

Regular Board of Directors Meeting
Monday, October 14, 2019 6:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. Call to Order

NOTE: The agenda is on file at the LPNNRD office and may be changed up to 24 hours prior to the meeting as scheduled.

1.A. Meeting Notice

1.B. Inform Public on Location of Copy of "Open Meeting Act"

1.C. Pledge of Allegiance

2. Roll Call

2.A. Introductions

3. Approval of Agenda

Are there any additions or corrections to the agenda?

4. Comments - Advisors/Guests

4.A. Guest Comments

4.B. NRCS Report

4.C. NARD Report

4.D. NRC Report

4.E. Managers Report

4.F. Education Program

5. Approval of Minutes

Are there any additions or corrections to the minutes? If not they will be approved on the consent agenda.

6. Report of Standing Committees

6.A. Executive Committee - Action as Required

6.A.1. UNFINISHED BUSINESS

6.A.1.a. Off Site Water Table Near Sand Creek

6.A.2. MEETINGS

6.A.2.a. Pending

6.A.2.a.1. GMDA Winter Conference

The GMDA Winter Conference will be held January 12-15, 2020 Fort Lauderdale, FL. Registration deadline is December 1st and travel arrangements need to made. Let staff know if you are interested in attending.

6.A.2.b. Reports

6.A.2.b.1. NARD Fall Conference

The NARD Fall Conference was held September 22-24 in Kearney.

6.A.3. MANAGEMENT ITEMS

6.A.3.a. Directors Absence

Attached find Directors Bailey and Yosten's excuse of absence from the September Board Meeting

6.A.3.b. Monthly Education Program

Kyle Overturf will be present at the October Board Meeting to give the audit report.

6.A.3.c. LARM Commercial Package

Attached find our 2019-2020 Renewal Invoice from LARM for our Commercial Property Insurance in the amount of \$66,962.32.

6.A.3.d. November Board Meeting

Reminder our November Board Meeting will be held at the Newman Grove High School and we will follow the schedule below.

3:15 p.m. Presentation from High School Students

3:45 p.m. Board Meeting followed by Dinner

6.A.3.e. Lower Platte River Consortium Amendment

The original 3 year term of this inter-local agreement expired at the end of September and is need of renewal. Several members of the group requested to move forward with 1-year agreements. Staff is requesting to renew the agreement with the new 1-year term as attached.

6.A.4. EQUIPMENT

6.A.4.a. Cellular service on directors Ipads.

There are three directors which the District carries cellular service on their director ipads. Discussion is requested as to the need for cellular capable ipads as the cost per unit is \$ 42.00 per month and we have one of the three ipads is in need of a new sim card to continue cellular service.

6.A.5. PERSONNEL

6.A.5.a. Conservation Technician Position

Skye Rezac's last day with the District was September 24th. She recently had a baby girl and has decided to stay at home with her.

We will need to start the process to fill the vacant position.

6.A.5.b. Part-Time Wanahoo Technician - Seasonal

We have spoken to Rick Gustafson and he is willing to work limited hours this fall (through November 30) and next spring (March - April) at a rate of \$10.00 per hour. Additional help can be utilized to finish mowing and trimming for the season and assisting with additional park work as needed.

6.A.6. FINANCE

6.A.6.a. Approval of Financial Reports

Attached find the July and August Financial Reports. Grant will be available to go over the reports with the Executive Committee.

6.A.6.b. Approval of Managers Time and Expense Sheets

Attached find Gottschalk's time and expense sheets.

6.A.6.c. Accounts over 90 Days

6.A.6.d. Fiscal Year 2019 Audit

Attached find a Draft form of the 2019 Annual Audit. Kyle Overturn will be available for a conference call to discuss the Audit. He will be present at Board Meeting to give an update to the full Board.

A motion will be needed at Board Meeting to accept and place on file the 2019 Audit Report as prepared and presented by Almquist, Malzahn, Galloway and Luth.

6.A.7. Other

6.A.7.a. Directors Review of District Policy

Review and discussion of Lower Platte North NRD Policy and Procedures.

6.B. Operations Committee - Action as Required

6.B.1. UNFINISHED BUSINESS

We have no unfinished business.

6.B.2. WILD NE AND OTHER PROGRAMS

We have nothing to address.

6.B.3. OPERATION & MAINTENANCE & OTHER ITEMS

The O & M staff has been mowing District projects, Wananhoo, Cottonwood Dam 21-A, Czechland, Homestead, Cotterell Levee, Rawhide Ditch 8 and we are now on Clear Creek Levee. We continue to cut & spray volunteer trees at many locations. Also added and moved rock on roads and other access areas at Czechland Lake.

6.B.3.a. Czechland Lake Camping Revenue

To date the current revenue for camping at Czechland Lake is \$11,500.

6.B.3.b. Conservation Tree Program

The District currently charges .82/tree for hand plants and \$1.45/tree for machine planting. Bessey Nursery's prices for 2 year old seedlings in 2018, 19 and 20 was .70, .75 and .78 respectively. Other nurseries we purchase from have price ranges of .85 - .95. A list of what other NRD"s charge is attached.

6.B.3.c. 2014 Jeep Patriot Repair

The Jeep Patriot engine is in need of being replaced, due to the loss of coolant and overheating.

On August 7, on a muddy road, the Jeep slid into a deep ditch and the bumper was dislodged, no other damage was noticed at the time. We had a auto body shop put the bump and other components back on. On September 18, in Platte County, the Jeep lost coolant and overheated and we trailered it back to HQ. Staff inspected the engine and found that the radiator had split on a seam. We had the radiator and AC condenser replaced but the engine would not run, leading to the diagnosis that the head or block is warped or cracked. A replacement engine with 48,000 miles will cost \$2,400 with a one year warranty.

6.B.3.d. Clear Creek Levee Repairs by Corp of Engineers

The Corps of Engineers are waiting on signed Real Estate Certifications (Rights of Entry, Easements, etc.) before they can advertise and have a contractors site visit for the Clear Creek Levee repairs. The District is waiting on three easements from homeowners on the river at Thomas Lakes to then send to the Corps.

Saunders County has a contractor on line to reconstruct County Road E and F. The two culverts through Co. Rd E are the responsibility of the District. The District will take that culvert line item cost and forward it to FEMA when the project is completed. The start date for the project is November. The District needs to make a decision on whether the two breaches in the old levee above County Road E need to be repaired.

6.B.3.e. Rawhide Ditch 8 Repair - (FEMA)

JEO Consulting is scheduled to do wetland delineation work this week and the survey crew will also be on site this week or next, weather depending. Heimann has been in touch with the landowners and their contact information has been forwarded to JEO. When the survey and some preliminary design is complete, JEO, NRD staff and the landowners will discuss the project approach.

6.B.3.f. Clear Creek Fuse Plug at Camp Ashland (FEMA)

At the September Board meeting it was decided to re-bid the Fuse Plug repair. Bids were due Wednesday, October 2 at Noon. One bid was received from Clark Construction at a bid of \$67,426.08. This dollar amount is subject to change depending on quantities needed, contractors were given estimated quantities.

Also at the September Board meeting a recommendation, on consent agenda, was to have

staff and the Operations Committee review and score Engineering Firms RFP's for the oversight of the Fuse Plug repair. We received three RFP's from E & A Engineering, JEO, and FYRA. After scoring and some discussion FYRA Engineering was chosen to lead the project. The contract was written not to exceed \$21,720.

6.B.3.g. Wanahoo Dam Spilling Basin (FEMA)

The decision to hire an Engineering firm to oversee the design and repair of the Wanahoo Dam Spilling Basin was tabled at the September Board meeting.

It was requested that Olsson Associates and FYRA Engineering give presentations on their proposals on committee meeting day. Olsson's is scheduled to present at 9:30 a.m. and FYRA at 10:00.

Both Firms gave very good presentations, Discussion took place by all Board members present. At Board Meeting, a motion is first needed to take it from the table in order to proceed with the Operations recommendation.

6.B.4. ROCK AND JETTY

One landowner has notified us that he received a Nation Wide 45 permit from the COE. NW-45 is for repair of upland damage due to discrete events. He will send a copy of his permit and NRD cost-share application soon.

6.B.5. LAKE WANAHOO

6.B.5.a. Wanahoo Education Building Update

September marked the first "unofficial" soft opening of our Education Building. A local family reunion used the facility for a day-long gathering. The kitchen, restrooms and audio/video components were not complete but were usable. The family had a great time, loved the building and have reserved the location for next year.

We are 99% complete and contractors are in the process of finishing the final touches. Walls have been sealed, audio components are installed and electrical, plumbing, heat/air are complete. Final inspection is set for next week and our next rentals are scheduled for the end of next week.

Any directors interested in touring the building, please let me know and we can stop out and walk through.

6.B.5.b. Lake Wanahoo 2019 Permit Sales

The District has made \$5,712.79 on permit since the last committee meeting on 8/23/2019.

Annual Permits: \$2197.50

Day Passes: \$3515.29

Year to date net sales total \$98,297

6.B.5.c. Lake Wanahoo Camping Sales

The District has made \$13,046.68 since the last committee meeting on 8/23/2019. Year to date net sales total \$85,895.14

6.B.5.d. Wanahoo Concrete Bids

Due to time constraints regarding our building rental scheduled for October 11, 2019, concrete bids to pour sidewalk and ADA accessible parking were requested to be in by Friday September 20th with work to be completed by the first week in October. McAtee Concrete Construction (same firm who poured our building floor) was the low bid of \$4,665.00.

6.B.6. INFORMATION AND EDUCATION

6.B.6.a. Information

6.B.6.a.1. Radio & eAds

The current KTIC radio ad and Wahoo Newspaper eAd promote the three LPNNRD recreation areas and will continue through October 31. The ads are attached.

6.B.6.a.2. FY2020 Long Range Plan

Staff have been working on providing updates and additions to the FY2020 Long Range Plan. The latest draft is attached. The final draft will be available prior to the October 14th Board of Directors meeting.

A motion will be needed at the Board Meeting to approve and adopt the FY2020 Long Range Plan.

6.B.6.a.3. Master Plan

Staff are currently working on the LPNNRD Master Plan. This plan is updated every 10 years. The 2009 Master Plan is attached. A draft will be provided at the next Operations Committee Meeting on October 31.

6.B.6.b. Education

6.B.6.b.1. East Central Region Land Judging Contest

The Lower Platte South NRD is hosting the East Central Region Land Judging Contest on Wednesday, October 9th. Several LPNNRD staff are assisting with scoring.

6.B.6.b.2. September-October Education Programs

Date	School /Group	Grade /Age	# of students	Topic	Staff
Thursday, September 5	Fremont Education Field Day	7 th grade	270	Drones/Lake Ecosystems/ Tree Planting	TePoel/Sabatka/Heimann/Andersen/Oaklund/Poole/Elliott/Brueggemann/Benal/Dokulil/Moore
Saturday, September 7	World O! Water Festival	Open to the Public	100	Water Quality	TePoel
Wednesday, September 18	Wonderful World of Water (LENRD & UENRD)	High School	30	Wildlife CSI	TePoel
Monday, September 9	St. Wenceslaus	Pre-K	18	Wildlife-Camouflage	TePoel/Sabatka/Gottschalk
Monday, September 9	Bishop Neumann	High School	11	Soil Health & Conservation	Elliott/TePoel
Monday, September 9	East Butler	8 th Grade	7	Water Quantity/Quality	Andersen/Sabatka
Thursday, September	St. Wenceslaus	Pre-K	12	Wildlife-Camouflage	TePoel/Sabatka

mber 12					
Thurs day, Septe mber 12	Waho o Public	7 th Grade/ High School	58	Careers	TePoel/Sabatka
Thurs day, Septe mber 12	Waho o Public	FCCL A/FBL A	12	Careers/LPN NRD/Wanah oo	TePoel/Gottschalk
Frida y, Septe mber 13	St. John's	Pre-K	8	Wildlife- Camouflage	TePoel
Tues day, Septe mber 17	St. John's	Pre-K	8	Wildlife- Camouflage	TePoel/Sabatka
Thurs day, Septe mber 17	Waho o Public	Kinder garten	32	Trees	TePoel
Wed nesda y, Septe mber 18	Wond erful World of Water	High School	30	Wildlife	TePoel
Thurs day, Septe mber 19	Waho o Public	Kinder garten	30	Trees	TePoel/Sabatka
Mon day, Septe mber 30	Bishop Neum ann	8 th Grade	7	Careers	Sabatka/TePoel/Nathan Mather

Tuesday, October 8	Howard Elementary (Fremont)	Pre-K-4 th Grade	400	Wildlife	TePoel/Sabatka/Breunig
Wednesday, October 9	Land Judging (LPSNRD)	High School FFA		Soil judging	TePoel/Sabatka/Breunig/Mountford/Elliott/Sc homer
Wednesday, October 23	Logan View	7 th , 8 th , High School		Geocaching, careers, water quality/quantity	TePoel/Sabatka/Andersen/Benal
Monday, October 28	Cub Scouts (Wahono)	5-6 year olds		Wildlife-Camouflage	TePoel

6.B.7. RURAL WATER SYSTEMS

6.B.7.a. Colon System

New customer hookup (Leonard Zeleny's shed) was completed 9/25. Shad Hejhal's account has been delinquent for twelve months; he suffered a traumatic brain injury at work and has been dealing with legal issues associated with acquiring disability. He has been in sporadic contact with us and has infrequently made small (~\$20.00) payments toward his balance. His service has been shut off and he recently requested that his account be turned off so he can not accrue any more debt. In discussion with the Village of Colon they looked into putting a lien on his property to recoup the money they are owed for the sewer portion of his debt, but due to Hejhal's efforts at making payments they could not further the lien pursuit.

6.B.7.b. Bruno System

Elliott contact the Nebraska Rural Water Association to complete a Rate Study for the Bruno RWD. This is free of charge to the RWD. Elliott repaired another damaged air relief vent; it appears that it was impacted by a vehicle/machinery and bent. Pictures attached. Sampling and billing completed.

6.B.7.c. Other

6.C. Water Committee - Action as Required

6.C.1. UNFINISHED BUSINESS

6.C.2. REGULATORY

6.C.2.a. GROUND WATER MANAGEMENT AREA

An update on the technical meeting. Geological model for District would include AEM flights, test holes, registered well logs?

6.C.2.a.1. Variance Request in the Hydrologically Connected Area (Limited Development Area)

The District has 13 applications that meet the criteria for approval within the Hydrologically Connected Area (see attached list). The 13 applications total 111.498 acre feet of new depletions and 837 acres of land. The Board can approve up to 200 acre feet of depletion each year.

The Committee reviewed the variances and heard from Gary Meister on his variance, which ranked high enough on points but had sloping lands greater than the 20% allowable by Board policy. Staff will continue to work with Gary along with 2 other applicants (attached as other variances) for review with conditions at next Water Committee.

6.C.2.a.2. Lonnie Schaad Variance Extension

Variance LPN-V-012-0207 for Lonnie Schaad was approved conditionally on 11/13/2017 for Section 20-18-1E Platte County. The flood took out some bridges in the county so Lonnie was unable to get the pivot moved to complete development of the acres. Lonnie is asking for an extension until March 1, 2020.

6.C.2.a.3. Well Permit Program

6.C.2.a.3.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							

6.C.2.a.4. Well Permit for Highway Construction

New bypass south of Fremont is cutting through an irrigation field. Attached on the map is the location for a new well. There will be no additional acres, so is the Committee/Board ok to approve a new well permit?

The Committee felt under the circumstance, that this well permit should be considered and will review when permit comes into the LPNNRD office.

6.C.2.a.5. Nitrogen Phase Area Study

A contract is attached to have UNL assist the LPNNRD in some of the in-kind match for the NET Grant in the nitrogen phase areas. UNL is asking for a 25% deposit at signing for the analysis that they plan on conducting for the NRD. An invoice for \$4,122.50 is attached.

A brief synopsis from the contract:

The University of Nebraska will work with the Lower Platte North and its contractor, EA Engineering, to identify and schedule core and water samples collection, and deliver samples to the Water Sciences Laboratory. Cores will be divided in to 5' intervals, described for texture and subsamples immediately collected for determination of gravimetric moisture content. The remaining core will be air dried and composited by grinding and mixing. Ground and dried subsamples of composites will be extracted for nitrate and ammonia using 1M KCl. Sediment pH will be measured using 0.01 M CaCl₂ slurry. Nitrate and ammonia will be extracted using 1M KCl and analyzed using a Lachat 8500 autoanalyzer by Cd reduction and salicylate colorimetric methods¹. If available, undisturbed samples will be collected for saturated hydraulic conductivity and water retention properties, which will be useful for estimating travel time analysis in the vadose zone. Detailed textural descriptions will be compared to measurements of nitrate-N, ammonia-N, pH, moisture and lithology. If requested as part of the project, stable isotope analysis of nitrate from either the vadose zone or wells in the area will be used to characterize the nitrate sources and transport. Determination of water retention properties and hydraulic conductivity of undisturbed cores will help estimating rate of travel of nitrate pulse to ground water. Repeated coring at specific locations will permit correlation of nitrate concentration profiles and potentially provide in situ estimates of transport and attenuation rates. Calibration of vadose zone transport calculations at these locations could permit more accurate estimates of transport rates at new sites. Finally, accurate assessment of the occurrence and potential leaching rates beneath specific land uses can help land and water resource managers identify areas where the most effort should be placed on managing fertilizer application and irrigation practices. A standardized protocol for collecting and analyzing vadose zone cores is currently being developed to collect vadose zone data used in estimating nitrate occurrence and transport potential. This project will help in development of this standardized protocol.

UNL will also be doing some age dating and isotope sampling analysis.

6.C.2.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)
2019	0 to 24.5	48% (22 of 46)	9% (4 of 46)	43% (20 of 46)

6.C.2.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)
2019	0.80 to 35.9	7% (2 of 30)	13% (4 of 30)	80% (24 of 30)

6.C.2.a.8. Richland - Schuyler Phase 3 Area

2019 is the fourth year of this Phase 3 Area. 38% of the water samples are over 15 PPM. Attached is some more information from the 2019 nitrate results.

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 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)
2019	0 to 39.4	26% (52 of 199)	11% (22 of 199)	63% (125 of 199)

6.C.2.b. CHEMIGATION

For 2019 we have 666 renewals and 51 new permit applications for a current total of 717 active permits. The 2019 NDEQ report is attached with the current totals including the number of inspections performed in 2019 and the total amount of chemical(s) applied and acres that were treated in 2018.

6.C.2.c. LIVESTOCK WASTE PERMITS

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

Name	Livestock	Type of Permit	Legal Description	County

Description of permit application

6.C.3. GROUND WATER PROGRAMS

6.C.3.a. DECOMMISSIONED WELL PROGRAM

6.C.3.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
Mitchel Broekemeier	Hand-dug	\$1,500	Saunders
Dorothy A. Kavan	Domestic	\$273.54	Saunders

6.C.3.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
Jeffrey S. Fadschild	Irrigation	\$1,000	Platte
David C. Mitchell	Domestic	\$285.49	Dodge
David C. Mitchell	Domestic	\$307.96	Dodge
David C. Mitchell	Domestic	\$364.05	Dodge

6.C.3.b. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

6.C.3.b.1. Flow Meters

The discussion from last month's Committee Meeting recommended a tier cost-share with set amounts being explored. An example would be, if producers install meters in year 1 they would get \$1,000, year 2 - \$800 and year 3 - \$600. The installation of flow meters should be over a 3 - 5 year period with producers realizing that a date after this time, flow meters would become mandatory. The purpose of installing flow meters for the LPNNRD is to get a better understanding of sustainable aquifers for future generations. This will also allow the LPNNRD to be pro-active instead of re-active if water consumption becomes an issue. A producer can utilize the flow meter on how the well is actually performing and increase irrigation management efficiency. The Committee recommended to start setting aside funding, like \$200,000 a year, into a sinking fund for the purpose of a grant match.

Staff is in the process of obtaining information on how many meters are actually installed in the District.

More discussion questions:

- > Who is going to do the meter installation?
 - Staff
 - Private
 - Contract
- > Who is going to handle the meter maintenance?
- > If the NRD does the tier cost-share, go district wide, by counties or management areas?
- > What about check valves? State water standards states that if a hole is cut into the pipe to install a meter, a check valve needs to be in place. Also if a person is doing meter maintenance on a flow meter, once it is pulled out of the pipe the meter can't be re-installed without a check valve in place.

At the NARD conference a presentation was shown on another option not utilizing a water flow meter. The Twin Platte NRD is working with Ollson and NDNR on getting water consumption by collecting electrical usage from the power company. The electrical rate number collected is calculated with the pumping rate from the well to provide water usage from the well. The grower would input irrigation method, crops planted and field operation and then receive a water budget on the field. The NRD contracted out to the local well drillers to provide the pumping rate from the wells for the producers. The cost for this project was estimated at \$3,500,000.

Another option that was reviewed at the conference was attaching a sensor to the pivot. This sensor would relay the amount of water going through the pivot nozzles and then using a formula with the pumping rate, the water use could be calculated. The cost of the sensor was about \$400.

6.C.3.b.2. NARD Conference

Some of the sessions attended by Water Staff:

>Nebraska Department of Environment and Energy Update - General updates were given and then NDEE explained the process of doing the permitting of 404 permits. This is not going to be a quick transition from the Corp. to the NDEE, which is also developing a new unit to handle the permits.

>Understanding Soil Health - NRCS gave an excellent update on where the agency is now and where it was. Since 2012 no-till and cover crops have increased in Nebraska. Nebraska is the leader with 51 percent of its cropland being no-till or reduced till. Cover Crops acres have doubled to 3.1% or 700,000 acres in this same time period. Aaron Hird showed some soil samples from the Rogers Farm near Lincoln which showed after 40 years of no-till, a hard pan is still present. He said the key to soil health is getting a root into the profile year around, that is why they feel cover crops can really benefit the soil.

6.C.3.b.3. Lower Platte River Consortium

The Drought Plan has been approved by Bureau of Reclamation and now NRD Boards in the next few month will review.

6.C.3.c. GROUND WATER QUALITY SAMPLING

6.C.4. SURFACE WATER PROGRAMS

6.C.4.a. STATE LAKES, FOR THE WEEK OF

Week of September 26th, 2019

This week's beach Bacteria and Harmful Algal Bloom results are now posted on the NDEE web page (<http://dee.ne.gov/>)

The trigger for HAB (Harmful Algae Bloom) is 20 ppb.

No lakes within LPN is on the list.

6.C.4.b. USGS STREAM FLOW GAUGING SITES

A meeting was held on the possibility of a streamgage around Fremont. There is expressed interest by multiple stakeholders to install a river gauge near Highway 77 South of Inglewood/Fremont. The partners discussed percentages and who all would be involved. The group would like the Dodge County Emergency Manager to seek grant funds to help in upfront costs, with a followup meeting later in the year. Some more information is shown below. At the basin meeting in Kearney, a suggestion was made about installing a camera at some locations.

Summary of River Gauge Project Costs;

The USGS charges a one-time cost for purchase of the equipment for the streamgage, USGS installs the equipment at no cost. USGS also maintains, repairs, and replaces that equipment for the life of the streamgage at no additional cost to the cooperator. That one-time equipment cost is \$18,200 (includes telemetry (transmits 15-minute values of data every hour), recorder, two independent water level sensors (radar sensor and pressure sensor) for stage verification, wire-weight gage for physical measurements to water surface (for verifying sensor information), enclosure, and misc (batteries, wiring, mast, solar panel, locks)).

Operation costs for the streamgage depend on what information is being collected at the gage.

1) Stage-only: streamgage only provides water level record (not discharge). This annual operation cost is \$6,460.

2) Stage and discharge: streamgage provides water level and discharge record. This annual operation cost is \$15,125.

The USGS is currently able to offer a 25% match, thus:

1) For stage-only, costs would be \$6,460 (\$1,615 for the USGS, and \$4,845 for the cooperator).

2) For stage/discharge, costs would be \$15,125 (\$3,780 for the USGS, and \$11,345 for the cooperator).

The USGS also is able to monitor real-time water quality at streamgages, such as water temperature, conductivity, pH, dissolved oxygen, turbidity, nitrates, and other parameters. Of course those options come at extra cost.

6.C.5. OTHER

Reminder on variance extension

6.C.5.a. GMDA Winter Conference

The conference is scheduled for January 12 - 15 in Fort Lauderdale, FL. In the past 2 staff and 2 directors have attended. If a director is interested, please let us know soon.

6.C.5.b. Voluntary Integrated Water Management Plan - LPNNRD

An update was given by Nebraska Department of Natural Resources (NDNR) on the V-IMP. As the NDNR and LPNNRD have developed a Voluntary Integrated Management Plan (V-IMP) they will not be annual fully appropriation evaluations. With V-IMP in place, the District should never be over-appropriated. After each 5-year water allotment, which was set up in the V-IMP, the time could come where no more water uses will be allowed. A chart was distributed showing the remaining depletion of 1,508 Acre Feet (should be corrected to 1505). This would leave the LPNNRD with 752.5 AF to be distributed over the next 3 years. Updated chart is attached.

NDNR mention the possibility of granting an extension on the current V-IMP, so they have a chance to incorporate the AEM data from all of the NRDs. This will be a discussion item at the Lower Platte Coalition technical meeting and annual meeting. NRD and UNL are conducting a study with the AEM information in the LPN SQS #2 management area at the present time. DNR also commented that more accurate water use information would be invaluable in making the model more accurate. As this model can be used as a baseline on future projects, to develop a regional model will be a lot easier in the future. A couple of areas of interest in the near future could be the nitrate management areas and the red area west of the Todd Valley aquifer.

NDNR would like to meet on a regular basis to help in communication. The plan is to meet early next year for followup discussion.

6.C.5.c. COMMENTS FROM THE PUBLIC

6.D. Projects Committee - Action as Required

6.D.1. UNFINISHED BUSINESS

No unfinished business to address.

6.D.2. SWCP

6.D.2.a. SWCP Application Approvals

None

6.D.2.b. SWCP Payments

None

6.D.2.c. SWCP Cancellations

None

6.D.2.d. Wahoo Creek Cost Share Approvals

None

6.D.3. WATERSHEDS

6.D.3.a. Shell Creek

6.D.3.a.1. Shell Creek Environmental Enhancement Plan Implementation

No new information.

6.D.3.a.1.A. Shell Creek Grant Funding Update

6.D.3.a.2. U.P. Railroad Shell Creek Bridge Replacement Update

On October 1, a meeting was held at LPNNRD (attendees list attached) to discuss U.P. Railroad's plan of action to replace their bridge at county road 15. U.P.'s plan is to replace the existing structure with a 130 foot length bridge (plans attached) as early as May-June 2020. Their hydraulic analysis has determined that a 130 foot will more than adequately meet their needs and increase the existing conveyance by 105%. This size bridge may also reduce needed channel improvements to and from the bridge, that LPNNRD has committed to, but this will be determined at a later time. Overall, the group felt that U.P.'s proposal was reasonable based on the hydraulic analysis, but there will likely be more follow-up discussion about their plan.

6.D.3.b. Wahoo Creek Watershed

6.D.3.b.1. Wahoo Creek Dam Site Planning Update & FYRA Invoices

Attached is Janel Kaufman's e-mail update on completing the Wahoo Creek Watershed Plan. As shown, FYRA has continued to work with NRCS and has been submitting plan sections for their review. Our push has been to have a November submittal to the NRCS national headquarters, which is also dependent and Wahoo and Weston approving Dam Breach Overlay zoning areas for each community.

Attached is FYRA's latest invoice for contract work totaling \$29,118.25. After this payment \$20,561.11 will remain under contract. We will be scheduling a meeting with NRCS to discuss the possibility that more funds may be needed to cover any additional work FYRA may need to do as a result of NRCS requirements after the plan is submitted to the National NRCS headquarters for review. It appears that the remaining contracted balance will cover work until the National submittal in November. Most of the contact overrun has been for economic analysis as a result of NRCS requests. We will have more information by the October 31st Projects Committee.

6.D.3.b.2. Wahoo Creek Watershed Water Quality Plan Phase II

We have approved and authorized LPNNRD Chair to sign the Wahoo Creek II Implementation - Part B grant agreement with NDEE as attached. makes available \$200,000 of new EPA 319 grant funds in additional to the remaining \$90,000 for NET funding available for water quality practices in the Wahoo Creek Watershed.

6.D.3.b.3. Olsson Design Update and Invoice

Attached is the September 23, 2019, Olsson invoice totaling \$4,799.26. After this payment there will be \$1,816,142.12 remaining under contract.

6.D.3.b.4. Wahoo Creek Dam Breach Overlay District Zoning Update

On September 10, 2019, the Saunders County Supervisors unanimously approved the Wahoo Creek Dam Breach Overlay District (attached) for the eleven proposed floodwater reduction dams. We are now moving forward working with Wahoo and Weston for adopting similar zoning restrictions. Wahoo City Administrator Melisa Harrell and Jeff Ray, JEO, have presented the following schedule for adoption of their zoning overlay:

1. Identification of all of the parcel affected by the proposed overlay.
2. Facilitate a community open house to present the proposed overlay zone for the property owners, City Council, Planning commission and general public. Potential dates for this meeting are: Oct, 21, 23, 28, 29, or 30th.
3. Present at the Nov. 7th Planning Commission and the November 26th City Council Meetings. These would be public hearings like Saunders Co's meetings.
4. Plot an updated Zoning Map and forward the GIS digital files to Gworks.

There will be additional expense for moving through this process with both Wahoo and Weston.

Attached is a \$2,700 invoice from JEO for work completed on the Saunders County Dam Breach Overlay. This completes our \$5,400 contract with JEO for working with Saunders County.

Attached is a proposed agreement with JEO for completing the dam breach zoning process with Wahoo and Weston. A motion to approve at the October 14, 2019, Board meeting is requested.

6.D.4. JOINT WATER MANAGEMENT ADVISORY BOARD

Mountford, Fremont & Dodge County representatives met with JEO on September 12 to discuss on the grant funding process. The FEMA application for assistance on the flood resiliency study has not yet been considered for funding, but will be considered at the next governor's task force meeting this fall. If approved for consideration, it would take JEO 2 to 3 weeks to develop a grant application with FEMA review taking 2 to 4 months. The grant application to NDNR for Water Sustainability Fund assistance will be reviewed in October

for potential approval in December. JEO discussed other potential funding alternatives should funds are not approved by FEMA or NDNR.

On August 30th, Andersen and Mountford met with the Dodge County Emergency Manager, Brian Newton, Fremont, Bob Misle, Dodge County and representatives from USGS and the National Weather Service about the possibility of partnering on establishing a steam gauge near Fremont. Daryl will discuss this possibility with the Water Committee.

6.D.5. HAZARD MITIGATION PLAN UPDATE (HMP)

We have completed two public meetings on September 19 (Wahoo) and September 24 (David City) for assisting communities, counties and other entities for completing their portions of the LPNNRD Hazard Mitigation Plan Update. These meetings were well attended. Attached is meeting information presented at the September 19 meeting held at our office. Also attached is LPNNRD's Mitigation Action Status Update that needs to be completed before the next round of public meetings, planned to be held sometime in January, 2020.

Attached is JEO's \$19,262.50 invoice for HMP contract work completed. After this payment, there will be up to \$159,237.50 remaining under contract.

6.D.6. NEBRASKA BUFFER STRIP PROGRAM

6.D.6.a. NBSP Contract Approval

Contract/Application # - 19023 - Marilee Polacek
Final approval from NDA received for this application, it has been combined with CRP. Contract length is 10 years, total acres is 4.4, NBSP payment: \$148.72

6.D.6.b. Nebraska Buffer Strip Program Annual Payments

It's that time of year again to approve our annual NBSP annual payments. Participants and amounts are listed below:

Ronald Anderson: 6.9ac - \$593.61
Ronald Anderson: 6ac - \$166.32
Charles Barjenbruch: 9.5ac - \$229.24
James Barjenbruch: 4.8ac - \$126.19
James Barjenbruch: 8.2ac - \$215.58
Hill Valley Farms Inc c/o William Klug: 16.5ac - \$3,712.50
Rodney Julsen: 23.1ac - \$5,197.50
Ed Luetkenhaus: 4ac - \$900.00
Tom Sprunk: 2.1ac - \$472.50
Tom Sprunk: 0.8ac - \$180.00
Tom Sprunk 12.5ac - \$2812.50
Francis Shanle: 9.5ac - \$247.00
Marilee Polacek: 4.4ac - \$148.72

Total acres: 108.3

Total payments: \$15,001.66

6.D.7. EROSION AND SEDIMENT RULES AND REGULATIONS

None

6.D.8. OTHER

6.D.8.a. North Bend Drainage District Assistance Request

Attached is an assistance request from Larry Ruzicka, North Bend Drainage District. The District is requesting up to \$15,000 for debris removal and ditch repair. While we have established higher assistance levels to assist individuals and entities, the committee is asked to discuss if we would want to consider handling counties, countries and Dike and Drainage flood damage request on an individual basis as intergovernmental projects.

6.D.9. ADJOURNMENT

The Projects Committee Meeting ajourned at 9:20 a.m.

7. Additional Action Items

7.A. Decommissioned Well Payment

Decommissioned Irrigation Well - Melvin P. Bailey - \$727.66

7.B. Lower Platte North NRD Position on Livestock Facilities

8. Approval of Bills Pending

9. Consent Agenda Adoption

10. Comments from Directors/Guests

11. Meeting Establishment/Adjournment

NOTE: The agenda is on file at the LPNNRD office and may be changed up to 24 hours prior to the meeting as scheduled.