

Water Committee Meeting
Thursday, August 1, 2019 7:30 AM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

2. NET (Nebraska Environmental Trust) Grant

Committee needs some discussion on these questions before proceeding with the grant. Maybe the last question needs answered first, as the District might not be ready to tackle flow meters. If the grant is postpone the District is looking at fall/winter of 2021 for grant money becoming available for flow meters and that's assuming the grant would be approved.

1. Are we willing to put any money towards this activity?

1a. If we are concerned about budget I would strongly suggest narrowing the scope of meter installations to the Phase III area.

1b. If we are going to put money towards this activity are we going to have cost share with producers? If so what rate?

2. Who is going to do the meter installs? There is a tremendous amount of in-kind to be captured at \$300 per install.

3. Who is going to handle the meter maintenance? Will we contract it out like the SQS Areas?

4. Are we going to target additional funding from other sources? WaterSMART grants are going to be a really hard sell on this and WSF and 319 funding is going to be due quickly and are both extremely time consuming grants to put together. WSF funding is due July 31st, which effectively invalidates our ability to utilize those possible funds. 319 grants are due September 6th. We should be able to chase that without any issue, but it will require a minimum of 10% local match (the in-kind from installations would be far greater than that).

5. Is this project perhaps better suited to next year's grant cycle?

Committee and staff discussed the pros and cons on proceeding with a grant submittal. The plan is for staff to work on a proposal for the Committee to answer these questions and then have discussion at the Board retreat. The plan is to submit a grant in next year's grant cycle.

3. REGULATORY

3.A. GROUND WATER MANAGEMENT AREA

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

Bob Hilger, Larry Feala and Daryl attended the Lower Platte Coalition Annual Meeting in Ord. A report was given by Tyler, for the Technical Group, on the peak depletions of each reporting agency. (Report is attached) The budget, which is attached, was accepted with no new dues for the upcoming year. A presentation was given by DNR on what the new 10-50 area could look like. A map is attached for review. John Engel from HDR also made a

presentation on the Lower Platte Consortium Drought Plan and where it is at currently in the process.

A study was conducted by Dr. Chen with the final report from April 5, 2013 attached. An excerpt from the Summary on page 45 of the report "A 10/50 area map was created through the simulated effect with the calibrated groundwater flow model. The extension of this area seems to be large. Note that the hypothetical wells used for determination of the 10/50 zone pumped continuously for 50 years. In reality, there were no wells operated in such a way. During the modeling period from 1950 to 2004, the groundwater level did not decline much in the study area and streamflow records did not show a decline trend for most gauging stations in the study area (Wen and Chen, 2006). Thus, the estimated 10/50 zone was generally exaggerated results compared to the real groundwater condition within the whole study area. On the other hand, groundwater is not unlimited resources. Overuse of it can certainly impact stream-flow especially during drought years. In uplands where aquifer thickness is small, careful groundwater management is needed." The map showing the Platte River 10/50 area is on page 42 of this report. Another map of interest is on page 24 showing the plan view of grid decretization and streams.

Staff will be providing information to the Committee/Board over the next few months on the propose 10/50 map from DNR. DNR will be at the October Water Committee or Board Meeting.

On Wednesday, August 7, John Engel from HDR discussed with staff and Bob Hilger the background on how the 10/50 area was developed. It was discussed that staff should reach out to other NRDs to get there thoughts, if the Board feels that's the direction they want to pursue.

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

Variances are due September 15, 2019

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

Variances are due August 15, 2019.

3.A.4. Variance Extension Request

James Macholan is requesting an extension for the Variance LPN-V-013-0281 for a new well on 36 acres with a Acre Feet Depletion of 7.27. This variance was approved Fall - 2019. The variance policy is that a well permit needs to be submitted 90 days after the variance is approved by the Board. The approved variance field was flooded this spring and was not planted till lately. They would like the opportunity to drill the well this fall/winter and then put the pivot on the field in the fall/winter of 2020-21. A letter is attached from Macholan's explaining the situation.

3.A.5. Well Permit Program

3.A.5.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.6. Cost Share Programs

3.A.6.a. Irrigation Well Sample Kits

Sample kits are just starting to be requested and sent out.

3.B. CHEMIGATION

So far in 2019 we have had 24 re-inspections. Still working on getting to all of them. In total including re-inspections and new permits we have 11 inspections left to do as of 8/1/19.

New Permits left to inspect: 4 (People aren't ready yet or just have applied)

Renewals left: 0

Re-inspections left: 7

Inspections completed thus far in 2019:

Renewals: 175 inspections done

New: 47 inspections done

Total inspections done: 222

3.C. LIVESTOCK WASTE PERMITS

The LPNNRD has received # 1 livestock permit applications from DEQ since the last Water Committee meeting.

Name	Livestock	Type of Permit	Legal Description	County
Dale Frisch	swine	new wean-to finish	SE SE Section 12-21N-4W	Madison

Description of permit application

2650 head nursery animals

1000 head of finish animals

4. GROUND WATER PROGRAMS

4.A. DECOMMISSIONED WELL PROGRAM

4.A.1. Well Estimates

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

Well Owner	Type of Well	Cost Share Estimate	County
Jeffrey & Kathy Fadschild	Irrigation	\$1,000.00	Platte

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 Payment	County
Donald L Birkel	Irrigation	\$931.53	Butler

4.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

4.B.1. Lower Platte River Consortium

A revised draft plan has been re-submitted to Bureau of Reclamation after initial comments from the Bureau and corrections done by HDR and DNR.

4.C. GROUND WATER QUALITY SAMPLING

Midwest labs sent all the results and one invoice to Papio-Missouri River NRD. The total invoice was \$13,440 in which LPN share is \$2,432.50, as shown by the attached invoice. Breakdown of samples by NRDs is LPS - 88, Papio - 541 and LPN - 139. Staff has received the results and is in the process of analyzing the results for the Board.

4.D. AEM (Airborne Electromagnetic Survey) Flights

The third and final payment for AEM (Airborne Electromagnetic Survey) flights conducted in 2018 is attached. The invoice is for \$150,000 in which LPNNRD will get reimbursed \$90,000 from ENWRA (Eastern Nebraska Water Resources Assessment), which received a WSF (Water Sustainability Fund) grant in 2017. Total cost of the flights were \$750,000 in which the grant paid \$450,000 and LPN \$300,000. The complete report is due to LPN staff in August, with Jim Cannia of Aqua Geo Frameworks scheduled to make a report to the Board/Committee in November.

Papio-Missouri River NRD is submitting a WSF grant to do more flight east of Fremont. Attached is some information about the flights and the potential purpose.

5. SURFACE WATER PROGRAMS

5.A. STATE LAKES, FOR THE WEEK OF JULY 22, 2019

No lakes in the LPN is under HAB (Harmful Algal Bloom) with Fremont Lake No. 10 testing high for E. coli bacteria.

For further information about our BeachWatch Program, E.coli, HABs and the microcystin toxin please visit the links on our BeachWatch website. (<https://deq-iis.ne.gov/zs/bw/>). This information is updated weekly on our web site.

NDEQ receives numerous calls with questions regarding Health Alerts and Toxic Algae Blooms. Hopefully, with answer to a couple of them here.

1. Is the lake closed? No. We advise against activities that would bring you into extended contact with the water, i.e. swimming, wading, skiing, jet skiing, etc. Fishing, camping, picnicking, etc. are safe activities at lakes that are under Health Alert.
2. Can we eat the fish from the lake? Research is limited but there have been no reports of illness from the moderate consumption of fish fillets caught during a freshwater HAB event. Research has shown that toxins tend to accumulate in the organs leaving the fish tissue affected much less .
3. If the beach sampled tested low for microcystin is the rest of the lake also low in HABs. Blooms can appear anywhere on a lake but tend to accumulate on the downwind side of the lake. An example of this is a beach on the south side of the lake that tested low but there is a suspected bloom in a residential area on the north side of the lake. NDEE does not have the resources to test all areas of each lake so it is up to each individual to use their best judgement when choosing where to recreate. See the pictures below for pictures of HABs we have seen around the state recently.

5.B. USGS STREAM FLOW GAUGING SITES

Invoice for \$17,090 is attached from USGS for annual payment on 2 streamgauge sites and 1 groundwater well. This does not include the payment for the water quality site and mointoring

well at Leshara.

Link to groundwater

well: <https://groundwaterwatch.usgs.gov/AWLSites.asp?mt=g&S=411005096281502&ncd=awl>

Streamgages at Shell Creek near Columbus and Wahoo Creek at Ashland, and one real-time groundwater level monitoring site, as agreed upon in the Joint Funding Agreement between Lower Platte North Natural Resources District and U.S. Geological Survey. JFA No. 19NRJFA00170

6. OTHER

6.A. COMMENTS FROM THE PUBLIC