

Water Committee Meeting
Thursday, January 28, 2016 5:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. ELECTION OF CHAIRPERSON AND VICE CHAIRPERSON

Election of Chairperson and Vice-Chairperson

Year	Chairperson	Vice-Chairperson
2015	Frank Pollard	Bob Meduna
2014	Jim McDermott	Frank Pollard
2013	Jim McDermott	Frank Pollard
2012	Dave Saalfeld	Jim McDermott

Person may serve two consecutive terms. Term of office is one year.

1.A. WATER COMMITTEE DAY AND TIME

Set date and time of Water Committee Meeting:

The Water Committee generally meets on the last Wednesday of the month at 5:00 pm. The Committee members decided to leave the day and time the same, so no action was necessary.

2. REGULATORY

2.A. GROUND WATER MANAGEMENT AREA

Request by Director Meduna to use the recent Olsson ground water information compiled in the fall of 2015 in the ranking criteria for future variance requests. For example, the 2008 report for saturated thickness looked at the thickness of the principal aquifer (Figure 12), while the newer report also include potential upper sand and gravel layers shown in Figure 8 (Caitlin B. Thomas of Olsson Associates).

2.A.1. LPNNRD Violations Policy

Attached is the Violations Policy that was reviewed by Jovan Lausterer in the fall of 2015. Also attached is the correlation between our current Ground Water Management Rules and Regulations and this Violations Policy.

Committee members discussed that these should be incorporated into the next update of the District's Ground Water Management Rules and Regulations.

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

Larry Hynek is requesting that the District modify his variance application LPN-V-015-

0421, approved October 12th 2015. The variance was approved as an expansion from a new well for 35, but Mr. Hynek believes that it would be more beneficial for him to connect the new pivot to an existing well, G-173948, in the NW 1/4 NE 1/4 Section 11-16-7E, Saunders County, Todd Valley Subarea. The well is currently registered for 143.6 acres. The final total would be 178.6 acres if the modification is approved. Attached is a map showing the fields in question, as well as the ranking sheet from the October approvals, and a blank ranking form.

2.A.3. Well Permit Program

2.A.3.a. Well Permits Approved

Wells Permits Approved: 1

Landowner	Number of Wells	Number of New Irrigated Acres	Type of Well	County	Subarea
John Sanderson	1	0	Irrigation/Supplemental	Saunders	Todd Valley

The total number of approved permits for 2016 is 1

Location of Approved Well Permits for 2016: Correct as of 1/28/2016

County	Irrigation - New	Irrigation - Replacement	Stock	Commercial	Municipal	Other	Total
Butler	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0
Saunders	1	0	0	0	0	0	1
Total	1	0	0	0	0	0	1

2015 Final Numbers:

The total number of approved permits for 2015 is 49

Location of Approved Well Permits for 2015: Correct as of 1/28/2016

County	Irrigation - New	Irrigation - Replacement	Stock	Commercial	Municipal	Other
Butler	2	2	1	0	0	0
Colfax	3	3	1	0	0	0
Dodge	3	3	0	0	0	0
Boone	1	2	0	0	0	0
Madison	2	0	0	0	0	0
Platte	7	2	1	0	0	0
Saunders	7	3	0	1	0	5
Total	25	15	3	1	0	5

2.A.3.b. Kresak Irrigation Transfer Request

Kresak Transfer:

Between 2010 and 2012 a pivot appeared in NE ¼, SW ¼, 34-14-9E. A letter was sent questioning this irrigation, as it did not appear in aerial photography prior to restrictions placed by the State in 2009, and was therefore an improper expansion of irrigated acres. Mr. Kresak came to the office and informed staff that this field had been part of a towable pivot system with the field to the North (towable pivot system visible in 2006 aerial photography on the North property, since replaced with individual small pivots on the North). The South field had not been irrigated during the two in ten cycle and was therefore no longer considered irrigated. Mr. Kresak was informed his only options for using the pivot to the South were to apply, and be approved, for a variance or transfer acres from another property to this one. Mr. Kresak brought up that he has land in W ½, SW ¼, 26-14-9E that had not been irrigated recently, but would meet the two in ten definition of historically irrigated. FSA proof was provided and the field certified. It was then proposed that around 40 acres be transferred to the pivot highlighted on the map in Maroon and to the areas of grass indicated on the map in Green, the remaining acres would then be forfeit as the field was on the verge of lapsing two in ten. Approving the transfer would result in the net loss of around 32 acres of irrigated ground; this is a positive for the district. Mr. Kresak ideally wants all of it to be considered irrigated, but was informed at the time, that would not be a possibility, though Mr. Kresak made clear he does not agree with the two in ten policy.

Transfer Considerations:

1. This transfer crosses Subarea Boundaries. The transfer would come from the Octavia Subarea and be applied to the Todd Valley Sub Area. The Subarea boundary basically abuts the gaining fields, the impact should be negligible.
2. This occurs in the Mead Superfund area. The field to be transferred from is in the TCE plume. The area of grass we would transfer to is within the RDX plume (though it is already irrigated, just not as crop). Thirteen of the 31 (41%) acres the new pivot would cover are within the RDX plume, though the well that would provide the water is already within that plume and should not draw it any further South and would likely help to contain the RDX plume.

Other Considerations:

This transfer was proposed over a year ago, Manager Angle consulted with COE, but they have yet to inform us of any concerns they may have. I would posit that means they have no actual concerns.

Mr. Kresak is eager to move ahead with this transfer request and would like to have it brought before the committee as soon as is possible. In summation, he wants all of his acres to be considered irrigated though they do not meet the two in ten rule, failing that request, he would like to request the transfer as outlined.

Report by Chris Poole

Mid-afternoon (January 28, 2016) Mr. Kresak contacted Chris and would like to modify his request to just transfer the lower 40 acres of the original ground to this new field.

2.A.4. Special Quantity Subareas

2.A.4.a. LPNNRD SQS Operator Certification Classes

Platte - Colfax SQS area (SQS #2)

Three informational classes have been set, the first of which has already been held. Each of these classes will be at Ag Park, Columbus:

1. Thursday, January 14, 2016, at 10:00 a.m. (prior to afternoon certification class) There were 92 landowners/producers at this first class. Several remained after the class with additional questions.
2. Thursday, February 11, 2016, at 1:30 p.m.
3. Tuesday, March 29, 2016, at 3:00 p.m. (prior to evening certification class)

293 letters were mailed to area producers, landowners, and tenants (mailing address information from the Acres Certification database).

2.A.4.b. Flow Meter Consideration

New information concerning mag-meters has been collected for Board consideration of expanding the 'LPNNRD Approved Flow Meter' list.

Specifications by manufactures indicate Mag meters need a full pipe, require certain upstream and downstream distances, and battery life is estimated at 3 to 5 years (see

attached summary sheets). In addition, mag-meters need to be placed where air entrapment or air bubbles are minimized, vibration is a concern, grounding ?, and irrigation water needs to be within the conductivity range of the meter. For example, bedrock aquifers with brackish water and location of chemigation inject points may be a factor in the use or location of these meters.

2.A.5. Lower Platte River Basin Water Management Plan Coalition (LPRBC)

No new updates.

The last technical committee was postponed until updates to the DNR Insight program were finalized. These are still under review by DNR and its contractor HDR. The website itself can be viewed at <http://data.dnr.ne.gov/insight/> but again this is preliminary data.

2.A.6. Voluntary Integrated Water Management Plan - LENRD and LPNNRD

The LPNNRD and DNR will resume meetings on our voluntary IMP in February. Discussion points will be on our goals, objectives, and action plan. Stakeholders wished to be involved in this process before the Plan is finalized by the NRD Board. On December 21, 2015 Angle and Miyoshi met with Frank Kwapnowski of H2Options on the final product of the LPNNRD Water Balance Study as part of our contract with Olsson Associates to develop a V-IMP for our District. See attached summary.

2.A.7. Cost Share Programs

2.A.7.a. Irrigation Well Sample Kits

No new requests for 2016.

2.A.8. LPNNRD Phase Ground Water Management Areas

2.A.8.a. Bellwood Phase 2 Area

Bellwood Phase 2 Area

2016 is the fourteenth year for this Phase 2 Area. This area was reduced from 32 sections to 21 sections in 2015 - to be in compliance with **Section G Ground Water Quality Management Area - Phase Two Rule 1 Phase Two Criteria.**

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Fertilizer Reports

130 reports for the 2015 crop year have been received. For the 2014 crop year 211 reports were received, but remember that this Phase 2 area was reduced in size.

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

Richland - Schuyler Phase 3 Area

2016 is the first year of this Phase 3 Area (to be in compliance with **Section H Ground Water Quality Management Area - Phase Three Rule 1 Phase Three Criteria**). This

Phase 3 area went into effect September 1, 2015. The 55 sections of this area first went into a Phase 2 Area in 2004.

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Fertilizer Reports

A total of 385 reports for the 2015 crop year have been received. For the 2014 crop year 406 reports were received.

2.A.8.c. Richland - Schuyler Phase 2 Area

Richland - Schuyler Phase 2 Area North

On September 1, 2015, the ten sections immediately north of the Phase 3 area became 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. Soil samples and water samples are required for 2016.

2.A.9. LPNNRD Certification

2.A.9.a. LPNNRD Operator Certification Classes

Two on-line test requests have been received in January (from the same person). On his first test his score was less than the 70% required for passing the test. He scored greater than 70% on his second attempt.

Cert #	Cert date	Name	Re-cert	Comments
6532	1/4/2016	Brad Ferguson	Yes	

Two of the twelve schedules classes have been completed. 30 producers (including three LPNNRD Directors) attended the class in Fremont following the Corn Expo. There were three first-time certifiers at this class. 32 producers attended the class at Ag Park, Columbus. (Some of these attendees had attended the first SQS #2 informational class earlier that day.) There were four first-time certifiers at the second class. The next class is tomorrow afternoon at ARDC.

2.A.10. Certifying Acres

2.A.10.a. Janette Schure Modification of Acre Certification

Janette Schure Modification of Acre Certification

Janette Schure Etal, formerly farmed by Eisenmenger Farms, has sent FSA paperwork showing the SW ¼, 7-19-1W (SQS) as 159.01 acres irrigated. There are a few issues regarding this request.

1. The total of 159.01 is not possible as there are 3 acres out of every 160 lost to the County Road Right of Way. Meaning at most, there would be 156.01 irrigable acres.
2. There is a building site that takes out another 0.93 acres making the maximum amount of acres 155.08.
3. Looking at the aerial photography, it is highly doubtful that three of these corners meet the criteria as irrigated based on the 2 in 10 rule established by the board. The NW, NE,

and SE, corners do not appear to be irrigated at any point between 2004 and 2014. The SW corner is assuredly gravity irrigated based on the aerial photography.

4. When initially certified, we were informed the SW corner was irrigated; no mention was made of the other three corners. If they were irrigated, I would think we'd have been informed at that point, not two years later.

Aerial Photos by year:

2004 – inconclusive, but if you look very close, you can see the pivot outline, which is not visible in fields with irrigated corners

2005 – difficult to see with the boundary, very clear without the boundary. Doubtful corners are irrigated.

2006 – Stands out plainly as the 3 corners not irrigated. If they were, the coloration should match the SW corner and the pivot.

2009 – Inconclusive, but the coloration in the three corners should match closer to the SW corner that is irrigated. There are areas in each of the three corners that look dry

2010 – Completely inconclusive

2012 – Obviously not irrigated, and that's the year you would expect to see it as irrigated definitively.

2014 – difficult to see with the boundary, clear without the boundary. Doubtful 3 corners are irrigated.

Summary: While we do accept FSA records as proof of irrigation, we also require 2 in 10 and that the ground meets our definition of irrigated (water actually applied to crops).

Based on the aerial photography, while it passes the FSA portion of proof, it is my opinion it fails the 2 in 10 burden and therefore does not meet our definition of irrigated. I do not think our rules bind us to the FSA records, just that they can be submitted as proof, barring other factors. If anything, the pivot is drawn too large, and there are actually fewer acres irrigated than what is certified.

Report by Chris Poole

John, Cyndi, and Jess Schure attended the Water Committee meeting. The field in question was farmed by Eisenmenger Farms from 2001 to ~2015 and was irrigated with a center pivot with the SW corner also irrigated by gated pipe. Previous to 2001 all four corners were irrigated by gated pipe but this has not been done since that year. Therefore, irrigation of the NW, NE, and SE corners for this field do not meet our 2 in 10 years requirement.

They wish to purchase a corner unit to irrigate all four corners of the field. They informed the committee that the buildings on the field have been removed so now the pivot can make a full circle. This field is also within the Platte-Colfax SQS area. It was suggested that a transfer of acres from the SW corner, and equally applied to all four corners through a more powerful end gun would allow them to at least partially irrigate these corners while the total number of field acres remains the same.

2.A.10.b. Cech Modification of Acre Certification

Cech Irrigation in NW¹/₄ of Section 34-T18N-R3E

On January 15, 2016, the acres owned by Delores Cech in the NW¹/₄ of Section 34, Township 18 North, Range 3 East, Lower Shell Creek subarea (south west of Shell Creek) were sold to three of her children who now each have interest in the land. The

new owners are John Cech (son), Ron Cech (son), and Nancy Martensen (daughter, whose husband is Dan Martensen). In the week prior to the purchase of this land Dan Martensen contacted Russell Oaklund regarding the certified acres for this land and the surface water right from Shell Creek for this ground. The records of LPNNRD show that there are 67 acres certified as irrigated from irrigation well G-001817 with some additional certified irrigation acres from the surface water permit. The records of the Department of Natural Resources show that surface Water Appropriation A-6523 is a permit with a priority date of July 30, 1954, to divert water from Shell Creek for irrigation of 70 acres in the NW¼ of Section 34.

Following their purchase of the land Dan Martensen made an appointment to meet with Oaklund at the LPNNRD office in Wahoo. On Wednesday, January 20th, Martensen met with Oaklund in LPNNRD office. Martensen related that the Delores Cech ground has been with gated pipe from irrigation well G-001817 and with a pump from Shell Creek. Martensen related that for more efficient use of irrigation water they would like to install a pivot and use the irrigation well as the source of water for irrigation. By removing some trees they could position the pivot to make a full circle covering 120 acres and irrigate only 17 acres outside the pivot with gated pipe. Martensen related that the additional time and expense needed to maintain the pumpsite and pump on Shell Creek are probably not worth it and they would be willing to relinquish their surface water right from Shell Creek if they could receive approval from LPNNRD to irrigate the land from irrigation well G-001817 (as indicated above). During this meeting Oaklund called the Department of Natural Resources in Lincoln and discussed surface Water Appropriation A-6523 with Susan France. The seventy acres approved for irrigation from Shell Creek under A-6523 remain “in full force and effect.”

On Thursday, January 21st, as per the appointment made with the DNR, Dan Martensen met with John Miller in Lincoln. During this meeting Miller called Oaklund regarding surface Water Appropriation A-6523. After this meeting Martensen stopped at LPNNRD. He again related that it would be more practical, economical, and a more efficient use of water to irrigate with a center pivot from the irrigation well. Dan Martensen related that he will attend the Water Committee meeting on January 28, 2016. An aerial photo showing the NW¼ of section 34 is attached. [Note: Section 34-T18N-R3E is the eastern most section in the new Richland-Schuyler *North* Phase 2 Area.]

Report by Russ Oaklund

Ron Cech and Dan Martensen attended the Water Committee meeting in regard to this request. They are willing to retire the surface water right in exchange to irrigate the entire field.

2.B. CHEMIGATION

No new updates

2.C. LIVESTOCK WASTE PERMITS

No new updates

3. GROUND WATER PROGRAMS

3.A. DECOMMISSIONED WELL PROGRAM

No new updates

3.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

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

The latest technical meeting was held on January 26, 2016 as part of the NARD conference in Lincoln. Items discussed included the Long Range Plan, grant requests to WSF, and USGS brackish GW assessment. Two the grant requests to the WSF are further AEM flights in eastern Nebraska, and a study looking at the ground water quality of the bedrock. The bedrock study would also include further drilling of more test holes, some of these will be in the LPNNRD.

4. SURFACE WATER PROGRAMS

4.A. USGS WATER QUALITY MONITORING ON SHELL CREEK

Attached is an invoice from USGS for water quality monitoring on Shell Creek north of Columbus. The invoice is for \$5,600 and is part of an existing contract with USGS.

5. OTHER

5.A. COMMENTS FROM THE PUBLIC

John Schure, Cyndi Schure, and Jess Schure attended the Water Committee meeting to discuss the Janette Schure modification of acre certification.

Ron Cech and Dan Martensen attended the Water Committee meeting to discuss the Cech modification of acre certification.

John Hannah, Chairperson of the LPNNRD Board, also attended.