

Water Committee Meeting
Wednesday, March 28, 2018 5:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. Water Committee

1.A. UNFINISHED BUSINESS

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

Katie Cameron discussed with the Committee and staff the proposed flight lines that will be flown in June 2018. She said that the bids to fly the area are calculated at \$500/km. If bids come in lower than expected, the committee will have an opportunity to adjust the lines at the next Committee meeting, otherwise lines can be adjusted by adding and subtracting.

1.C. REGULATORY

1.C.1. GROUND WATER MANAGEMENT AREA

1.C.1.a. Groundwater Rules and Regulations

A draft copy of the Groundwater Rules and Regulations is attached. Jovan Lausterer reviewed the proposed Rules and Regulations and sees no legal issues with the changes. NeDNR is still in the process of reviewing the document and indicated that if the hearing is held on May 2nd that would give them sufficient time.

Staff has been contacted to allow expansion of acres in the SQS areas starting after the June Board Meeting, instead of December 15, 2018. The current GW rules states that rules need to be changed by the December 15 date or the prior rules apply. The Committee can include in its recommendations to allow the expansion of acres in June for the SQS areas.

If there is no major changes in the Rules and Regulations, it is recommended that a hearing be set for May 2nd. As this will be during planting season do you want the hearing prior or after the Committee meeting? Notice for the hearing needs to be published during the week of April 9, so notices need to be sent to the weekly papers before the April Board Meeting.

Since the Water Committee Meeting on March 28 NeDNR has commented that they would like some changes corrected on the Rules and Regulations. As the LPN is looking at managing water by consumption use NeDNR would like to reference the IMP and the statutes that pertain to implementing a voluntary IMP. Staff would correct the

wording and would like to postpone the hearing date to May 14 at 5 pm. Water Committee will still get a chance to review the word changes at the next Committee meeting.

1.C.1.b. Well Permit Program

1.C.1.b.1. Well Permits Approved

Wells Permits Approved: 0

Landowner	Number of Wells	Number of New Irrigated Acres	Type of Well	County	Subarea
Anthony Krafka	1	38.44	Irrigation (New)	Butler	Bellwood

The total number of approved permits for 2018 is 2

Location of Approved Well Permits for 2018: Correct as of 3/27/2018

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

1.C.1.b.2. Timothy Mueller Livestock Well

Timothy Mueller has applied for a new livestock irrigation well in the NW1/4 SE1/4 20-18-1E, Platte County, Lower Shell Creek Subarea. This well will be used to supply water to approximately 2,880,000 broiler chickens annually. The expected water use will be 10,000,000 gallons. The peak season depletion will be 8.91 AF Equation: $30.93(\text{gallons}/325851) \times .96 \text{ (SDF)} \times .3 \text{ (peak season)}$. Total annual consumption 30.93 AF. In the surrounding sections there are 29 irrigation wells, 23 domestic wells, 3 livestock wells, and 1 commercial well (rural fire department). All wells are drilled to a similar depth (~150ft). The irrigation wells are registered to pump between 600 and 1600 gpm. Attached is a profile of the nearest AEM flight line (3/4mi north), as well as a map of the area surrounding the proposed location of the new well.

1.C.1.b.3. Scott Cassels Pond Well Application

Scott Cassels has applied to drill a new pond well in the NW1/4 SE1/4 33-16-9E, Saunders County, Leshara Platte Valley Subarea. The well will only be used between September 1st and May 31st and will only pump enough to keep the water open on the 2.5 acre lake (see attached map). Total water pumped will be below the 9 acre inch requirement.

1.C.1.c. Lower Platte River Basin Water Management Plan Coalition (LPRBC)

A technical/management meeting was held at LPSNRD on March 26. Each participating NRD and DNR reported on the activities that was part of the annual report that was due March 1st. A synopsis of these reports will be given at the annual meeting on April 20. A copy of the 2018 report submitted by LPN is attached showing water activities in the second half of 2016 and all of 2017. The financial report was given to the group showing a surplus of \$324,018.29 in the account. The management group is going to recommend that dues not be assessed to each participating NRD in FY 2019. The group reviewed a proposal on developing a database platform for submitting the Annual Report. The database will be developed utilizing a Water Smart Grant from USGS.

Friday, April 20 is Lower Platte River Basin Annual Meeting starting at 1:30 pm at the LLNRD in Ord. Items that will be discussed are the NRD annual basin reports, database proposal and budget. Dean Eisenhauer will be making a presentation on water consumption within a Basin and John Engel on the Consortium Drought Plan.

1.C.1.d. Cost Share Programs

1.C.1.d.1. Flow Meter Maintenance Program

Tri-City Meters has started the yearly maintenance of meters in the SQS areas. They have found a few meters without boot covers but are replacing them as they find them. The covers will help in extending the life of the meter.

1.C.1.d.2. Flow Meter Cost Share in SQS #2

Staff has contacted producers that did show some initial interest, with the plan to get the WSF grant wrapped up before the end of the fiscal year. We have 1 meter to receive cost-share for this month.

Attached is a waiver agreement received on installing water flow meters from Dicke Feed Yards. Dicke is requesting that if they install the required flow meters, that LPNNRD sign the waiver stating that their wells will never be taxed on gallons of water consumed. The committee discussed that we would not have authority to sign such a waiver. Our taxing authority is based on property tax (and potentially occupation tax). No such irrigation tax authority exists now and any such proposal would need to come to the State Legislature. A representative from Dicke Feed Yards may be present to address the Board about this topic on April 9th.

At the June 28, 2017 Water Committee, motion (1) offer cost-share for flow meters to producers within 2 miles of the SQS #2 Boundary within LPNNRD and (2) to offer cost-share within the SQS #2 area to convert gallons reading registers to acre-inches. Cost-share for registers conversion will be \$225 with producer paying the labor cost. Deadline for invoices will be by March 1.

At the November 30, 2016 Water Committee, motion was made to fund GWEL cooperator wells at \$1,000 per 8 inch meters (\$770 from WSF and \$230 from LPNNRD = \$1,000) and at \$749 per 6 inch meters (\$577 from WSF and \$172 from LPNNRD = \$749)

Water Sustainability Fund (WSF)	
8 inch meters	1 x 8" meters or XX x \$770 = \$770
6 inch meters	XX x 6" meters or XX x \$577 = \$0
WSF Total	\$0
	So Running Total WSF Grant = \$80,229 of \$200,000 grant
	So Remaining Total of WSF Grant = \$119,771

LPNNRD For GWEL Cooperators	
8 inch meter	0 x 8" meters or 1 x \$230 = \$0
6 inch meter	0 x 6" meters or 0 x \$172 = \$0
Carry over (8 inch meter)	0 x 8" meter or 0 x \$230 = \$0

LPNNRD Total	\$0

Total For Flow Meter Cost Share Program	
WSF & LPNNRD	For approval at September 9, 2017 Board Meeting = \$770

=====

1.C.1.e. Bellwood Phase 2 Area

2018 is the sixteenth year for this Phase 2 Area. Phase 2 information packets with order were mailed to producers in June, before the start of irrigation.

Soil sample results were not included with David Nicolas' corn reports - Oaklund spoke with Chris Nicolas (son) yesterday. He will find out about these soil samples.

1.C.1.f. Richland - Schuyler Phase 2 Area

2018 is the third year of this Phase 2 Area. There are 45 registered active irrigation wells in the ten sections of this new area.

2017 reports have **not been received** from Brian Goff. Oaklund called him again yesterday and left message on both his cell phone and home phone.

1.C.1.g. LPNNRD Operator Certification

Eight online test requests have been received so far in March. Seven have passed the test and a certification card was mailed to each.

Cert #	Cert date	Name	Re-cert	Comments
7103	2/28/2018	Carl Williamson	New	
5855	2/28/2018	Marty Reznicek	Yes	
6278	3/13/2018	James Jelinek	Yes	
5947	3/13/2018	David Sklenar	Yes	
6130	3/13/2018	Anthony Stepanek	Yes	
7127	3/27/2018	Kody Karloff	New	
6110	3/26/2018	Mark Ostry	Yes	

1.C.1.g.1. 2018 LPNNRD Certification Classes for Nitrogen and Water Management

Class	Date & time	Location	Attendance
# 1	Thursday, January 4th @ 3:30 p.m. (after Corn Expo)	Fremont - Extension Office	41 / 0
# 2	Wednesday, January 17th @ 7:00 p.m. [Dryland focus/emphasis]	ENREC (formerly known as ARDC)	102 / 0
# 3	Tuesday, January 30th @ 9:30 a.m. *Special class at 1:00 p.m. AEM	Columbus - Ag Park	26 / 0
# 4	Tuesday, January 30th @ 1:00 p.m. *Special class on AEM	Columbus - Ag Park	92 / 1
# 5	Thursday, February 5th @ 1:00 p.m. [Dryland focus/emphasis]	Butler County Events Center	36 / 6
# 6	Thursday, February 8th @ 9:30 a.m.	Lindsay - Village Office	8 / 0
# 7	Tuesday, February 27th @ 9:30 p.m.	Columbus - Pinnacle Bank	14 / 0
# 8	Wednesday, March 7th @ 9:00 a.m.	Fremont - Extension Office	24 / 4
# 9	Tuesday, March 13th @ 9:30 a.m.	Butler County Events Center	21 / 3
# 10	Tuesday, March 20th @ 7:00 p.m.	ENREC (ARDC)	31 / 5
# 11	Thursday, March 22nd @ 3:00 p.m. *Special class afternoon. AEM	Columbus - Ag Park	37 / 9
# 12	Thursday, March 22nd @ 7:00 p.m.	Columbus - Ag Park	11 / 2
		Totals	443 / 21

*Three AEM classes for SQS producers, with AEM experts

- There were approximately 107 at the 1/30/2018 AEM class at Ag Park [one LPNNRD Director - Terry Sobota]. Only 92 of these attendees turned in their sign-in sheet. Some who didn't return their sign-in sheet were from outside LPNNRD.
- There were 31 at the 3/13/2018 AEM class at the Butler County Events Center.

- There were approximately 44 at the 3/22/2018 AEM class at Ag Park [one LPNNRD Director - John Hannah]. Only 37 of these attendees turned in their sign-in sheet. Some who didn't return their sign-in sheet were from outside LPNNRD.

In mid-December 2017 letters and class schedule were mailed to 670:

- 56 whose certification expired in 2015
 - Three of these are retired / 53 no response
- 46 whose certification expired in 2016
 - Two of these attended / 44 no response
- 79 whose certification expired in 2017
 - Nine attended; two retired / 68 no response
- 489 whose certification will expire 4/1/2018
 - 361 of these attended / six are retired

1.C.2. CHEMIGATION

For 2018 we have 180 renewals and 3 new permit applications for a current total of 183. No inspections for permits have been completed.

Attached is the monthly report.

1.C.3. LIVESTOCK WASTE PERMITS

The LPNNRD has received # 1 livestock permit applications from DEQ since the last Water Committee meeting. Staff visited the proposed site on March 22 and saw no issues on the location. Majority of the application sites are located in neighboring NRDs.

Name	Livestock	Type of Permit	Legal Description	County
Kyle Herchenbach Poultry Operation	Broilers	Major Modification	NW SW 23-20N-03W	Platte

Description of permit application

1.D. GROUND WATER PROGRAMS

1.D.1. DECOMMISSIONED WELL PROGRAM

1.D.1.a. Well Estimates

new wells has been reviewed and approved for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County
WMW Family Farms LLC	Irrigation	\$915.92	Platte
Leonard Cuda	Irrigation	\$750.82	Saunders

1.D.1.b. Plugged Wells

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

Well Owner	Type of Well	Cost Share Estimate	County
Kirk Strong	Domestic	\$451.22	Saunders
Cara Ahrens-Emerson	Hand-dug	\$530.25	Colfax

1.D.1.c. City Water Consumption

This is the total water usage that was reported from towns throughout the district. The only towns that we did not receive a report from was Weston and Ithaca.

1.D.2. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

1.D.2.a. Lower Platte River Consortium

A meeting was held on March 30 at 1:30 pm at LPS to discuss the upcoming workshop and public open house. A draft Lower Platte River Drought Contingency Plan was presented to the group by HDR. The group gave feedback on the vulnerability assessment and drought monitoring sections of the plan. The group will meet one more time on May 9 to finalize the workshop and public open house.

The workshop is being planned for the week of June 18 at LPS. Invitees to the workshop will be state agencies, communities' utilities managers, industry and farmers to name a few. After the workshop, a public open house will be held for all citizens on the progress of the Consortium. Another workshop and public open house will be held in the fall of the year.

1.D.3. Phoenix WebGroup

Staff gave a presentation to the Committee on the progress of the Phoenix database and demonstrated its capabilities.

1.D.4. Groundwater Project Ideas

Project ideas to start the discussion

- Software - Modeling or Analyzing data
- Vadose Sampling
- Cover Crops
- Split Applications of Nitrogen
- Other

If Committee feels a project could be developed that would be a benefit to the District, staff could submit a NET or WSF grant to offset some of the costs.

Staff has been visiting with Engineering firms and UNL personnel to generate ideas on presenting an innovative project.

1.D.5. GROUND WATER ENERGY LEVELS

Staff began collection of the Spring measurements last week. The wet weather has hindered progress.

1.D.6. FORMER ORDNANCE PLANT NEAR MEAD

A tour is being planned for May 16 from 4 to 7 pm.

1.E. Weather Stations

In the latter part of 2017 we were contacted by Rezaul Mahmood to help assist in finding 10 weather station sites in both Butler and Saunders counties. Rezaul is professor at Western Kentucky University and the assistant director at the Western Kentucky Climate Center. The Western Kentucky Climate Center, Western Kentucky University, and several other Universities are partnering along for this study. The weather station sites are being constructed by students at the University of Alabama in Huntsville. These sites are solar powered and will collect data for approximately 4 months; mid-May through mid-August, 2018. The landowner has no responsibility on any destruction of equipment if something would occur.

They plan on sharing the data with producers throughout Eastern Nebraska. The overall goal of the study is to have a better understanding on how natural and human modified landscapes impact weather which will then help assist in predicting potential weather forecasts. The sites have been selected and landowners were met with in person. The contact information for the landowners has been forwarded to Rezaul Mahmood.

Below is Rezaul's contact information along with his credentials and links that show other various studies he has done. Attached is a PowerPoint describing the study. A Google imagery map of the sites is also attached.

Rezaul Mahmood PhD.
Professor
Dept. of Geography and Geology
Associate Director, Kentucky Climate Center
Associate Director, KY-Mesonet
Co-Director, WKU-High Performance Computing Center

Western Kentucky University
Bowling Green, KY 42101

Editor-in-Chief, Earth Interactions

<http://people.wku.edu/rezaul.mahmood/rezaul-vitae-geog.pdf>

<http://www.kyclimate.org/>

<http://www.kymesonet.org/>

<http://earthinteractions.org/>

Phone: [\(270\) 745-5979](tel:(270)745-5979)

Fax: [\(270\) 745-6410](tel:(270)745-6410)

1.F. UTV Trailer Bids

We sent trailer bids to trailer dealers earlier this month. The deadline for the trailer bids was 3-

26-2018. We received bids from 4 different dealers.

Aluminum Trailer Bids:

Stuart Cromwell Trailer Sales Columbus:

- 2018 Aluma 6310 Utility Trailer; **\$2,063.50** (allow 6-8 weeks for delivery)
- 2018 Aluma 7712HTilt Utility Trailer; **\$2,742.75** (allow 6-8 weeks for delivery)

All Star Trailers Norfolk:

- 2018 Aluma 7712H Tilt; **\$2,995.00**
- 2018 Aluma 7712H Bi-fold gate; **\$2,995.00**
- 2018 Aluma 7712 H Standard gate; **\$2,795.00**
- H & H 76" x 12' aluminum utility trailer; allow 5 weeks for build time; additional options available **\$2,095.00-\$3,250.00**

P & R Sales North Bend:

- Aluminum trailer; fold up ramp; **\$1,750.00**

Steel Trailer/Wood Deck Bids:

All Star Trailers Norfolk:

- 2017 H & H 76" x 12' Rail Side; **\$1,550.00**
- 2017 H & H 76" x 12' Rail Side; spare tire mount; spring assist on gate; **\$1,650.00**
- 2018 H & H 76" x 12' Solid Side; **\$1,800.00**

Tractor Supply Fremont:

- 5.5' x 10' Wood floor pipe top trailer; **\$1,399.99**

Larry's Trailer Sales and Rental David City:

- 2018 H & H 82" x 14' ; **\$2,695.00 Delivered**
- ATV Utility trailer 76" x 12' ; **\$1,820.00 (without upgrades) Delivered; can order**
- 2018 H & H 76" x 12' Solid Side; **\$1,700 delivered to Wahoo; Spare wheel & tire \$130**
- 2017 H & H 76" x 12' Rail Side; **\$1,625 delivered to Wahoo**

1.G. Voluntary Integrated Management Plan

Attached is the copy of the final V-IMP draft. A public informational meeting was held on Wednesday, March 28 starting at 7:30 pm. DNR and LPN staff made a presentation to Committee, Staff and one person from the public.

If there is no major changes in the plan, it is recommended that a hearing be set for May 2nd. As this will be during planting season do you want the hearing prior or after the Committee meeting? Notice for the hearing needs to be published during the week of April 9, so notices need to be sent to the weekly papers before the April Board Meeting.

1.H. OTHER

1.H.1. GMDA ANNUAL CONFERENCE

Summer conference is scheduled for May 30 - June 1 in Savannah, Georgia. Bret and Daryl are the Water Department Staff Members that are planning to attend.

1.H.2. COMMENTS FROM THE PUBLIC