

Water Committee Meeting  
Wednesday, July 1, 2015 5:00 PM  
Lower Platte North NRD Office  
P.O. Box 126  
Wahoo, NE 68066

## 1. REGULATORY

### 1.A. GROUND WATER MANAGEMENT AREA

#### Violation Policy

- Cease and desist orders
- Loss or reduction in water allocation
- Loss or reduction in certified acres
- Loss of well permit
- Loss of variance
- Loss of transfer request
- Loss of chemigation permit
- Loss of cost-share funding
- Second or repeated violations

Members discussed this proposal and asked staff to draw up the wording for the next Water Committee before forwarding it to the LPNNRD attorneys.

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

The District has received one new application for 40 acres. This brings our total to 350 new acres for this year, which will be added to the previous years total or approximately 7,000 acres for review in September for the 2016 allocation.

##### 1.A.1.a. Russ Larson Variance Request

Russ Larson talked to the Committee seeking a variance request for this summer (2015) to allow a neighbor to irrigate Mr. Larson's field in the NE ¼, NE ¼, Section 3, T14N, R8E, Saunders County (Todd Valley Subarea). The Committee discussed this but took no action. Therefore, his request will be carried forward for further review in September when all other variances requests will be evaluated.

##### 1.A.1.b. Frank Vech Variance Request

The Assessor's office of Saunders County had the entire NW1/4 of Section 2, T16N, R6E (Todd Valley Subarea) of Frank Vech's field as irrigated. However, during the acre certification process the aerial imagery did not have the corner's as irrigated and Frank Vech signed off that this is correct. He now wants to buy a corner unit to irrigate those acres, however he will have to obtain an approved variance from the LPNNRD to allow this.

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

No new applications have been received by the district. We currently have a total of 430 new acres for this year which will be added to the previous years, so the NRD will have approximately 1,500 acres for review in August for the 2016 allocation.

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

Landowner	Number of Wells	Number of New Irrigated Acres	Type of Well	County	Subarea
Ryan Loseke	1	0	Livestock	Platte	Platte Center (SQS)
Charlie Heavican	1	0	Livestock	Colfax	Octavia
Kevin Ziegenbein	1	0	Irrigation (Replacement)	Saunders	Todd Valley

The total number of approved permits for 2015 is 29

Location of Approved Well Permits for 2015: Correct as of 6/30/2015

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

<b>Total</b>	11	14	2	1	0	0	29
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#### 1.A.4.b. Steve Frahm Well Permit Request

Steve Frahm has submitted an application for a new well in the SW 1/4 NW 1/4 in Section 3-T13N-R9E Saunders County (Todd Valley Subarea). The new well will irrigate 65 acres in 3-T13N-R9E and 65 acres in 34-T14N-9E. These acres are currently irrigated with the Corps cleanup water, but Mr. Frahm would like to have the ability to use his own well to irrigate in the event the cleanup water is not delivered. Attached is a map showing the area to be irrigated and the proposed well location. Since this is within the cleanup area of the US Corps of Engineers, this will be forwarded for their review.

#### 1.A.4.c. Claire Ehernberger Well Modification

Claire Ehernberger has asked the District to modify well permit LPN-015-1567 from a replacement well for 80 acres to a new well. The well is located in the NW 1/4 of the NW 1/4 of Section 35-T18N-R4E in Colfax County (North Bend Subarea). The new well did not turn out to be as good as planned and they would like to keep the old well to supplement the new well in times of need, and also to irrigate the corners and fill a stock tank from time to time. Therefore, this would be classified as a supplemental well.

#### 1.A.5. Special Quantity Subareas

##### 1.A.5.a. Butler-Saunders SQS Area

All the irrigation well sites have been visited by staff. Following the June 8th Board Meeting letters were mailed to those who hadn't yet installed their flow meter. Subsequent field checks show that a few of them now have flow meters installed. Landowners/producers and their well driller (meters ordered) have been re-contacted regarding remaining sites. Staff continue to check wells that have not yet installed flow meters. In place of a 'cease and desist' letter being sent, a letter was mailed to each of these six producers (11 wells) on June 29th asking them to pledge not to

irrigate until a meter is installed and to return that document by July 8th (see attached letter).

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

The last technical committee met at the Lower Elkhorn NRD on June 18th. Topics included basin wide water accounting (see attached graphs) and review of Goals and Objectives. State Statutes imply that the upper basin must assist the lower basin to be in compliance. The draft of the Basin Plan (at least the first three chapters based on those goals and objectives) should be done in the next few weeks.

Next Managers meeting July 7 from 10:00 am to noon in Kearney, but exact location to be announced.

Water Banking Workshop July 20 from 11:00 am to 1:00 pm at Platte College in Columbus NE.

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

Staff met with Olsson Associates on June 4th to discuss changes to the Water Inventory Study and the V-IMP, which is based on the goals and objectives previously discussed by the NRD Board and the Stakeholders. Work still needs to be done on the Water Inventory Study, especially the data gap analysis for our Ground Water Energy Level network. In the original assessment, Olsson just looked at the 2 dimension spacial distribution and didn't consider the different geology of the District.

#### 1.A.8. Cost Share Programs

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

No additional requests have been received since the last committee meeting. Oaklund will order kits, bottles, and supplies from HHS and requested kits will be mailed in July.

##### 1.A.8.b. Nebraska Agricultural Water Management Network (NAWMN)

Equipment has been delivered to 15 of the 18 producers who had order this year. Karen has sent Invoice to these fifteen and payment has been received from a couple of them. One producer has passed away in a farm accident since his order was received. Aaron Nygren, UNL Extension Educator in Colfax County, and his summer intern have been coordinating the delivery and installation of the equipment.

##### 1.A.8.c. SENSE Program

A demonstration of the SENSE program will be held at the Columbus NE Platte County Fairgrounds on Tuesday July 28, 2015 with a starting time of 6:00 pm.

#### 1.A.9. Bellwood Phase 2 Area

2015 is the thirteenth year for this Phase 2 Area. This area has been reduced from 32 sections to 21 sections. Staff plan to collect a water sample from a well in each of the

eleven sections removed (now in Phase 1 ←, like rest of our district). Letters with packets have been sent to these landowners/producers that encouraged them to continue to sample their wells for the nitrate content in the irrigation water. Information contained in these packets were tailored for those whose tracts remain within the Phase 2 area, for those whose tracts lie in the eleven border sections now in Phase 1 and for those with a mix (tracts in Phase 1 and Phase 2).

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

2015 is the twelfth year of this Phase 2 Area. The 55 sections of this area will go into a Phase 3 Area September 1, 2015. Also effective September 1, 2015, the ten sections immediately north of this area will become 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. Staff plan to collect water samples from wells in these ten sections and continue sampling of some wells in the 55 sections that will go from a Phase 2 designation to Phase 3.

A Public Information meeting has been set for Wednesday, July 22<sup>nd</sup>, at 7:00 p.m. at the Oak Ball Room in Schuyler, to discuss these upcoming changes with landowners/producers and answer questions.

1.A.11. LPNNRD Certification

There have been three more on-line test requests since the last committee meeting. Each of these three has completed the test and a certification card was mailed.

Cert #	Cert date	Name	Re-cert	Comments
6522	6/3/2015	Alex Kavan	No	first-time
6523	6/9/2015	Clayton Heavican	No	first-time
6524	6/16/2015	Ryan Preister	No	first-time

1.B. CHEMIGATION

So far for 2015, we currently have 420 renewals and 73 new applications for a total of 493 permits.

Summer chemigation inspections are listed below:

	<b>Number to be inspected this summer</b>	<b>Number inspected</b>	<b>Number remaining</b>
<b>Renewal</b>	~140	12	128
<b>New</b>	73	43	30

The breakdown, by county for the 73 new chemigation permit applications, are listed below:

- Boone 0
- Butler 11

- Colfax 7
- Dodge 13
- Madison 1
- Platte 15
- Saunders 26

1.C. LIVESTOCK WASTE PERMITS

DEQ has approved the livestock waste permits for:

- Jermemy Janssen / Janssen Tarnov Nursery / 31713 325 Avenue / Columbus NE 68601 in the NE1/4 of the NW1/4, Section 22, T19N, R3W, Platte County (Middle Shell Creek)
- Jess Hough / Little Pine Ridge Feedyard Inc. / PO Box 187 / Bellwood NE 68624 in Section 23, T16N, R2E, Butler County (Bellwood Subarea) This is for modified construction of waste storage facilities.

2. GROUND WATER PROGRAMS

2.A. DECOMMISSIONED WELL PROGRAM

2.A.1. Well Estimates

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

2.A.2. Plugged Wells

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

Well Owner	Type of Well	Cost Share Estimate	County
Phil Buhman	Irrigation	\$666.95	Platte
Goedeken Farms Inc.	Irrigation	\$602.48	Platte

2.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

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

No new update

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

Results from AEM flights from fall of 2014 and spring 2015 are still expected by the end of July.

ENWRA and C&SD are drilling four test holes in our District, see report under monitoring wells and test holes.

## 2.C. NEW MONITORING WELLS AND TEST HOLES

Received an invoice for \$24,000 from C&SD concerning the drilling and logging of four test holes (see attached). This is to come from the budget line of Capitol Improvements 162-019 for the current fiscal year. The North Bend test hole collapsed at 300 feet and will have to be re-drilled, likely next week.

Oaklund and Johannes met with Tracy McConnell of Grosch, N.B. on May 28th, the day after our previous Water Committee meeting, at the site of the monitoring well on Clint's land. Tracy was able to run his camera to bottom of this well (120'). There was reasonably good clarity throughout the column and the screens (bottom 20') appeared to be in good condition. The concern had been the relatively flat hydrograph. The nearest high capacity irrigation well is about ¼ mile northwest and the impact of its pumping is not readily apparent on the hydrograph. A possible mitigating circumstance is that Taylor Creek is less than ¼ mile east of this monitoring well and/or this well is not hydrologic connection to the irrigation well. Tracy's conclusion is that the logger is likely recording the correct water level. He suggested that we may want to pump this well later this year. With the corn crop here this pumping would wait until fall, after the corn has been harvested.

## 2.D. GROUND WATER ENERGY LEVELS

Summer GWEL wells within and near both SQS are to be measured in late July to early August.

Butler-Saunders SQS will have 15 wells

Platte-Colfax SQS will have 29 wells so a total of 44 GWEL wells. This does not include the irrigation wells within the Bulter-Saunders SQS that landowners have given use permission to measure their well.

## 3. SURFACE WATER PROGRAMS

### 3.A. STATE LAKES, FOR THE WEEK OF JUNE 22, 2015

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

#### **Week of June 22nd , 2015**

This week's lake beach bacteria and toxic algae results are now posted on the NDEQ web page (<http://deq.ne.gov>).

## **Bacteria**

Three lakes 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 we want people to be aware and use their own judgment on their use.

### **Lakes with High E. coli Bacteria Levels**

- Bluestem Lake in Lancaster County
- Medicine Creek Lake in Frontier County
- Valentine Mill Pond in Cherry County

### 3.A.2. Toxic Algae

#### **Week of June 22nd , 2015**

##### **Toxic Algae**

NO 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.

## 4. OTHER

### 4.A. LPNNRD WATER PROGRAMS BUDGET FY15-16

The Water Programs budget for FY2015-2016 was handed out for review.

### 4.B. GMDA SUMMER SESSION

The GMDA Summer Session was held June 10-12, 2015 in Coeur d'Alene Idaho. One of highlights of the conference was a presentation by Orrin Feril of the Big Bend GMD#3 in Kansas dealing with water banking. They look at transfers based on acre-feet of water, not acres, and consider the hydrologic connection to a stream or river, the areal extent of the aquifer and the saturated thickness. Transfers are not permanent and when your approved amount of water has been pumped, the transfer is done and the water right reverts back to the original land. In Kansas they have ground water rights, not correlative rights.

### 4.C. 2014 SUMMER INTERNS

All three of our summer interns passed the NRD license test in O'Neill last month. Recently they have been assisting Tyler Benal with chemigation inspections since we have so many new permit applications.

### 4.D. COMMENTS FROM THE PUBLIC