sampling turned up negative for RDX and TCE in the bedrock.

4. SURFACE WATER PROGRAMS

4.A. STATE LAKES, FOR THE WEEK OF

4.A.1. Bacteria Sampling

Week of September 19th, 2016

Lakes that tested high for *E. coli* bacteria this week. *E. coli* levels measured above 235 colonies/100 ml of sample are considered a higher risk for illness when swimming. Considering the more rapid changes in bacteria conditions, signs are not posted with these higher levels although DEQ wants people to be aware and use their own judgment on their use.

- Branched Oak Lake in Lancaster County
- Cunningham Lake in Douglas County
- Lake North in Platte County
- Lewis and Clark Reservoir in Knox County
- Maple Creek Recreation Area Lak in Colfax County

4.A.2. Toxic Algae

Week of September 19th, 2016

Lakes that will be on “Health Alert” this week. Even if a lake does not test above 20 ppb in the current week, it is DEQ policy that any lake that has microcystin levels over the established criterion of 20 ppb will be placed on “Health Alert” Status until such time that it has tested below 20 ppb for two continuous weeks. If a lake is on a Health Alert, signs will be posted recommending people avoid full body contact activities such as swimming, wading, skiing, jet skiing, etc. Non-contact activities such as boating, fishing, and camping are OK.

- Big Indian Creek Lake in Gage County
- Rockford Lake in Gage County
- Willow Creek Lake in Pierce County

4.B. USGS WATER QUALITY MONITORING ON SHELL CREEK

Attached is an invoice from USGS for \$5,600 for the water quality monitoring on Shell Creek. Since this invoice is part of an approved contract with USGS, Water Committee motion to approve payment is not necessary.

5. OTHER

5.A. TEST YOUR WELL NIGHT

Last week Oaklund and Desirae TePoel made a presentation to Mrs Kocian’ Resources class at David City High School. The management areas (Quality and Quantity) of the Lower Platte North were identified and Water quality sampling was the emphasis.

Desirae and Bret will attend ‘Test Your Well Night’ on September 29, 2016 at the David City High School. Water samples brought in will be tested for nitrate-nitrogen.

5.B. COMMENTS FROM THE PUBLIC

Tom Lichtl, Mary Wotipka, and Don Wegener were in attendance and had questions concerning their own irrigation situations.