

Water Committee Meeting
Wednesday, February 27, 2019 5:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

2. USGS STREAM FLOW GAUGING SITES

Additional information from meeting on February 25 with LPS, PMR, MUD and LWS. Points to consider for the Leshara Water Quality Monitoring Site:

- Can trace if the contamination is coming from the Platte or Elkhorn River.
- If no contamination is found this can show that BMPs are working.
- People can see that the NRD is taking a pro-active approach on protecting the water quality of the river.
- If contamination does show up in a community along the Platte River, might be able to verify if is coming from surface or groundwater.
- Opens availability of more funding sources?
- If contamination is reported then communities can adjust pumping locations of their wells.
- Partnership with all agencies.
- Is this the best location for implementing BMPs, if contamination is found?

Information from Dave Potter - LPS

The Lower Platte Corridor Alliance (LPRCA) actually has two stream gage agreements coming due in April. One is the Leshara site and the other is the 3-long term sites further downstream. If we want to continue the monitoring gages without any interruptions, we will need to consider approving the agreements in a March timeframe.

The 3-year agreement for the Leshara site is currently funded by Lower Platte South NRD (22% of funding), Lower Platte North NRD (22%), Papio-Missouri River NRD (22%), Lincoln Water Systems (10.5%), M.U.D (10.5%), and USGS (13%). The total cost of that project was \$110,564 with LPRCA partners paying \$84,743 and USGS paying \$25,821. The proposed cost of the 2nd 3-year agreement would be \$113,893 with USGS picking up \$15,468. If the five agencies were to equally contribute to the balance (\$98,425), it would be a cost of \$19,685 per agency or about \$6,652 per agency per year. If we worked with the same percentages as before, the cost would be adjusted. However, if we all benefit, then it should probably be equally split.

Below is some further explanation of the cost:

The total cost of the monitoring is to be \$113,893 for Leshara, the portion that LPRCA is billed for appears as \$98,425. I took the information below from the previous and current proposed agreements. The 2016-2018 monitoring costs of \$110,564 is the amount it took to operate the

Leshara site and publish the data for three years.

Leshara agreement:

2019-2021

Monitoring

estimate	LPRCA	USGS
\$113,893	\$98,425	\$15,468

2016-2018 Billed LPRCA USGS

\$110,564	\$84,743	\$25,821
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Committee/Board desire to continue to monitor water quality at the Platte River at Leshara gage?

3. REGULATORY

3.A. GROUND WATER MANAGEMENT AREA

3.A.1. Irrigation Certification Policy

Chuck Hasselbrook from Sandhills Energy and Vanessa Silke of Geronimo Energy discussed desired projects involving Solar Panel Installations to the Committee. Discussion was regarding the policy that a parcel of land needs to irrigated 2 out of 10 years to keep irrigation certification on a parcel. Other individuals also addressed the Committee on this policy.

The Committee heard from the industry representatives and individuals that were interested in pursuing solar installation sites, along with an individual that wanted to expand his cattle operation onto irrigated acres. They would like the option to retain irrigation rights, if the land is not irrigated 2 out of 10 years. Some of the solar installation sites can be as large as 800 - 1000 acres and need to be in close proximity to transmission lines. The solar installation sites pays property tax along with a nameplate tax for renewal energy. Other comments were an opportunity for a young family to come back to the farm if cropland is limited. The Committee discussed banking and transfer rules along with selling the irrigated right. One company has individuals that will be needing to sign agreements in April. If Board is interested in a policy change, this could be done in a couple of months. A rule change for banking or transferring would required more time.

The Committee directed Jovan or staff to write up a policy to clarify certified irrigated acre as it relates to "historically irrigated acre". The Committee wanted the Board to review the policy and then the Committee would review it at the next Committee Meeting.

For Discussion Only - Retirement of Certified Irrigated Acres:

_____ made the motion, seconded by _____, to clarify that once an irrigated acre has been certified as either a "historically irrigated acre" or has been issued a variance by the District those acres are no longer subject to the "two of the last ten years" rule as described within the District's groundwater rules and regulations. As a result, certified irrigated acres will not be retired by virtue of the fact they have not been put to beneficial use by the landowner for an extended period of time. Once the certified irrigated acres are put back into beneficial use by the landowner they shall be subject to the then existing rules and regulations of the District. The District retains the right to amend its groundwater rules and regulations should it later determine it as necessary or appropriate (ergo landowners should govern themselves accordingly as the District is not precluded from later adopting a rule for retirement of certified irrigated acres).

3.A.2. Well Permit Program

3.A.2.a. Well Permits Approved

Wells Permits Approved: #

Landowner	Number of Wells	Number of New Irrigated Acres	Type of Well	County	Subarea

The total number of approved permits for 2019 is #

Location of Approved Well Permits for 2019: Correct as of #####

County	Irrigation - New	Irrigation - Replacement	Stock	Commercial	Municipal	Other	Total
Butler							

Colfax							
Dodge							
Boone							
Madison							
Platte							
Saunders							
Total							

3.A.3. Transfer of Acres

Last month the Board approved a irrigation transfer from LPN to LL for the Kettlesons'. Lower Loup uses the Elm model for determining SDF while the LPN used the numbers provided by DNR. The ELM model showed a SDF of 12.9%, while the number that was used by LPN was 54%. It allowed the Kettlesons' to expand up to 16 acres, which will work in this situation.

3.A.4. Lower Platte River Basin Water Management Plan Coalition (LPRBC)

The LPNNRD directors appointed for LPRBC are Bob Hilger and Larry Feala to attend the next meeting to be held Monday, March 18 in Ord from 11 to 1:30. A technical group meeting is planned for Monday, March 4 in Kearney starting at 3 pm.

3.A.5. Voluntary Integrated Water Management Plan - LPNNRD

Report is due to the state on March 1.

3.A.6. Bellwood Phase 2 Area

2019 is the seventeenth year for 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	43% (31 of 72)	8% (6 of 72)	49% (35 of 72)
2016	0 to 35.1 ppm	34% (25 of 74)	11% (8 of 74)	55% (41 of 74)
2017	0 to 23.5 ppm	36% (27 of 74)	15% (11 of 74)	49% (36 of 74)
2018	0 to 30.9 ppm	40% (25 of 63)	11% (7 of 63)	49% (31 of 63)

3.A.7. Richland - Schuyler Phase 2 Area

2019 is the fourth 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
2016	1.47 to 41.8 ppm	29% (10 of 34)	9% (3 of 34)	62% (21 of 34)
2017	2.44 to 25.4 ppm	23% (8 of 35)	(0 of 35)	77% (27 of 35)
2018	1.75 to 29.3 ppm	25% (5 of 20)	10% (2 of 20)	65% (13 of 20)

Fertilizer application reports have not yet been received from Brian Goff. Goff called Oaklund and said he would bring his report to the class at Ag Park, Columbus, as his re-certification is due in 2019. The class was subsequently cancelled due to inclement weather. Goff will mail in his report.

3.A.8. Richland - Schuyler Phase 3 Area

2019 is the fourth year of this Phase 3 Area.

Year	Nitrate-nitrogen Range	Percent	Percent	Percent
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		Nitrate-nitrogen 0 to 8.0 ppm	Nitrate-nitrogen 8.01 to 10.00 ppm	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	23% (55 of 238)	12% (29 of 238)	65% (154 of 238)
2016	0 to 50.5 ppm	25% (58 of 228)	10% (22 of 228)	65% (148 of 228)
2017	0 to 53.4 ppm	25% (60 of 238)	6% (14 of 238)	69% (164 of 238)
2018	0 to 56.9 ppm	26.5% (50 of 189)	6.3% (12 of 189)	67.2% (127 of 189)

Fertilizer application reports have not yet been received from Mike Settles [Barta Family LLP] for tracts south of Richland. Efforts to contact him by telephone have been unsuccessful. A January 25th reminder letter has gone unanswered. Settles may not be the tenant for these tracts in 2019.

3.A.9. LPNNRD Operator Certification

Comments from the meeting in Schuyler are attached. Two online tests have been completed since previous meeting (see following table).

Cert #	Cert date	Name	Re-cert	Comments
6524	1/30/2019	Ryan Preister	Yes	
5978	1/30/2019	Dennis Riha	Yes	
6142	2/19/2019	Andy Chvatal	Yes	
7159	2/25/2019	Gary Torczon	New	

3.A.9.a. 2019 LPNNRD Certification Classes for Nitrogen and Water Management

Class	Date & time	Location	Attendees

# 1	Thursd ay, January 3rd @ 3:30 p.m. <i>? Note: Corn Expo at Christen sen Field ?</i>	Fremont - Extension Office (after the Corn Expo)	65/7
# 2	Monda y, January 14th @ 7:00 p.m.	ENREC - Mead (formerly ARDC)	38/2
# 3	Friday, Februar y 1st @ 9:30 a.m.	Columbus - Ag Park **	30/6
# 4	Monda y, Februar y 4th @ 1:00 p.m.	David City - Butler County Events Center, at Fairgrounds	23/2
# 5	Thursd ay, Februar y 7th @ 9:30 a.m.	Lindsay - Village Office	21/2
# 6	Wedne sday, Februar y 20th @ 9:30 a.m.	Columbus - Ag Park **	cancel led
# 7	Monda y, March 11th @	Fremont - Extension Office	

	6:00 p.m. ##		
# 8	Tuesda y, March 12th @ 9:30 a.m.	David City - Butler County Events Center, at Fairgrounds	
# 9	Wedne sday, March 20th @ 7:00 p.m.	ENREC - Mead (formerly ARDC)	
# 10	Thursd ay, March 21st @ 7:00 p.m.	Columbus - Ag Park **	
	**Ag Park classes will be on second floor. E ntrance is on south side - assessib le by stairs or elevator **	Ten Classes	

- ## "Zoom" class (next class) - may allow taking certification class from remote computer for this date only! If interested please contact Aaron Nygren at anygren2@unl.edu or Daryl Andersen at dandersen@lpnrd.org before the end of February to receive instructions on how to pre-register for the March 11th class.

>>>On Friday, February 15th @ 1:00 p.m,

On Friday, February 15th @ 1:00 p.m. a special class was held at the Oak Ball-Room in Schuyler. The class focused on Phase 2/3/4 management areas. There were 66 at this class, which included current and past directors. Six staff members were also present to assist with facilitation. Fifty attendees returned their sign-in sheet; six of these were first-time certifiers. A follow-up meeting is scheduled for Thursday, February 28th (This class met the Nitrogen & Water Management certification requirement.)

3.A.10. Flow Meter Program

There is 7056 active high capacity well, with 4584 irrigation wells. By NRD records, 868 wells has submitted a water use report. If you look at the chart, the NRD could do about 1000 wells a year over a 3-year period to handle the irrigation wells. How is the NRD going to handle the other high capacity wells?

Locations	Total High Capacity Wells	Metered Wells by Water Use Reports	Wells without Meters?
Bellwood	143	8	135
Richland-Schuyler	548	30	518
By County			
Boone County	228	62	166
Butler	966	95	871
Colfax	998	99	899
Dodge	1322	84	1238
Madison	81	13	68
Platte	1083	321	762
Saunders	2378	195	2183
By Management Area			
Blue (HC)	6292	643	5649

White (Normal)	561	204	357
Red (Restricted)	203	21	182
By Stream Depletion Factor			
SDF > 90%	1236	75	1161
80 - 90%	1777	104	1673
70-80%	1121	110	1011
60-70%	1103	144	959
50-60%	678	72	606
40-50%	173	50	123
30-40%	152	60	92
20-30%	35	31	4
0-20%	27	4	23

Attached are a few maps showing high capacity wells sorted by management areas or SDF. These maps shows all wells and wells with meters that the NRD receives water use reports.

4. GROUND WATER PROGRAMS

4.A. DECOMMISSIONED WELL PROGRAM

4.A.1. 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
Jamie Yindrick	Irrigation	\$1,153.77	Butler

4.A.2. 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

4.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

4.B.1. Lower Platte River Consortium

A meeting was held Monday, February 25 starting at 1:00 pm at Lower Platte South. Public comments were reviewed and discussed by the group with the Draft Drought Plan approved for submittal to Bureau of Reclamation (BOR) on March 1st after some final revisions. The major revision was including the possibility of connecting MUD and LWS.

The Flatwater Group presented the information obtained from the piezometers and water levels installed for this project. The sites in the District are at Columbus, Linwood, North Bend and Fremont. Discussion will be held later in March on keeping these sites for longer periods of time. If the sites are kept, the NRD would be taking over the sites for maintenance and gathering information. Approximated cost would be 80 hours of time with the cost of batteries. The cost of the data logger that is being used now is \$750, which should last for a while. As the data loggers have only been in just over a year, no data was collected during a low flow event on the river.

4.B.2. Phoenix Database and Online Reporting

At the meeting in Schuyler, 20 individuals answered they would utilize online reporting with 24 with no comments and only 3 saying no. Attached are two contracts from the Phoenix webgroup, which one would include developing online reporting for water use and phase reports along with submitting chemigation permits. Part of the online reporting will include a dashboard with tables, charts, graphs and notifications, The online report quote is for \$73,100, with 50% due at signing. The other contract is a change order for \$3,950 to add additions to the current database. The Board approved \$126,000 in this year's budget, with the plan that online reporting would be developed. To date \$31,200 has been spent for the workflow dashboard.

5. OTHER

5.A. COMMENTS FROM THE PUBLIC