

Water Committee Meeting  
Wednesday, August 27, 2014 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. 2014 Well Interference Complaints

- One new well interference complaint from Section 14, T14N, R5E or 4 miles west of Weston. He didn't give his name or contact a well driller but said this is the second year in a row that he has had problems.
- Follow up on Bryan Rozic well interference complaint. Site visits were done on August 14th and August 21th. Photographs were taken on August 14th of the proposed new supplement well for David Carlson (Kent Langemeier tenant) in SW1/4, Section 34, T16N, R8E that was approved by the Board on April 14, 2014. Drill rig was in place but drilling didn't start until after August 15th. Letters were sent to area irrigation well owners on August 19, 2014 urging them to conserve water. Talked to Scott Subbert of Subbert Well & Septic Company and he said Mr. Rozic remaining option is to drill a new well and hope good quality water exists in a deeper formation. Mr Rozic was present at committee meeting and part of the discussion. He requested that the NRD cost-share on a replacement well for him which is estimated to cost \$12,000. Staff and committee members do not want to start a precedence by cost-sharing on replacement wells. Mr. Rozic plans to come to board meeting to make this request to the entire board.

#### 1.A.2. Irrigated Acres for 2015 in HCA and NHCA

- Non-hydrologically Connected Areas (white areas) made up 14.88% of the District before the SQS areas were declared. Now that the SQS areas are in place the remaining Non-Hydrologically Connected Areas make up 6.0% of the District.
- Staff recommends that if additional irrigated acres are awarded that the top priority be given to corner systems and/or completing a circle if less than 20 to 25 acres.

#### 1.A.3. Variance Request in the Hydrologically Connected Area (Limited Development Area)

- The district has received nine new applications for 180 acres in the Hydrologically Connected (Limited Development) Area since the last water committee meeting.
- The deadline for variance applications in the HCA is September 15, 2014. This information has been placed on our webpage.

1.A.4. Variance Requests in the Non-Hydrologically Connected Area (Normal Development Area)

- The deadline for variance applications in the NHCA was August 15, 2014.
- With the exclusion of the Special Quantity Subareas, the NHCA now makes up just 6% of the total District.
- Counting previous year's and this year's requests makes a total of 1,493.88 acres and these have been ranked (see attached spreadsheet). If acres are to be awarded, staff recommends top priority be given to corner units and completing a circle of less than 25 acres.

1.A.5. Variance Requests in the Restricted Development Areas

- No new variance requests.
- Variance requests for expanded irrigated acres from this area will be placed in the same category as its adjoining section, either HCA or NHCA.

1.A.6. Well Permit Program

1.A.6.a. Well Permits Approved

Four new Well Permits have been approved:

Landowner	Number of Wells	Number of New Irrigated Acres	Type of Well	County	Subarea
BEG LLC	1	0	Replacement	Dodge	North Bend
Lyman-Richey Corporation	1	0	Commercial	Dodge	Fremont
CLW Valley Farm Holdings	1	0	Supplemental	Dodge	Fremont
Justin Taylor	1	0	Supplemental	Dodge	North Bend

The total number of approved permits for 2014 is 62.

Location of Approved Well Permits by County for 2014: Correct as of 8/27/2014

County	Irrigation - new	Irrigation - replacement	Stock	Commercial /Industrial	Municipal	Other	Total
Butler	1	5	0	0	0	0	6
Colfax	1	2	0	0	0	0	3
Dodge	5	8	0	1	0	1	15
Boone	5	1	0	0	0	0	6
Madison	1	0	0	0	0	0	1
Platte	4	4	0	0	0	1	9

Saunders 12	7	0	0	0	3	22	
Total	29	27	0	1	0	5	62

#### 1.A.6.b. Supplemental Well Permit for Line Rider LLC

Line Rider LLC is requesting a supplemental well for their ground in the N $\frac{1}{2}$  of the NE $\frac{1}{4}$  in Section 21-T18N-R6E in Dodge County (North Bend Subarea). The ground is currently irrigated by a well in the S $\frac{1}{2}$  of the the same  $\frac{1}{4}$  but, due to a change in ownership, they would like to drill their own well and install their own pivot. The test hole is attached.

#### 1.A.6.c. Buhman Replacement Well Permit

Phil Buhman is requesting a replacement well in the NW $\frac{1}{4}$  of the NW $\frac{1}{4}$  in Section 2-T18N-R1E in Platte County. They believe that they are having well construction issues and would like to replace the existing well. This is the first replacement well inside of a Special Quantity Subarea. The well currently irrigates 108 acres. Since this is a replacement well is was approved by staff.

#### 1.A.7. Irrigation Runoff Complaint

On August 22nd Russ Oaklund investigated a complaint of an end gun watering a county road. This water was from a pivot located in the SW $\frac{1}{4}$ , Section 36, T15N, R4E owned by Duane Ratkovec. When Russ arrived the end gun had been turned off and he talked briefly with Mr. Ratkovec.

#### 1.A.8. Potential Violation of Expanded Irrigation

An initial complaint noted irrigation from end guns on land owned by Liberty Land & Livestock LLC that exceeded the approved number of acres. Following action by the Board on August 11, 2014 a Cease & Desist Order was mailed to Liberty Livestock on August 13th, which they received on August 15, 2014.

Operation of the end gun on the pivot in SW $\frac{1}{4}$ , Section 32, T18N, R6E was approved by LPNNRD staff, while operation of the end guns on pivots in the SE $\frac{1}{4}$ , Section 32, T18N, R6E and SW $\frac{1}{4}$ , Section 33, T18N, R6E were not.

#### 1.A.9. Special Quantity Subareas

##### 1.A.9.a. Special Quantity Subareas - NET Grant

Staff have been working on submitting a NET grant request, which is due September 5, 2014. We may not know the final outcome of our grant request until February or March of 2015.

##### 1.A.9.b. Special Quantity Subareas - Approved Flow Meters

Staff is reviewing our current list of approved flow meters and will likely need to make some modifications. For example, it appears Seimens no longer makes propeller meters and has switched to ultrasonic and electromagnetic meters. See attachment.

1.A.9.c. Special Quantity Subareas - Water Allocation for 2015

Allocation for 2015 will need to be discussed and set before December 15, 2014. If the Board does not set the allocation by that date, the default rolling allocation will be 27 acre inches for a three year period. This allocation will first take effect in the Butler-Saunders SQS in 2015, and take effect in the Platte-Colfax SQS in 2016.

1.A.10. Lower Platte River Basin Water Management Plan Coalition (LPRBWMPC)

- The first Technical Committee meeting for the Basin Coalition was held on July 10, 2014 in Ord NE at the Lower Loup NRD. Much of the discussion focused on the Goals and Objectives. The next meeting will be held in Norfolk at the LENRD on September 3, 2014.

1.A.11. Voluntary Integrated Water Management Plan - LENRD and LPNNRD

- The last Stakeholder meeting was held on August 5, 2014 at the LPNNRD office in Wahoo NE. Information on the Water Inventory and Water Balance Study was presented and is due to be finished this fall. The next Stakeholder meeting is scheduled for October 7, 2014 at 2:00 p.m. at the LPNNRD office.
- The next Coordination meeting between LENRD, LPNNRD, and Olsson Assoc. is scheduled for September 2, 2014 at the LPNNRD office starting at 10:00 am.
- The NRD has received an Invoice for \$12,446.39 from Olsson Assoc. for services rendered through August 2, 2014 (see attached invoice).

1.A.12. Cost Share Programs

1.A.12.a. Irrigation Well Sample Kits

338 kits have been requested and sent out (43 of these have been requested earlier the week of August 25 - 26, 2014). The results from 136 of these kits have been received from HHS/Lincoln with a range of 0.00 to 33.0 ppm. Thirty water samples were received on August 26th and 48 more on August 27, 2015.

1.A.12.b. Domestic Well Sample Kits

Seven kits have been requested and these were mailed out. The results from four of these kits has been received and the results have been mailed to the well owner. This cost-share program is available only in the Phase 2 areas.

Kit #	Date sent	Date collected	Nitrate result (in ppm)	Bacteria 0 = no hit 1 = hit
14-3386	7/9/2014	7/15/2014	10.1	0
14-3461	7/21/2014	8/4/2014	0.00	0
14-3462	7/22/2014	8/4/2014	7.93	0

14-3463	7/22/2014	8/4/2014	17.5	0
14-3508	8/1/2014			
14-3608	8/18/2014			
14-3630	8/20/2014			

### 1.A.13. LPNNRD Certification

No new on-line test requests since the last committee meeting.

### 1.A.14. Certifying Acres in Saunders and Dodge Counties

- Acre Certification Update: Staff continue to meet with Saunders County producers. All Saunders County mailings have been sent at this point with a due date for the second batch coming up the first week of September. Of the roughly 1800 sent out, almost 1000 have been returned, the overwhelming majority of which have been through individual meetings. Staff is starting work on Dodge County corrections and should be able to begin sending them out after harvest.
- Brian Sanderson Corner Unit: Prior to changing the rules for Saunders County to not accept Assessor Records as proof of irrigated acres, Mr. Sanderson was informed by a Board Member that as long as he had the proof of irrigation he could add two corner units. This was perfectly acceptable until the rule change; therefore Mr. Sanderson purchased a corner unit and has plans to purchase another. The one that has been purchased was purchased prior to the rule change and therefore met our rules at the time. The one in question is the second Corner Unit that Mr. Sanderson would like to add to NW ¼, Section 14, T16N, R7E (see attached map). Modeling the proposed Corner Unit (225ft for the unit and 100ft for the end gun) adds right at 13 additional acres to the NW ¼. Mr. Sanderson would like approval from the committee to purchase this additional corner unit as he was given the go ahead from a Board Member prior to the Rule Change.

### 1.A.15. Bellwood Phase 2 Area

2014 is the twelfth year of this Phase 2 Area. 39 producer sample results have been received (range of 0.93 to 21.6 ppm).

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 21.6 ppm	46% (18 of 39)	15% (6 of 39)	39% (15 of 39)

32 of these sample results were received the day of the Water Committee meeting.

#### 1.A.16. Richland-Schuyler Phase 2 Area

2014 is the eleventh year of this Phase 2 Area. 97 producer sample results have been received (range of 2.37 to 33.0).

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 33.0 ppm	24% (23 of 97)	11% (11 of 97)	65% (63 of 97)

35 of these sample results were received the day of the Water Committee.

#### 1.B. CHEMIGATION

For 2014 we have 381 renewals and 84 new permit applications for a current total of 465. Due to weather and landowner delays, inspections are still ongoing. Summer chemigation inspections are listed below:

	Number to be inspected this summer	Number inspected	Number approved	Number and reason not approved
Renewal	~128	na	na	mainline 0 interlock 0 not ready 0
New	84	84	84	mainline 0 interlock 0 not ready 0

The breakdown, by county for the 84 chemigation permit applications, are listed below.

Butler	29	Colfax	3	Saunders	21
Platte	6	Dodge	15	Madison	0
Boone	10				

The fee structure for chemigation systems has been the same since 1987. A time is being reserved at the fall NARD conference for NRD's to discuss this general fee structure. At the

July 23rd meeting the consensus of the attending NRD's was to keep the new fees essentially uniform across the State, whatever that final amount will be.

Permit Type	Current Fee	Maximum Fee
New	\$30	\$150
Renewal	\$10	\$100
Emergency	\$100	\$500

### 1.C. LIVESTOCK WASTE PERMITS

No new livestock permit applications have been received from DEQ.

## 2. GROUND WATER PROGRAMS

### 2.A. DECOMMISSIONED WELL PROGRAM

#### 2.A.1. Well Estimates

Four new wells have been reviewed and approved by Gottschalk for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County
Jamie Yindrick	2 Domestic wells	\$854.60	Butler
Gary Wirka	Irrigation well	\$877.13	Saunders
Robert Bartek	Irrigation well	\$669.32	Saunders

#### 2.A.2. Plugged Wells

No wells are ready for cost share payment this month.

### 2.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

#### 2.B.1. Elkhorn Loup Model (ELM)

- Training by USGS to use the MODFLOW model developed for the ELM project was held July 29-30, 2014 at LLNRD in Ord. Angle and Schomer attended the training. The next training is scheduled for September 24 & 25, 2014 in Kearney right after the NARD Conference.
- Attached is an invoice of \$5,000 from LLNRD for training using the ELM model.

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

Katie Cameron (ENWRA coordinator) is asking members of the Technical Committee to review the ENWRA application for an NET grant. The due date is August 29, 2014. The northern half of the ENWRA flightlines over eastern Nebraska maybe delayed until the Spring of 2015. Scheduling conflicts with the helicopter company is part of the problem. LENRD had made earlier arrangements to fly a portion of their District this fall and it looks like those will be flown as scheduled.

## 2.C. GROUND WATER ENERGY LEVELS

The summer readings for the monitoring wells owned by the multi-agencies in the Wann Basin subarea and near the Former Ordnance plant near Mead were measured on August 26, 2014. This data is used in the ground water modeling efforts of MUD, LWS, and the USACE.

## 2.D. GROUND WATER SAMPLING

- Staff has been sampling the statewide network sites throughout the summer. As of August 27th, we have collected samples at 47 of the 53 sites. Nitrate results range from 0 to 20.7 ppm.
- Staff has sampled 106 wells in Colfax County, 88 of which are in the Richland-Schuyler Phase 2 area. Nitrate results range from 0 to 70.3 ppm.

## 3. SURFACE WATER PROGRAMS

### 3.A. STATE LAKES, FOR THE WEEK OF

Lake Wanahoo will be added to DEQ sampling list for area lakes.

#### 3.A.1. Bacteria Sampling

One Lake 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.

- Fremont Lake #9 in Dodge County

#### 3.A.2. Toxic Algae

Three Lakes will be on “Health Alert” this 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 under 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.

- Bluestem Lake in Lancaster County

- Iron Horse Trail Lake in Pawnee County
- Oliver Lake in Kimball County

#### 4. OTHER

##### 4.A. 2014 SUMMER INTERNS

Interns have ended their summer employment with the Lower Platte North NRD and have returned to UNL.

##### 4.B. COMMENTS FROM THE PUBLIC