

Water Committee Meeting
 Wednesday, September 30, 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. LPNNRD Violations Policy

Updated Violations policy from Jovan Lausterer is attached.
 Also attached is a correlation between the GWMA Rules and the Violations policy.

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

All applications for the 2016 allocation have been ranked and can be viewed on the attached list. The Water Committee recommended 2,420.85 acres for approval for the 2015 allocation. The Board can approve up to 2,500 acres each year in the Hydrologically Connected Area under the current Rules & Regulations.

The last two requests had a tie score of 385, but the LPNNRD can only award one of these. Committee members suggested that both individuals be contacted and see if they can come to some agreement. The 65 acres requested by Ronald Sladky are in the Swedeburg subarea (Restricted Development Area) but within one mile of the border with the Weston subarea. Following LPNNRD policy, letters should be sent to adjacent landowners letting them know of the request and that they may testify for or against this application.

1.A.3. Variance Requests in the Non-Hydrologically Connected Area (Normal Development Area)

Approval and denial letters will be sent out Friday October 2nd.

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
Kristopher Kavan	1	0	Irrigation (supplemental)	Saunders	Todd Valley

The total number of approved permits for 2015 is 36

Location of Approved Well Permits for 2015: Correct as of 9/2/2015

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	3	2	1	0	0	0	6
Saunders	5	3	0	1	0	3	12
Total	14	15	3	1	0	3	36

1.A.5. Special Quantity Subareas

We need to start thinking about the acre-inch allocation for the Platte - Colfax SQS area.

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

The next technical committee will meet at the LENRD on October 7, 2015.

A special LPRBC sub-basin meeting will be held October 14, 2015 at Mahoney Park starting at 12:00 noon. NRD's attending will be Papio, LPN, and LPS.

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

Olsson Associates will present updates to the Water Committee dealing with our V-IMP.

Received an invoice from Olsson Associates for work done up to September 5, 2015.

- Invoice amount = \$1,774.36
- Amount to date including this invoice = \$147,179.10
- Total amount on contract = \$174,700.00
- Amount remaining = \$27,520.90

1.A.8. Cost Share Programs

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

A total of 325 kits have been mailed out so far, including the request for five which were mailed September 30, 2015. The results for 301 samples have been received and mailed to producers. At present there are no samples pending at HHS Lab in Lincoln, but sixteen kits remain outstanding with producers and all of these producers have been contacted.

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**.

2014 is the twelfth year of this Phase 2 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
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	46% (30 of 65)	8% (5 of 65)	46% (30 of 65)

Staff collected thirteen water samples from wells in the eleven sections removed (now in Phase 1, like most of our district): thirteen nitrate samples [range of 0.00 to 15.8 ppm; seven were 0 to 8 ppm; one in 8.01 to 10 ppm; and five were > 10 ppm] and one pesticide sample [all 25 constituents were <RL>].

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). [Section H of our Rules & Regs is included below the table.]

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 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	22.37% (51 of 228)	12.28% (28 of 228)	65.35% (149 of 228)

Section H Ground Water Quality Management Area - Phase Three Rule 1 Phase Three Criteria

Phase Three Areas will be established when the MCL/LHAL is exceeded (>100%). Phase Three

trigger levels range from 10.01 parts per million or greater for nitrate-nitrogen, with other human-induced non-point source contaminants, based upon greater than 100% of the Maximum

Contaminant Levels (MCL) or Lifetime Health Advisory Levels (LHAL). Within the same ground water reservoir, boundary setting for Phase Three 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 registered 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

Three 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 Two or Phase One.

Rule 2 Continuation of Phase One and Two Rules

A continuation of Phase One Rules as defined in Section E, Rules 1-6, Section F, Rule 2 and in

Phase Two Rules as defined in Section G, Rules 3, 4, 5, 8, 9, 10 and 11 shall apply.

Rule 3 Fertilizer Application On All Soils

The application of commercial nitrogen fertilizer is prohibited in the fall and winter on all soils

until after March 1. Spring applications of commercial nitrogen fertilizer will require split applications (pre-plant and side-dress) or the use of an approved inhibitor applied as recommended. If a split application is used and 50 percent or more of nitrogen fertilizer is applied as a pre-plant, the use of an approved inhibitor, applied as recommended, is still required.

Rule 4 Record that District Approved Inhibitor was Used

If 50% or more of commercial nitrogen fertilizer is applied at pre-plant, then operators are required to furnish the District a record from the fertilizer dealer that a District inhibitor was used

at recommended rates. This record shall accompany the Fertilizer Application report made to the

District by December 31 of each year.

Also going into 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. During the 2015 irrigation season staff collected a water sample for nitrate from ten wells in this new area [range of 2.05 to 20.7 ppm; three were 0 to 8 ppm; two were 8.01 to 10 ppm; and five were > 10 ppm].

1.A.11. LPNNRD Operator Certification (primarily for Fertilizer application)

For our radio ad spot with radio station KTIC we should include both a reminder to producers that they need to wait until November 1st before fall fertilizer can be applied on non-sandy soils and that no fall fertilizing is allowed in the Phase 3 Area. For sandy soils fertilization is not allowed until after March 1st.

Staff will be meeting in the next couple of months with Extension for the next round of nitrogen classes.

There have been three on-line test requests since the last committee meeting. Two producers have passed the online test and a certification card was mailed to each:

Cert #	Cert date	Name	Re-cert	Comments
6525	9/14/2015	Jack Nitz	No	First-timer
6526	9/14/2015	Martin Erickson	No	First-timer

1.A.12. LPNNRD Acre Certification

Brach Johnson request for certificated acres. Please see attachment.

1.B. CHEMIGATION

No new update. We have a total of 521 chemigation permits in our District.

1.C. LIVESTOCK WASTE PERMITS

No new livestock permits from DEQ since the last Committee meeting.

1. Statewide Network

Staff sampled 23 of the 53 wells in the Statewide Network. Of those 23 wells, 19 were found to have nitrate levels between 0-8 ppm, 1 between 8.01-10 ppm, and 3 at or above 10.1 ppm.

The only major increase came at site 44 (east of Tarnov). In 2014 the nitrate level was at 4.55 ppm, but in 2015 the nitrate level rose to 13.2, a 8.65 ppm increase.

Staff collected pesticide samples at 3 sites. All results were under the reporting limit.

Attached is the District nitrate map.

2. GROUND WATER PROGRAMS

2.A. DECOMMISSIONED WELL PROGRAM

2.A.1. Well Estimates

No new requested for decommissioned wells.

2.A.2. Plugged Wells

No wells have been plugged or need cost share assistance since the last Water Committee meeting.

2.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

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

Staff is still reviewing the ENWRA data. The website is www.ENWRA.org

Attached is a pdf document that shows the flight lines within LPNNRD. Click on the flight line number (oranged colored font) in the first column and it will pull up the corresponding transect.

2.B.2. LPNNRD Database

The LPNNRD needs to get started on our centralized database, which will take two to three years to fully implement. Estimated cost for year one is ~\$70,000. After much research the staff would recommend using Phoenix Group of Waverly NE to develop this database. Several NRD's including LPS report a good working relationship with this company.

We will likely have to go to bid for this project.

3. OTHER

3.A. GMDA ANNUAL CONFERENCE

Staff have been working on the upcoming GMDA conference for Sacramento and the programs should be mailed out soon.

3.B. COMMENTS FROM THE PUBLIC