




LOWER PLATTE SOUTH natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581 | P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

Memorandum

Date: September 17, 2019
To: Each Director
From: Paul D. Zillig, General Manager 
Subject: Water Resources Subcommittee Meeting Minutes

The Water Resources Subcommittee met in the NRD Office at 5:30 p.m. on Monday, September 16, 2019. Subcommittee members present included Bob Andersen, Vern Barrett, Greg Osborn, Don Jacobson, Mark Spangler, and David Landis. Others present included Don Olson & Leo Benes, Steve Seglin & Corey Wasserburger (Corey's daughter also attended), Katie Cameron, Dan Schulz, Steve Herdzina, Jared Nelson, Dick Ehrman, Maclane Scott, Chris Witthuhn, David Potter, and myself.

Listed below is a brief description of each of the agenda items followed by the discussion and actions by the Subcommittee.

Chair Andersen opened the meeting and asked Potter to report on the Oak-Middle 82-B bids.

8a. Consideration of Oak-Middle 82-B Watershed Rehabilitation Project construction bids – The NRD opened bids on Thursday, September 12th. A total of two bids were received. The bidders were Goes Construction, LLC of Talmage, NE \$485,078.40; and High Plains Enterprises, Inc of Martell, NE \$693,546.25. The bids are under review by staff and legal counsel. As with nearly all construction bids for this type of work, since the March flood event, the bid exceeds the cost of constructing a similar project prior to the March flooding (more work to get done than there are contractors to do it). This is likely to continue well into 2020 and beyond. The Subcommittee will review legal counsel's recommendation and they consider the pro's and con's of either recommending approval of a bid or rejecting all the bids, and rebidding the project.

Potter reviewed the status of the project and Nelson handed out and reviewed the attached bid summary sheet. It was pointed out that Goes Construction, LLC forgot to attach the written acknowledgment of Amendment #1, NRD legal counsel declared this an informality and it was waived by the General Manager. The Subcommittee discussed the bids and that recently nearly all projects are bid for more than the engineer's estimate. The Subcommittee discussed that

USDA/NRCS will be reimbursing the NRD for 65% of the cost and the NRD needs to get the project under construction while the funding is still available.

It was moved by Landis, seconded by Osborn and unanimously approved by the Subcommittee to **recommend the Board of Directors approve the low bid from Goes Construction, LLC of Talmage, Nebraska in the amount of \$485,078.40 for the construction of the Oak-Middle Creek Watershed 82-B Rehabilitation Project.**

The next item on the agenda was to consider an agreement to extend USGS's time to complete the ENWRA Age Dating Project.

8b. Consideration of a United States Geologic Service (USGS) Agreement to extend the Eastern Nebraska Water Resources Assessment (ENWRA) Age Dating Project -

The NRD entered into this agreement, on behalf of ENWRA, in August of 2016. We have paid USGS for their work. The only work remaining is to give a final presentation of the data and finish the report. USGS is requesting a one year extension to complete the work. The new completion date will be September 30, 2020. ENWRA is recommending the Board approve Modification #002 to the USGS Age Dating Project Agreement (16EMNE000280), see attachment.

Cameron explained that status of the work and the need to extend the agreement so USGS can complete the work. It was moved by Landis, seconded by Jacobson, and unanimously approved by the Subcommittee to **recommend the Board of Directors, on behalf of the Eastern Nebraska Water Resources Assessment, approve Modification #002 to the USGS Age Dating Project Agreement 16EMNE00280.**

Potter then reported on the status of the Upper Salt 3-A landrights negotiations (see below) and that we don't anticipate being ready for additional Board action at the September Board Meeting.

8c. Consideration of landrights negotiations for the Upper Salt 3-A Watershed Rehabilitation project. - Negotiations have been successfully completed with six of the landowners for this project.

Negotiations continue with the one remaining landowner, DSC Properties, LLC/David Cabela. They have proposed some easement wording changes, which are being reviewed by NRD legal counsel, and they have provided a counter offer. The Board has authorized a counter offer, once we review the proposed easement changes we will reject their offer and propose the counter offer. This item may require the Board to go into closed session at the Board Meeting.

The next item was to consider the investigation into potential irrigation runoff from Irrigation Runoff Complaint #002 (Benes Service Co. 34-13-5). Andersen asked Steve Herdzina, NRD Water Resources Compliance Specialist, to review his Investigative Report (attached). Herdzina reviewed his report and the conditions he observed during his inspection September 6th with Mr.

Olson. Herdzina also reported on his discussions with the Benes' and the rainfall records from radar that are also included in the report. His report concluded that there is no evidence that the water impounded on the Olson property is the result of groundwater irrigation runoff.

Olson reviewed this rainfall records for late August and early September which were generally close to the rainfall estimates in the report. Olson expressed his displeasure with the operation of the water & sediment control basin and compared it to a dripping faucet problem. I responded that NRCS designed the basin and they have indicated it is constructed properly and doing it's job.

Leo Benes reported to the Subcommittee his irrigation operation in 2019 and that it's been a pretty wet year with not much need to irrigate as compared to previous years. Benes reported that the basin was designed by NRCS and he shuts the gates when he's irrigating.

8d. Consideration of investigation into Irrigation Runoff Complaint #002. - The NRD received a phone call from Don Olson on Friday, September 6th reporting the presence of water in his grassed waterway downstream of the basin on the neighboring Benes Service Company property. Don was concerned that it was irrigation runoff, from the land currently under a cease and desist order to not allow irrigation runoff. NRD Water Resources Compliance Specialist, Steve Herdzina, traveled to the site and conducted an inspection. A copy of his report is attached. The investigation concluded that "there is no evidence that the water impounded on the Olson property is the result of ground water irrigation runoff". The Subcommittee will review the report and prepare a recommendation for Board consideration.

It was moved by Osborn, seconded by Landis, and unanimously approved by the subcommittee to **recommend the Board of Directors approve the September 11, 2019 Report of Investigation and find that there was no irrigation runoff in violation of the NRD's April 22, 2015 Cease and Desist Order against Benes Service Company, Inc.**

The final item on the agenda was to review the proposed modifications to the NRD Groundwater Rules & Regulations (see below).

8e. Reports – Proposed “Draft” Modifications to the NRD Groundwater Rules & Regulations. - Earlier this year WRS and the Dwight-Valparaiso-Brainard Special Management Area (DVB SMA) Citizen's Advisory Group reviewed and provided input on some of the proposed changes to the LPSNRD Groundwater Rules and Regulations. As you will recall we are in the final year of the DVB SMA three year allocation so action is necessary to extend the allocation. Attached is an email summary of the proposed changes. A redline version of the GW R&R was attached to the September 13th memo to the Board.

Dick Ehrman reviewed the proposed changes, most relate to the need to extend our allocation limits a second time (3 years) in the DVB SMA. The Subcommittee discussed the changes and the need

to discuss further “public interest”. Benes stated that he is on the DVB Advisory Group and feels that a change to a “rolling average” will save water. Landis appreciated the work of the Advisory Group and felt that they have provided good positive input.

It was moved by Landis, seconded by Jacobson, and unanimously approved by the Subcommittee to **recommend the Board of Directors direct staff to conduct a public hearing on the Draft modifications to the Groundwater Rules and Regulations.**

There being no further business the meeting adjourned at 6:18 pm.

PDZ/pz

Encl. 4

Pc: Steve Seglin
Corey Wasserburger

BID TABULATION - All Bidders

9/13/2019, JN

PROJECT: Oak Middle Creek 82-B Rehabilitation - Oak Middle Creek Watershed

LOCATION: Lower Platte South NRD Office, Lincoln, NE

LETTING: 9/12/2019 1:00 PM CDT

Bid Item No.	Item Description	Quantity	Unit	Goes Construction, LLC		High Plains Enterprises, Inc		ENGINEERS ESTIMATE	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1	Mobilization and Demobilization	1	LS	\$ 75,000.00	\$ 75,000.00	\$ 20,000.00	\$ 20,000.00	\$ 13,300.00	\$ 13,300.00
2	Water	330	1000 GALS.	\$ 0.02	\$ 6.60	\$ 30.00	\$ 9,900.00	\$ 10.00	\$ 3,300.00
3	Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
4	Removal of Water	1	LS	\$ 10,000.00	\$ 10,000.00	\$ 15,000.00	\$ 15,000.00	\$ 20,000.00	\$ 20,000.00
5	Excavation, Common	10249	CU. YDS.	\$ 6.00	\$ 61,494.00	\$ 19.00	\$ 194,731.00	\$ 4.00	\$ 40,996.00
6	Earth Fill, Class A Compaction	21379	CU. YDS.	\$ 3.00	\$ 64,137.00	\$ 5.75	\$ 122,929.25	\$ 3.00	\$ 64,137.00
7	Drain Fill, Foundation Drain System	214	CU. YDS.	\$ 50.00	\$ 10,700.00	\$ 85.00	\$ 18,190.00	\$ 55.00	\$ 11,770.00
8	Drain Fill, Seepage Protection Filter System and Outlet	118	CU. YDS.	\$ 60.00	\$ 7,080.00	\$ 85.00	\$ 10,030.00	\$ 60.00	\$ 7,080.00
9	Salvaging and Spreading Topsoil	4725	SQ. YDS.	\$ 10.00	\$ 47,250.00	\$ 3.00	\$ 14,175.00	\$ 1.50	\$ 7,087.50
10	Concrete (Class 4000)	14.7	CU. YDS.	\$ 800.00	\$ 11,760.00	\$ 966.00	\$ 14,200.20	\$ 650.00	\$ 9,555.00
11	Steel Reinforcement	3058	LBS.	\$ 2.50	\$ 7,645.00	\$ 4.60	\$ 14,066.80	\$ 3.50	\$ 10,703.00
12	Reinforced Concrete Pipe (30 " Dia.)	186	LIN. FT.	\$ 112.00	\$ 20,832.00	\$ 120.75	\$ 22,459.50	\$ 225.00	\$ 41,850.00
13	Plastic Pipe (8 " Dia.)	40	LIN. FT.	\$ 10.00	\$ 400.00	\$ 115.00	\$ 4,600.00	\$ 26.00	\$ 1,040.00
14	Plastic Pipe (4 " Dia., Slotted and non-slotted)	561	LIN. FT.	\$ 8.00	\$ 4,488.00	\$ 109.25	\$ 61,289.25	\$ 10.00	\$ 5,610.00
15	Metal Fabrication and Installation	1	LS	\$ 16,000.00	\$ 16,000.00	\$ 17,083.25	\$ 17,083.25	\$ 10,000.00	\$ 10,000.00
16	Conduit Abandonment	1	LS	\$ 5,500.00	\$ 5,500.00	\$ 7,000.00	\$ 7,000.00	\$ 20,000.00	\$ 20,000.00
17	Diversions	294	LIN. FT.	\$ 4.00	\$ 1,176.00	\$ 10.00	\$ 2,940.00	\$ 2.00	\$ 588.00
18	Rock Riprap, Plunge Pool	226	CU. YDS.	\$ 80.00	\$ 18,080.00	\$ 108.00	\$ 24,408.00	\$ 73.00	\$ 16,498.00
19	Rock Riprap Protection Berm	1	LS	\$ 8,000.00	\$ 8,000.00	\$ 6,000.00	\$ 6,000.00	\$ 12,000.00	\$ 12,000.00
20	Seeding and Mulching	3.9	ACRES	\$ 6,000.00	\$ 23,400.00	\$ 2,500.00	\$ 9,750.00	\$ 1,500.00	\$ 5,850.00
21	Surveying and Staking	1	LS	\$ 16,000.00	\$ 16,000.00	\$ 7,500.00	\$ 7,500.00	\$ 10,000.00	\$ 10,000.00
22	Contractor Quality Control	1	LS	\$ 18,000.00	\$ 18,000.00	\$ 20,000.00	\$ 20,000.00	\$ 25,000.00	\$ 25,000.00
23	Survey Marker	2	EACH	\$ 3,000.00	\$ 6,000.00	\$ 500.00	\$ 1,000.00	\$ 400.00	\$ 800.00
24	Pollution Control	1	LS	\$ 17,000.00	\$ 17,000.00	\$ 10,000.00	\$ 10,000.00	\$ 7,000.00	\$ 7,000.00
25	Erosion Control Blankets	6988	SQ. YDS.	\$ 1.35	\$ 9,433.80	\$ 5.00	\$ 34,940.00	\$ 2.50	\$ 17,470.00
26	Drawdown Valve	1	LS	\$ 3,000.00	\$ 3,000.00	\$ 5,000.00	\$ 5,000.00	\$ 3,000.00	\$ 3,000.00
27	Fence	962	LIN. FT.	\$ 8.00	\$ 7,696.00	\$ 17.00	\$ 16,354.00	\$ 4.50	\$ 4,329.00
				TOTAL:	\$485,078.40	TOTAL:	\$693,546.25	TOTAL:	\$378,963.50

Agreement No. 16EMNE000280
Modification No. 002
Customer No. 6000000121
Cost Center GGEMNR0000
Project NR00GHH
TIN 47-0542969

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SUPPLEMENTAL JOINT FUNDING AGREEMENT
FOR
WATER RESOURCES INVESTIGATIONS

THE GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, party of the second part, hereby agree to amend the Joint Funding Agreement No. 16EMNE000280 dated August 1, 2016 as follows:

Paragraph 2(a) is hereby **date changed** to read as follows:

- (a) \$49,500 by the party of the first part during the period August 1, 2016 to September 30, 2020

Paragraph 2(b) is hereby **date changed** to read as follows:

- (b) \$160,500 by the party of the second part during the period August 1, 2016 to September 30, 2020

Billing for this agreement will be rendered **quarterly**. Payments of bills are due within 60 days after billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)

Geological Survey
UNITED STATES
DEPARTMENT OF THE INTERIOR

 Digitally signed by JILL
FRANKFORTER
Date: 2019.09.05 09:21:06
-06'00'

By _____
Jill Frankforter, Acting Director
Nebraska Water Science Center

Date September 5, 2019

USGS DUNS: 949286512

LOWER PLATTE SOUTH
NATURAL RESOURCES DISTRICT

By _____

Date _____

REPORT OF INVESTIGATION

**LPSNRD Irrigation Runoff Complaint #002
Benes Service Inc.**

NW 1/4, Sec. 34, T13N, R5E, Saunders County, Nebraska

Investigation Date: September 6, 2019

Investigator: Steve Herdzina, Water Resources Compliance Specialist

Report Date: September 11, 2019

BACKGROUND:

On September 6, 2019 at approximately 10:50 AM, the Lower Platte South Natural Resources District Water Resources Specialist received a phone call from Don Olson indicating that ground water from an irrigation well was running off a property operated by Benes Service Company from a center pivot irrigated field located in the N ½ of the SW ¼ and the SW ¼ of the NW ¼, Sec. 34, T13N, R5E, Saunders County Nebraska. The field is located approximately one mile southwest of the Village of Valparaiso (also referred to as the Benes pivot). Olson indicated to the Water Resources Specialist that irrigation runoff had come through tile outlets onto his property. The Water Resources Specialist informed the Water Resources Compliance Specialist and the General Manager that there was a call about irrigation runoff and an investigation was needed.

For this property, a cease and desist order has been entered requiring Benes to control and prevent the runoff of ground water used for irrigation on the property. This order supersedes the previous Irrigation Management Plan that was developed by NRCS and approved by Benes and the NRD for this property.

INVESTIGATION:

LPSNRD's Water Resources Compliance Specialist responded to the call and arrived at the Olson property at approximately 11:50 AM on September 6th. The Compliance Specialist proceeded to take photos of the area and also noted that the Benes pivot was not currently running but was pointing southwest (Fig. 1). The Compliance Specialist noted that dry conditions existed 100 meters downstream of the tile outlets (Fig. 2). The far west tile outlet of the water/sediment control basin coming from the Benes property was slowly dripping water and a photo and video of this was taken by the Compliance Specialist (Figure 3). All the tile outlets were closed during the inspection (Figures 4-6). The Compliance Specialist noted that there was a puddle of water that was about 12 inches deep below the tile outlets (Fig. 7). In addition to the tile outlets, it is noted that there are existing terraces on the Olson property that drain into the waterway below the outlets. The Compliance Specialist walked downstream of the outlets through the waterway and noted other areas of impounded water within 50 feet of the outlets. The waterway has aggradation from silt accumulation and does not appear to drain properly. Photos were also taken of the Benes property on the other side of the water/sediment control basin (Fig. 8-10). The irrigated cropland above the basin showed similar soil moisture conditions to the dryland crop ground below the basin.

The Water Resources Compliance Specialist proceeded to the Benes Service Inc. property at 1:10 PM on September 6th to get a meter reading from the irrigation well. At the time of the inspection, the meter reading was 315235 gallons x 100 (Fig. 11) and the well was not running and the pivot was facing southwest (Fig. 12). The site visit was completed at approximately 1:30 PM on September 6th.

The Water Resources Compliance Specialist pulled rainfall data for the previous 7 days August 31-September 6 (Fig. 13). This data showed that the area received 0.1-0.3 inch of precipitation through that period. The Compliance Specialist also pulled rainfall data for the previous 14 days August 26-September 8 (Fig. 14). This data showed that the area received 1-2 inches of rain through that period.

The Water Resources Compliance Specialist obtained pumping records from Benes Service (Fig. 14). Benes Service reported closing the gates on the tile outlets on July 29th prior to running the irrigation well. The gates have not been reopened since the closure. The Compliance Specialist also calculated the total water usage for the 2019 growing season and determined that 2.36 inches have been applied (Fig. 15). Benes Service informed the Compliance Specialist that on September 5, they turned the pivot system on with the intent of irrigating. At some point, a clutch went out resulting in the pivot no longer

being able to pump water prior to completing the planned irrigation. The system was turned off prior to passing over the basin.

CONCLUSION:

The Water Resources Compliance Specialist acknowledged the presence of water impounded in the waterway on the Olson property. Any water that accumulates within the waterway is unable to drain properly due to the aggregation of silt within the waterway. After discussions with Benes Service, the Compliance Specialist determined that their property is still being operated in a way to prevent irrigation runoff. Given that the last irrigation event over the basin occurred two weeks prior and accounting for the precipitation since that irrigation event, the Compliance Specialist cannot determine that the impounded water is the result of illegal ground water irrigation. The water leaving the west tile outlet is de minimis which is consistent with previous investigations. Additionally, the source of the water dripping from the west outlet cannot be attributed exclusively to ground water, but could be the result of ground water, precipitation, dew moisture, seepage, or a combination of. **The conclusion of the Compliance Specialist is that there is no evidence that the water impounded on the Olson property is the result of ground water irrigation runoff.**



Fig. 1: Looking north from berm at Benes Service pivot not running and facing southwest. (9/6/2019)



Fig. 2: View of dry conditions 100 meters downstream of tile outlets (9/6/2019)



Fig. 3: Close look at far left tile outlet dripping. (9/6/2019)



Fig. 4: West outlet pipe with gate closed. (9/6/2019)



Fig. 5: Middle outlet pipe with gate closed. (9/6/2019)



Fig. 6: East outlet pipe with gate closed. (9/6/2019)



Figure 7: Looking down at puddle of water below tile outlets. (9/6/2019)



Fig. 8: View of tile inlet structure on Benes Service property (9/6/2019)



Fig. 9: Looking into middle tile inlet on Benes Service Co. property (9/6/2019)



Fig. 10: Looking into west tile inlet on Benes Service Co. property (9/6/2019)

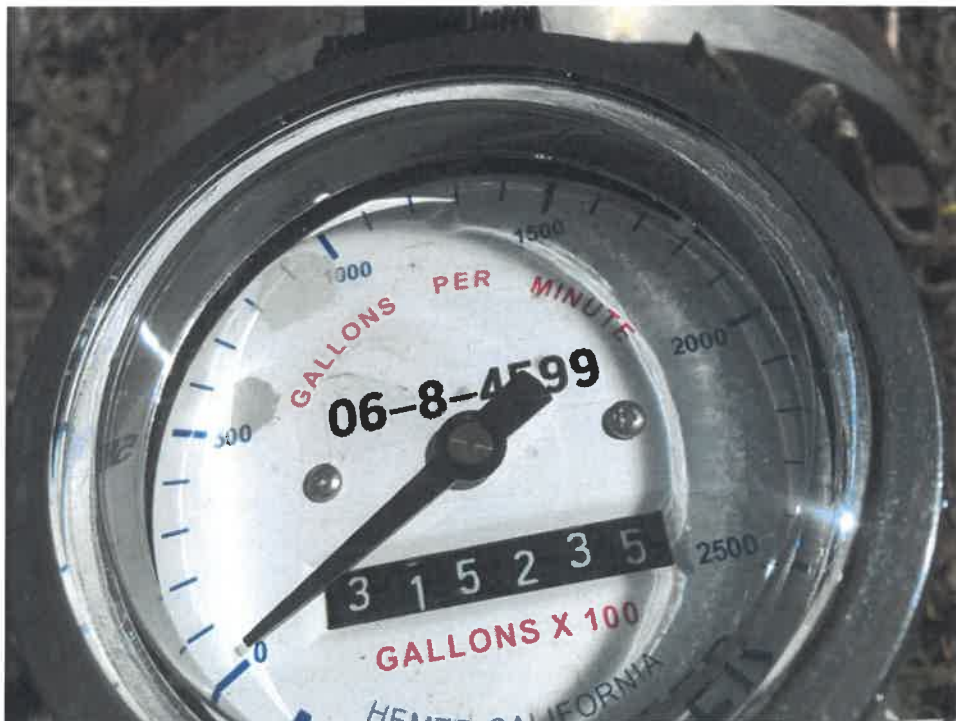


Fig. 11: Meter 06-8-4599 showing meter reading of 315235 gx100 (9/6/2019)



Fig. 12: Benes Service Co. pivot not running facing southwest (9/6/2019)

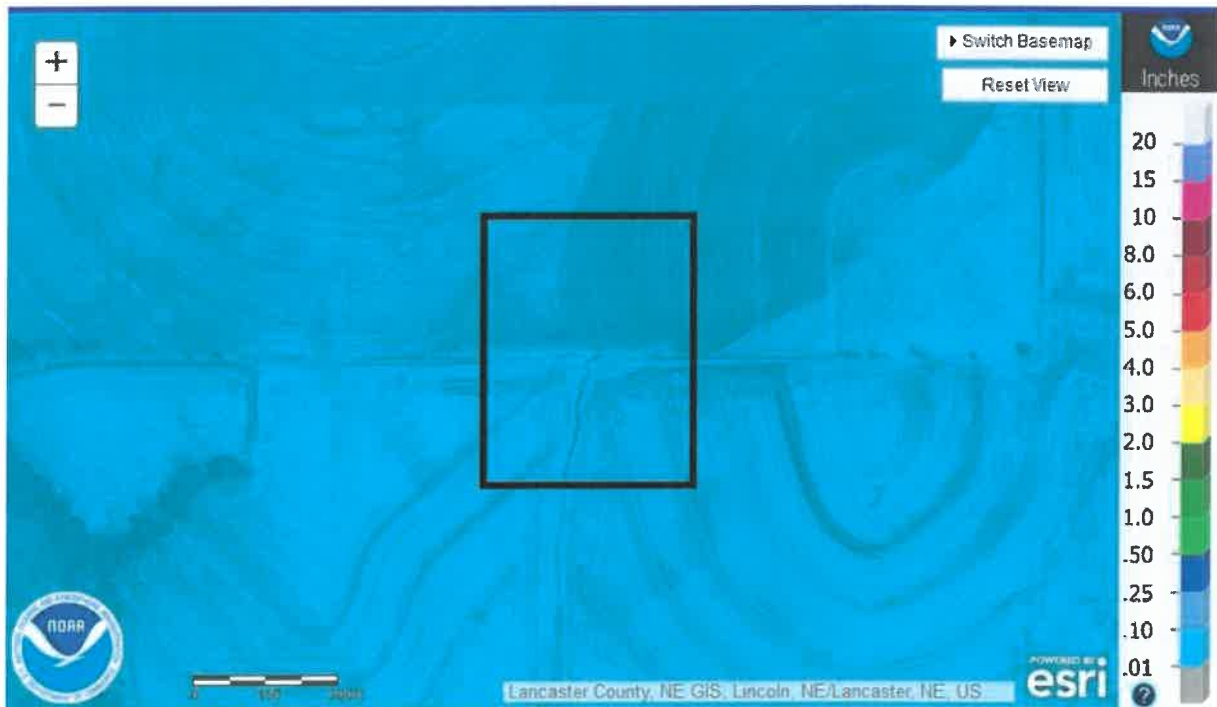


Fig. 13: Prior 7 day rainfall totals (8/31/19 - 9/6/2019)



Fig. 14: Prior 14 day rainfall totals (8/26/19-9/8/2019)

Benes Pivot Irrigated Usage Calculations Well (G-065496)
Operated by Benes Service (6-9-4599)

Irrigation Event	Well Reg #	Starting Reading	Ending Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
Irrigation Event 1 7.29.19	G-065496	252319	266277	13958	1395800	51.40	0.52	98.12
Irrigation Event 2 8.2.19	G-065496	7.29.19 Reading 266277	8.2.19 278757	12480	1248000	45.96	0.47	98.12
Irrigation Event 3 8.12.19	G-065496	8.2.19 278757	8.12.19 290498	11741	1174100	43.24	0.44	98.12
Irrigation Event 4 8.22.19	G-065496	8.12.19 290498	8.22.19 310515	20017	2001700	73.72	0.75	98.12
Irrigation Event 5 9.5.19	G-065496	8.22.19 310515	9.6.19 315235	4720	472000	17.38	0.18	98.12
TOTAL							2.36	

Fig. 15: Benes Service Co. Meter Calculations (7/29/2019-9/6/2019)

**Benes Pivot Irrigated Usage Calculations Well (G-065496)
Operated by Benes Service (6-9-4599)**

3 Year Allocation Amount (2017-2019)							21 inches		
Year	Well Reg #	2016 Reading	2017 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres	
2017	G-065496	91254	172594	81340	8134000	299.55	3.05	98.12	

Year	Well Reg #	2017 Reading	2018 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
2018	G-065496	172594	252319	79725	7972500	293.60	2.99	98.12

3 Year Allocation Amount Remaining (2017-2019)	21 inches - 1.64 inches - 0.39 inches = 18.97 inches
	14.96 left for last year (2019)

Year	Well Reg #	2018 Reading	2019 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
2019	G-065496	252319	315235	62916	6291600	231.70	2.36	98.12

Since you used only 6.04 Inches total in 2017 and 2018, you have a total of 14.96 inches remaining for 2019. However, our Rules & Regulations state that you can not exceed 9.0 inches annually for pivot irrigation, and you can not exceed 12.0 inches annually for flood irrigation. These calculations are based on using 9 inches for the pivot (98.12 acres)

Fig. 16: Benes Service Co. Meter Calculations (7/29/2019-9/6/2019)

Paul Zillig

Subject: FW: GW Regs Proposed Revisions
Attachments: Ground Water RR's 2020 Redline.doc; Ground Water RR's 2020 Redline.pdf

From: Dick Ehrman
Sent: Tuesday, September 10, 2019 1:44 PM

Subject: GW Regs Proposed Revisions

Proposed New/Revised Definitions (all page numbers for redline version):

- P. 1: Allocation & slight revision to Aquifer Test**
- P. 2: Certified Irrigated Acres & revision/redefinition of Domestic Well**
- P. 4: Revision of Irrigation Well**
- P. 5: Rolling Allocation**

Note: Definitions of Allocation & Certified Irrigated Acres taken from NE Statute; Rolling Allocation modified slightly from Lower Platte North NRD Regs

Proposed Changes to Regs:

- P. 10-11:** Eliminate example of additional information for water well permit.
- P. 12:** Eliminate details for aquifer test for Class 3 permit as this requirement is superseded by 600' spacing protection.
- P. 15:** Eliminate aquifer test results as reason for granting/denying/cancelling Class 3 permit as this is superseded by 600' spacing protection.
- P. 18-19:** Unify specification for quality/quantity triggers so all triggers must be exceeded for a period of not less than two consecutive years.
- P. 35-36:** Revise allowable expansion of irrigated acres in the HCA to account for consideration of allowable depletions under the Lower Platte Basin Coalition.
- P. 37:** Eliminate reference to 20% of historical acres in the HCA as per revised allowable expansion above.
- P. 39:** Establish three-year rolling allocation in DVB SMA; eliminate distinction between sprinkler and gravity irrigation for allocation; and eliminate carryover penalty for existing three-year fixed allocation.
- P. 40:** Eliminate definition of public interest (either let Board decide this or put it in Definitions).


And a few other minor grammatical/spelling corrections



LOWER PLATTE SOUTH natural resources district

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Memorandum

Date: September 13, 2019
To: Each Director
From: Paul D. Zillig, General Manager 
Subject: Water Resources Subcommittee Meeting Minutes

The Water Resources Subcommittee will meet in the NRD Office at 5:30 p.m. on Monday, September 16, 2019. Listed below is a brief description of each of the agenda items.

8a. Consideration of Oak-Middle 82-B Watershed Rehabilitation Project construction bids –

The NRD opened bids on Thursday, September 12th. A total of two bids were received. The bidders were Goes Construction, LLC of Talmage, NE \$485,078.40; and High Plains Enterprises, Inc of Martell, NE \$693,546.25. The bids are under review by staff and legal counsel. As with nearly all construction bids for this type of work, since the March flood event, the bid exceeds the cost of constructing a similar project prior to the March flooding (more work to get done than there are contractors to do it). This is likely to continue well into 2020 and beyond. The Subcommittee will review legal counsel's recommendation and they consider the pro's and con's of either recommending approval of a bid or rejecting all the bids, and rebidding the project.

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The NRD entered into this agreement, on behalf of ENWRA, in August of 2016. We have paid USGS for their work. The only work remaining is to give a final presentation of the data and finish the report. USGS is requesting a one year extension to complete the work. The new completion date will be September 30, 2020. ENWRA is recommending the Board approve Modification #002 to the USGS Age Dating Project Agreement (16EMNE000280), see attachment.

8c. Consideration of landrights negotiations for the Upper Salt 3-A Watershed Rehabilitation project. -

Negotiations have been successfully completed with six of the landowners for this project. Negotiations continue with the one remaining landowner, DSC Properties, LLC/David Cabela. They have proposed some easement wording changes, which are being reviewed by NRD legal counsel, and they have provided a counter offer. The Board has authorized a counter offer, once we review the proposed easement changes we will reject their offer and

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PDZ/pz

Encl. 4

Pc: Steve Seglin
Corey Wasserburger

Agreement No. 16EMNE000280
Modification No. 002
Customer No. 6000000121
Cost Center GGEMNR0000
Project NR00GHH
TIN 47-0542969

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SUPPLEMENTAL JOINT FUNDING AGREEMENT
FOR
WATER RESOURCES INVESTIGATIONS

THE GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, party of the second part, hereby agree to amend the Joint Funding Agreement No. **16EMNE000280** dated August 1, 2016 as follows:

Paragraph 2(a) is hereby **date changed** to read as follows:


- (a) \$49,500 by the party of the first part during the period August 1, 2016 to September 30, 2020

Paragraph 2(b) is hereby **date changed** to read as follows:

- (b) \$160,500 by the party of the second part during the period August 1, 2016 to September 30, 2020

Billing for this agreement will be rendered **quarterly**. Payments of bills are due within 60 days after billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)

Geological Survey
UNITED STATES
DEPARTMENT OF THE INTERIOR

By  Digitally signed by JILL FRANKFORTER
Date: 2019.09.05 09:21:06 -06'00'

Jill Frankforter, Acting Director
Nebraska Water Science Center

Date September 5, 2019

USGS DUNS: 949286512

LOWER PLATTE SOUTH
NATURAL RESOURCES DISTRICT

By _____

Date _____

REPORT OF INVESTIGATION

**LPSNRD Irrigation Runoff Complaint #002
Benes Service Inc.
NW 1/4, Sec. 34, T13N, R5E, Saunders County, Nebraska**

Investigation Date: September 6, 2019

Investigator: Steve Herdzina, Water Resources Compliance Specialist

Report Date: September 11, 2019

BACKGROUND:

On September 6, 2019 at approximately 10:50 AM, the Lower Platte South Natural Resources District Water Resources Specialist received a phone call from Don Olson indicating that ground water from an irrigation well was running off a property operated by Benes Service Company from a center pivot irrigated field located in the N ½ of the SW ¼ and the SW ¼ of the NW ¼, Sec. 34, T13N, R5E, Saunders County Nebraska. The field is located approximately one mile southwest of the Village of Valparaiso (also referred to as the Benes pivot). Olson indicated to the Water Resources Specialist that irrigation runoff had come through tile outlets onto his property. The Water Resources Specialist informed the Water Resources Compliance Specialist and the General Manager that there was a call about irrigation runoff and an investigation was needed.

For this property, a cease and desist order has been entered requiring Benes to control and prevent the runoff of ground water used for irrigation on the property. This order supersedes the previous Irrigation Management Plan that was developed by NRCS and approved by Benes and the NRD for this property.

INVESTIGATION:

LPSNRD's Water Resources Compliance Specialist responded to the call and arrived at the Olson property at approximately 11:50 AM on September 6th. The Compliance Specialist proceeded to take photos of the area and also noted that the Benes pivot was not currently running but was pointing southwest (Fig. 1). The Compliance Specialist noted that dry conditions existed 100 meters downstream of the tile outlets (Fig. 2). The far west tile outlet of the water/sediment control basin coming from the Benes property was slowly dripping water and a photo and video of this was taken by the Compliance Specialist (Figure 3). All the tile outlets were closed during the inspection (Figures 4-6). The Compliance Specialist noted that there was a puddle of water that was about 12 inches deep below the tile outlets (Fig. 7). In addition to the tile outlets, it is noted that there are existing terraces on the Olson property that drain into the waterway below the outlets. The Compliance Specialist walked downstream of the outlets through the waterway and noted other areas of impounded water within 50 feet of the outlets. The waterway has aggradation from silt accumulation and does not appear to drain properly. Photos were also taken of the Benes property on the other side of the water/sediment control basin (Fig. 8-10). The irrigated cropland above the basin showed similar soil moisture conditions to the dryland crop ground below the basin.

The Water Resources Compliance Specialist proceeded to the Benes Service Inc. property at 1:10 PM on September 6th to get a meter reading from the irrigation well. At the time of the inspection, the meter reading was 315235 gallons x 100 (Fig. 11) and the well was not running and the pivot was facing southwest (Fig. 12). The site visit was completed at approximately 1:30 PM on September 6th.

The Water Resources Compliance Specialist pulled rainfall data for the previous 7 days August 31-September 6 (Fig. 13). This data showed that the area received 0.1-0.3 inch of precipitation through that period. The Compliance Specialist also pulled rainfall data for the previous 14 days August 26-September 8 (Fig. 14). This data showed that the area received 1-2 inches of rain through that period.

The Water Resources Compliance Specialist obtained pumping records from Benes Service (Fig. 14). Benes Service reported closing the gates on the tile outlets on July 29th prior to running the irrigation well. The gates have not been reopened since the closure. The Compliance Specialist also calculated the total water usage for the 2019 growing season and determined that 2.36 inches have been applied (Fig. 15). Benes Service informed the Compliance Specialist that on September 5, they turned the pivot system on with the intent of irrigating. At some point, a clutch went out resulting in the pivot no longer

being able to pump water prior to completing the planned irrigation. The system was turned off prior to passing over the basin.

CONCLUSION:

The Water Resources Compliance Specialist acknowledged the presence of water impounded in the waterway on the Olson property. Any water that accumulates within the waterway is unable to drain properly due to the aggregation of silt within the waterway. After discussions with Benes Service, the Compliance Specialist determined that their property is still being operated in a way to prevent irrigation runoff. Given that the last irrigation event over the basin occurred two weeks prior and accounting for the precipitation since that irrigation event, the Compliance Specialist cannot determine that the impounded water is the result of illegal ground water irrigation. The water leaving the west tile outlet is de minimis which is consistent with previous investigations. Additionally, the source of the water dripping from the west outlet cannot be attributed exclusively to ground water, but could be the result of ground water, precipitation, dew moisture, seepage, or a combination of. **The conclusion of the Compliance Specialist is that there is no evidence that the water impounded on the Olson property is the result of ground water irrigation runoff.**



Fig. 1: Looking north from berm at Benes Service pivot not running and facing southwest. (9/6/2019)



Fig. 2: View of dry conditions 100 meters downstream of tile outlets (9/6/2019)



Fig. 3: Close look at far left tile outlet dripping. (9/6/2019)



Fig. 4: West outlet pipe with gate closed. (9/6/2019)



Fig. 5: Middle outlet pipe with gate closed. (9/6/2019)



Fig. 6: East outlet pipe with gate closed. (9/6/2019)



Figure 7: Looking down at puddle of water below tile outlets. (9/6/2019)



Fig. 8: View of tile inlet structure on Benes Service property (9/6/2019)



Fig. 9: Looking into middle tile inlet on Benes Service Co. property (9/6/2019)



Fig. 10: Looking into west tile inlet on Benes Service Co. property (9/6/2019)



Fig. 11: Meter 06-8-4599 showing meter reading of 315235 gx100 (9/6/2019)



Fig. 12: Benes Service Co. pivot not running facing southwest (9/6/2019)

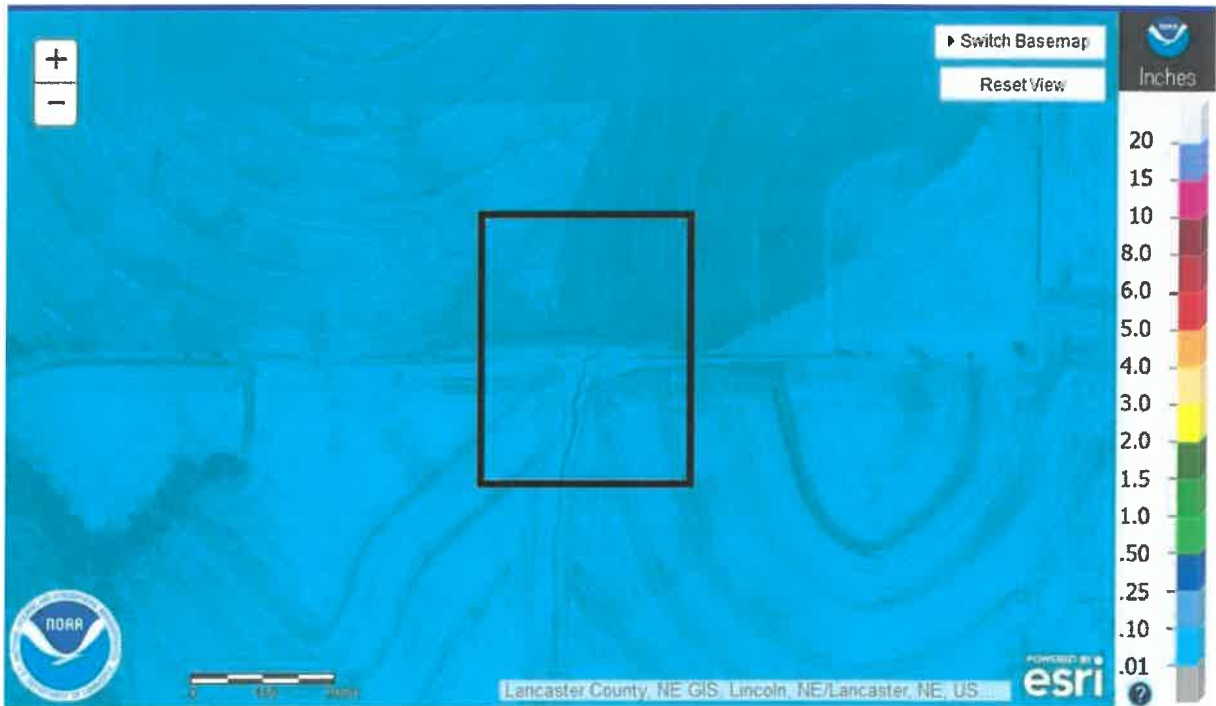


Fig. 13: Prior 7 day rainfall totals (8/31/19 - 9/6/2019)



Fig. 14: Prior 14 day rainfall totals (8/26/19-9/8/2019)

Benes Pivot Irrigated Usage Calculations Well (G-065496)
Operated by Benes Service (6-9-4599)

Irrigation Event	Well Reg #	Starting Reading	Ending Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
7.29.19	G-065496	252319	266277	13958	1395800	51.40	0.52	98.12
8.2.19	G-065496	266277	278757	12480	1248000	45.96	0.47	98.12
8.12.19	G-065496	278757	290498	11741	1174100	43.24	0.44	98.12
8.22.19	G-065496	290498	310515	20017	2001700	73.72	0.75	98.12
9.5.19	G-065496	310515	315235	4720	472000	17.38	0.18	98.12
TOTAL							2.36	

Fig. 15: Benes Service Co. Meter Calculations (7/29/2019-9/6/2019)

**Benes Pivot Irrigated Usage Calculations Well (G-065496)
Operated by Benes Service (6-9-4599)**

3 Year Allocation Amount (2017-2019)						21 inches		
Year	Well Reg #	2016 Reading	2017 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
2017	G-065496	91254	172594	81340	8134000	299.55	3.05	98.12

Year	Well Reg #	2017 Reading	2018 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
2018	G-065496	172594	252319	79725	7972500	293.60	2.99	98.12

3 Year Allocation Amount Remaining (2017-2019)	21 inches - 1.64 inches - 0.39 inches = 18.97 inches
	14.96 left for last year (2019)

Year	Well Reg #	2018 Reading	2019 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
2019	G-065496	252319	315235	62916	6291600	231.70	2.36	98.12

Since you used only 6.04 inches total in 2017 and 2018, you have a total of 14.96 inches remaining for 2019. However, our Rules & Regulations state that you can not exceed 9.0 inches annually for pivot irrigation, and you can not exceed 12.0 inches annually for flood irrigation. These calculations are based on using 9 inches for the pivot (98.12 acres)

Fig. 16: Benes Service Co. Meter Calculations (7/29/2019-9/6/2019)

Paul Zillig

Subject: FW: GW Regs Proposed Revisions
Attachments: Ground Water RR's 2020 Redline.doc; Ground Water RR's 2020 Redline.pdf

From: Dick Ehrman
Sent: Tuesday, September 10, 2019 1:44 PM

Subject: GW Regs Proposed Revisions

Proposed New/Revised Definitions (all page numbers for redline version):

P. 1: Allocation & slight revision to **Aquifer Test**

P. 2: Certified Irrigated Acres & revision/redefinition of **Domestic Well**

P. 4: Revision of **Irrigation Well**

P. 5: Rolling Allocation

Note: Definitions of Allocation & Certified Irrigated Acres taken from NE Statute; Rolling Allocation modified slightly from Lower Platte North NRD Regs

Proposed Changes to Regs:

P. 10-11: Eliminate example of additional information for water well permit.

P. 12: Eliminate details for aquifer test for Class 3 permit as this requirement is superseded by 600' spacing protection.

P. 15: Eliminate aquifer test results as reason for granting/denying/cancelling Class 3 permit as this is superseded by 600' spacing protection.

P. 18-19: Unify specification for quality/quantity triggers so all triggers must be exceeded for a period of not less than two consecutive years.

P. 35-36: Revise allowable expansion of irrigated acres in the HCA to account for consideration of allowable depletions under the Lower Platte Basin Coalition.

P. 37: Eliminate reference to 20% of historical acres in the HCA as per revised allowable expansion above.

P. 39: Establish three-year rolling allocation in DVB SMA; eliminate distinction between sprinkler and gravity irrigation for allocation; and eliminate carryover penalty for existing three-year fixed allocation.

P. 40: Eliminate definition of public interest (either let Board decide this or put it in Definitions).

And a few other minor grammatical/spelling corrections



LOWER PLATTE SOUTH
natural resources district

GROUND WATER RULES & REGULATIONS

Revised Effective Date:
~~January 1^{XX}~~, 20~~20~~17

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**LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
RULES AND REGULATIONS FOR
THE NEBRASKA GROUND WATER MANAGEMENT AND
PROTECTION ACT**

REVISED EFFECTIVE DATE: ~~JANUARY 1, 2017~~ XX, 2020

Authority – The following rules and regulations are adopted pursuant to the Nebraska Ground Water Management and Protection Act (the “Act”) *Neb. Rev. Stat. §§46-701 to 46-754*.

Purpose – The purpose of the rules and regulations is to implement the Lower Platte South Natural Resources District’s Ground Water Management Plan, to develop procedures for the implementation of management practices, to conserve and protect ground water supplies, to prevent the contamination or inefficient or improper use of ground water, and to prevent and resolve conflicts between users of ground water and appropriators of surface water which are hydrologically connected. The District acknowledges the Nebraska preference statute, *Neb. Rev. Stat. §46-613*, which grants preference in the use of ground water, first for domestic purposes, second for agricultural purposes, and last for manufacturing or industrial purposes.

Section A Definitions

Rule 1 Definitions

For purposes of implementation of these regulations under the Nebraska Ground Water Management and Protection Act, unless the context otherwise requires:

Acre-Inch shall mean the volume of water that would cover an area of one (1) acre to a depth of one (1) inch; one-twelfth of an acre-foot; equivalent to 3,630 cubic feet or 27,154 gallons.

Alleged Violator shall mean any person who is charged with failure to comply with any of these rules and regulations.

Allocation as it relates to water use for irrigation purposes shall mean the allotment of a specified total number of acre-inches of irrigation water per irrigated acre per year or an average number of acre-inches of irrigation water per irrigated acre over any reasonable period of time.

Aquifer Test shall mean the design, implementation, and analysis of a test by a licensed professional geologist or engineer according to standard procedures to determine the hydraulic conductivity, ~~and~~ storativity, and other appropriate properties of an aquifer.

Best Management Practices (BMPs) shall mean schedules of activities, maintenance procedures, and other management practices utilized to prevent or reduce present and future contamination and/or depletion of ground water which

may include soil testing, water testing, irrigation scheduling, proper timing of fertilizer and pesticide application, chemigation techniques, crop rotation, residue management, contaminant source inventories, land treatment, irrigation surge valves, pivot conversions, water return lines, reuse systems, water use efficiency techniques, and other management programs and practices as the Board of Directors may adopt from time to time.

Board or Board of Directors shall mean the Board of Directors of the Lower Platte South Natural Resources District.

Certified Irrigated Acres shall mean the number of acres or portion of an acre that the District has approved for irrigation from ground water in accordance with law and with rules adopted by the District.

Complainant shall mean any person who files a complaint alleging a violation of these rules and regulations.

Community Water System Protection Area shall mean the area of land designated by the Nebraska Department of Environmental Quality that delineates the 20 year time of travel for ground water to be intercepted by a political subdivision that has 15 or more connections to its water system's well or wells and serves 25 or more year round residents.

Contaminant, Contamination or Contamination of Ground Water shall mean nitrate nitrogen or other material which enters the ground water due to any action of any person and causes degradation of the quality of ground water sufficient to make such ground water unsuitable for present or reasonably foreseeable beneficial uses.

De Minimis shall mean surface runoff of ground water used for irrigation which causes either no damage or nominal damage to another person's land, including crops, buildings, or personal property.

District shall mean the Lower Platte South Natural Resources District.

District Compliance Officer shall mean an employee of the District authorized to perform the functions assigned by these rules and regulations.

Domestic Well Inside a Ground Water Reservoir shall mean ~~uses of ground water~~ water a water well pumping ground water for human needs as it relates to health, fire control and sanitation including water for domestic livestock and plants.

Domestic Well in the Remaining Area shall mean ~~uses of ground water for human needs as it relates to health, fire control and sanitation including water for domestic livestock, plants, and irrigation of less than one acre of land.~~

Good Cause Shown shall mean a reasonable justification for granting a variance for a consumptive use of water that would otherwise be prohibited by rule or regulation and which the granting agency, district, or organization reasonably and in good faith believes will provide an economic, environmental, social, or public health and safety benefit that is equal to or greater than the benefit resulting from the rule or regulation from which a variance is sought.

Gravity Irrigation shall mean a method of applying water to plants by letting water flow by gravity from a higher elevation and distributed to the plants at a lower elevation by flooding or furrows.

Ground Water shall mean that water which occurs in or moves, seeps, filters, or percolates through ground under the surface of the land, and shall include ground water which becomes commingled with waters from surface sources.

Ground Water Reservoir shall mean a designated area of land under which a major aquifer is known to exist and which has been delineated by the District, based on readily identifiable physical boundaries on the land surface, to generally coincide with the boundaries of the aquifer and to be the basis for specific rules and regulations pertaining to ground water as stated in these rules and regulations.

Hydrogeologic Analysis shall mean the investigation required to apply for a water well permit in the District. Analysis must include consideration of aquifer boundaries, existing water uses, and other factors appropriate to the hydrogeologic setting of the site. The District shall develop guidelines for preparing hydrogeologic analysis reports.

Illegal Water Well shall mean:

- (a) any water well operated or constructed without or in violation of a permit required by the Nebraska Ground Water Management and Protection Act;
- (b) any water well not in compliance with rules and regulations adopted and promulgated pursuant to the Act;
- (c) any water ~~well~~ not properly registered in accordance with *Neb. Rev. Stat.* §§46-602 to 46-604; or
- (d) any water well not in compliance with any other applicable laws of the State of Nebraska or with rules and regulations adopted and promulgated pursuant to such laws.

Inefficient or Improper Irrigation Runoff shall mean water derived from ground water used for irrigation that moves off of the land that is being irrigated onto another person's land, lake, stream, or river either as surface flow or as spray that accumulates to create surface flow, unless it is *De Minimis* or agreed to pursuant to these rules and regulations.

Investigator shall mean an employee or agent of the District authorized to perform functions assigned thereto by these rules and regulations.

Irrigation Well on Lands in the Remaining Area shall mean a water well ~~pumping~~ ground water pumped to apply to plants on ~~one~~ five (5) or more acres of land.

Irrigation Runoff Water shall mean ground water used for irrigation purposes which escapes from land owned, leased, or otherwise under the direct supervision and control of a person.

Large Capacity Well shall mean a well designed and constructed to pump more than 50 gallons per minute in a ground water reservoir and more than 20 gallons per minute in the remaining area, except for domestic only wells of between 20 and 50 gallons per minute.

Landowner shall mean any person who owns or has a contract to purchase land.

Non-point Source Pollution shall mean contamination from diffuse sources where no one point of release can be identified and/or sources not identified as point source pollution.

Operator shall mean that person who has the most direct control over the day-to-day operations of the land in question.

Person shall mean a natural person, a partnership, a limited liability company an association, a corporation, a municipality, an irrigation district, an agency or a political subdivision of the State of Nebraska or a department, an agency, or a bureau of the United States.

Pollution shall mean the process of contaminating air, water, or land with impurities to a level that is undesirable.

Point Source Pollution shall mean any discernible, confined, and discrete conveyance, including but not limited to, any pipe, channel, tunnel, conduit, well, discrete fissure, container, rolling stone, vessel, other floating craft, or other conveyance, over which the Department of Environmental Quality has regulatory authority and from which a substance which can cause or contribute to contamination of ground water is or may be discharged.

Pump Test shall mean the pumping of a well for a specified period of time at a specified pumping rate for the purpose of collecting water quality samples.

Remaining Area shall mean all lands outside of the boundaries of a Ground Water Reservoir

Rolling Allocation shall mean the amount of ground water in acre-inches granted by the Board to a ground water user within a three year allocation period. The period shall be rolling in that a new three year period shall commence at the expiration of each calendar year.

Salt Water shall mean ground water pumped from a well containing total dissolved solids in concentrations more than 2500 parts per million.

Salt Water Intrusion shall mean the physical movement of ground water into a well which either 1) the concentration of total dissolved solids equals or exceeds 2500 parts per million into areas of an aquifer in which the total dissolved solids previously was less than 1000 parts per million due to the pumping of ground water; or 2) the concentration of total dissolved solids equals or exceeds 5000 parts per million into areas of an aquifer in which the total dissolved solids previously was less than 2500 parts per million due to the pumping of ground water; or 3) the concentration of total dissolved solids equals or exceeds 10,000 parts per million into areas of an aquifer in which the total dissolved solids previously was less than 5000 parts per million due to the pumping of ground water.

Salt Water Well shall mean a ~~ground~~ water well drilled and constructed such that it produces salt water.

Sprinkler Irrigation shall mean a method of applying water to plants by pipelines which carry water under pressure and distributed to the plants from overhead.

Variance shall mean (a) an approval to deviate from a restriction imposed under subsection (1), (2), (8), or (9) of *Neb. Rev. Stat.* §46-714 or (b) the approval to act in a manner contrary to existing rules or regulations from a governing body whose rule or regulation is otherwise applicable.

Water Well shall mean any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed for the purpose of exploring for ground water, monitoring ground water, utilizing the geothermal properties of the ground, obtaining hydrogeologic information, or extracting water from or injecting water into the underground reservoir. Water well shall not include any excavation made for obtaining or prospecting for oil or natural gas or for inserting media to repressure oil or natural gas bearing formations regulated by the Nebraska Oil and Gas Conservation Commission.

Section B Ground Water Management Area

Rule 1 Management Options and Means Authorized

- (a) The District hereby establishes a Ground Water Management Area which includes the entire geographic area within the boundaries of the District. The District may by order and following a hearing held in accordance with *Neb. Rev. Stat. §46-712*, manage the use of water in the management area for water quantity or water quality purposes or both by any of the following means, as provided in *Neb. Rev. Stat. §46-739*:
- (i) Allocate the amount of ground water that may be withdrawn by ground water users;
 - (ii) Adopt a system of rotation for use of ground water;
 - (iii) Adopt well-spacing requirements more restrictive than those found in *Neb. Rev. Stat. §§46- 609 and 46-651*;
 - (iv) Require the installation of devices for measuring ground water withdrawals from wells;
 - (v) Adopt a system which requires a reduction of irrigated acres pursuant to subsection (2) of *Neb. Rev. Stat. §46-740*;
 - (vi) Limit or prevent the expansion of irrigated acres or otherwise limit or prevent increases in the consumptive use of ground water withdrawals from water wells used for irrigation or other beneficial purposes;
 - (vii) It may require the use of best management practices;
 - (viii) It may require the analysis of water or deep soils for fertilizer and chemical content;
 - (ix) It may impose mandatory educational requirements designed to protect water quality or stabilize or reduce the incidence of ground water depletion, conflicts between ground water users and surface water appropriators, disputes over interstate compacts or decrees, or difficulties fulfilling the provisions of other formal state contracts or agreements;
 - (x) It may require water quality monitoring and reporting of results to the district for all water wells within all or part of the management area;
 - (xi) It may require District approval of:
 - (A) Transfers of ground water off the land where the water is withdrawn; or
 - (B) Transfers of rights to use ground water that result from district allocations imposed pursuant to subdivision 1(a) of this section or from other restrictions on use that are imposed by the district in accordance with this section. Such approval may be required whether the transfer is within the management area, from inside to outside the management area, or from outside to inside the management area, except that transfers for which permits have been obtained from the Department of Natural

Resources prior to July 16, 2004, or pursuant to the Municipal and Rural Domestic Ground Water Transfers Permit Act shall not be subject to district approval pursuant to this subdivision. The district may adopt rules and regulations pursuant to this subdivision that shall require that the district deny or condition the approval of any such transfer when and to the extent such action is necessary to:

- (A) Ensure the consistency of the transfer with the purpose or purposes for which the management area was designated;
 - (B) Prevent adverse effects on other ground water users or on surface water appropriators;
 - (C) Prevent adverse effects on the state's ability to comply with an interstate compact or decree or to fulfill the provisions of any other formal state contract or agreement; and
 - (D) Otherwise protect the public interest and prevent detriment to the public welfare.
- (xii) It may require, when conditions so permit, that new or replacement water wells to be used for domestic or other purposes shall be constructed to such a depth that they are less likely to be affected by seasonal water level declines cause by other water wells in the same area;
- (xiii) It may close all or a portion of the management area to the issuance of additional permits or may condition the issuance of additional permits on compliance with other rules and regulations adopted and promulgated by the district to achieve the purpose or purposes for which the management area was designated; and
- (xiv) It may adopt and promulgate such other reasonable rules and regulations as are necessary to carry out the purpose for which a management area was designated.
- (b) In adopting, amending, or repealing any control authorized by subsection (1) of *Neb. Rev. Stat.* §46-739, §46-740 or §46-741, the District's considerations shall include, but not be limited to, whether it reasonably appears that such action will mitigate or eliminate the condition which led to designation of the management area or will improve the administration of the area.
- (c) Upon request by the District or when any of the controls being proposed are for the purpose of integrated management of hydrologically connected ground water and surface water, the Director of Natural Resources shall review and comment on the adoption, amendment, or repeal of any authorized control in a management area. The director may hold a public hearing to consider testimony regarding the control prior to commenting on the adoption, amendment, or repeal of the control. The director shall consult with the district and fix a time, place, and date for such hearing. In

- reviewing and commenting on an authorized control in a management area, the director's considerations shall include, but not be limited to, those enumerated in subsection (b) of this section.
- (d) If because of varying ground water uses, varying surface water uses, different irrigation distribution systems, or varying climatic, hydrologic, geologic, or soil conditions existing within a management area, the uniform application throughout such area of one or more controls would fail to carry out the intent of the Nebraska Ground Water Management and Protection Act in a reasonably effective and equitable manner, the controls adopted by the District pursuant to *Neb. Rev. Stat. §46-739* may contain different provisions for different categories of ground water use or portions of the management area which differ from each other because of varying climatic, hydrologic, geologic, or soil conditions. Any differences in such provisions shall recognize and be directed toward such varying ground water uses or varying conditions. Except as otherwise provided in this section, if the District adopts different controls for different categories of ground water use, those controls shall be consistent with *Neb. Rev. Stat. §46-613* and shall, for each such category, be uniform for all portions of the area which have substantially similar climate, hydrologic, geologic, and soil conditions.
 - (e) The District may establish different water allocations for different irrigation distribution systems.
 - (f) The District may establish different provisions for different hydrologic relationships between ground water and surface water:
 - (i) For management areas for which a purpose is the integrated management of hydrologically connected ground water and surface water, the District may establish different provisions for water wells either permitted or constructed before the designation of a management area for integrated management of hydrologically connected ground water and surface water and for water wells either permitted or constructed on or after the designation date or any other later date or dates established by the District. Permits for construction of new wells not completed by the date of the determination of fully appropriated shall be subject to any conditions imposed by the District; and
 - (ii) For a management area in a basin or part of a basin that is or was the subject of litigation over an interstate water compact or decree in which the State of Nebraska is a named defendant, the District may establish different provisions for restriction of water wells constructed after January 1, 2001, if such litigation was commenced before or on May 22, 2001. If such litigation is commenced after May 22, 2001, the district may establish different provisions for restriction of water wells constructed after the date on which such litigation is commenced in federal court. An appeal from a decision of the district under this subdivision shall be in

accordance with the hearing procedures established in the Nebraska Ground Water Management and Protection Act.

- (g) Except as otherwise authorized by law, the District shall make a replacement water well as defined in *Neb. Rev. Stat.* §46-602, or as further defined in district rules and regulations, subject to the same provisions as the water well it replaces.
- (h) If the District has included controls delineated in subdivision (1)(m) of *Neb. Rev. Stat.* §46-739 in its management plan, but has not implemented such controls within two years after the initial public hearing on the controls, the district shall hold a public hearing, as provided in *Neb. Rev. Stat.* §46-712, regarding the controls before implementing them.
- (i) In addition to the controls listed in subsection (1) of *Neb. Rev. Stat.* §46-739, the District may also adopt and implement one or more of the following measures if it determines that any such measures would help the District and water users achieve the goals and objectives of the management area. It may sponsor non-mandatory educational programs and it may establish and implement financial or other incentive programs. As a condition for participation in an incentive program, the District may require water users or landowners to enter into and perform such agreements or covenants concerning the use of land or water as are necessary to produce the benefits for which the incentive program is established.

Rule 2 Designated Areas of Management

- (a) The District hereby establishes the following as designated areas of management (see maps in Appendix A):
 - (i) Crete-Princeton-Adams Ground Water Reservoir;
 - (ii) Dwight-Valparaiso Ground Water Reservoir;
 - (iii) Lower Salt Creek Ground Water Reservoir;
 - (iv) Missouri River Ground Water Reservoir;
 - (v) Platte River Ground Water Reservoir;
 - (vi) Remaining Area; and
 - (vii) Community Water System Protection Areas.

Rule 3 Remaining Area

- (a) Due to the hydrogeology of the Remaining Area, the District hereby recognizes the need to manage ground water declines, conflicts between users and salt water intrusion and may require well permits on all new and replacement wells in the remaining area designed and constructed to pump greater than 20 gallons per minute, except for domestic wells that pump 50 gallons per minute or less.

Section C Water Well Permits

Rule 1 Water Well Permits

- (a) Any person who intends to construct any new or replacement water well on land which he or she owns or controls that falls within the following categories shall, before commencing construction, apply to the District for a permit on forms provided by the District, and receive approval from the District:
 - (i) Any well designed and constructed or modified to pump more than 50 gallons per minute;
 - (ii) Any well in the Remaining Area designed and constructed or modified to pump more than 20 gallons per minute except for domestic wells and wells used to water range livestock that pump 50 gallons per minute or less;
 - (iii) Any well in (i) and (ii) above that is designed and constructed to pump salt water for a beneficial use;
 - (iv) Any wells commingled, combined, clustered, or joined with any other water well or wells and such wells shall be considered one water well and the combined capacity shall be used as the rated capacity;
 - (v) Except that no permit shall be required for test holes or dewatering wells with an intended use of ninety (90) days or less;
 - (vi) Permit application forms are available at the office of the District, 3125 Portia Street, at Lincoln, Lancaster County, Nebraska, or shall be available at such office or at such other office or offices as from time to time the Board of Directors shall designate;
 - (vii) The application shall contain:
 - (A) The name and post office address of the applicant or applicants;
 - (B) The nature of the proposed use;
 - (C) The intended location of the proposed water well or other means of obtaining ground water;
 - (D) The intended size, type and description of the proposed water well and the estimated depth, if known;
 - (E) The estimated capacity in gallons per minute
 - (F) The estimated annual water usage in acre feet per year;
 - (G) The acreage and location by legal description of the land involved if the water is to be used for irrigation purposes;
 - (H) A description of the proposed use if other than for irrigation purposes;
 - (I) The registration number of the water well being replaced if applicable; and
 - (J) Such additional information as the District deems necessary or desirable, ~~for example to determine if the operation of a new or replacement well will have a potential short or long~~

~~term detrimental effect on the aquifer, and/or adversely affect a nearby well with a higher preference of use.~~

- (viii) The District shall review such application and issue or deny the permit within thirty (30) days after a complete and properly prepared application is filed; and
- (ix) If the District finds that the application is incomplete or improperly prepared, it shall return the application for correction. If the correction is not made within sixty (60) days, or an extension is not granted, the application shall be cancelled. All permits shall be issued with or without conditions attached or denied not later than thirty (30) days after receipt by the District of a complete and properly prepared application. A permit issued shall specify all regulations and controls adopted by the District relevant to the construction or utilization of the proposed water well. No refund of any application fees shall be made regardless of whether the permit is issued, canceled, or denied. The District shall transmit one copy of each permit issued to the Director of the Department of Natural Resources.

Rule 2

Classes of Well Permits and Required Hydrogeologic and Water Quality Information

- (a) Any person who proposes to construct a well requiring a permit shall be required to provide certain hydrogeologic and water quality information before a water well permit may be approved. The District shall provide guidelines for required reports which shall be submitted to the District with each permit application.
- (b) Class 1 Permit:
 - (i) Applies to any proposed well to be located in a Ground Water Reservoir, that is designed to pump more than 50 gallons per minute and less than 1000 gallons per minute and pump less than 250 acre-feet of water per year;
 - (A) The requirements for a Class 1 permit shall be as follows and shall be included with the application:
 - (1) Water quality samples to be collected at the end of a 24-hour pump test. Any well must be pumped at 100% of its designed rate. The samples shall be submitted to a qualified laboratory for an analysis of sodium, chloride and total dissolved solids.
- (c) Class 2 Permit:
 - (i) Applies to any proposed well to be located in a Ground Water Reservoir designed and constructed to pump 1000 gallons per minute or more, or pump 250 acre-feet or more water per year;
 - (A) The requirements for a Class 2 permit shall be as follows and shall be included with the application:
 - (1) A copy of the well log to determine geologic formation;

- (2) An accurate static water level measurement to estimate saturated thickness of the aquifer;
- (3) An aquifer test including all necessary drawdown and pumping data as required by the District. The aquifer test must be designed and supervised by a licensed professional geologist or engineer with experience in such analysis;
- (4) Water quality samples to be collected at the end of a 24-hour pump test. Any well must be pumped at 100% of its designed rate. The samples shall be submitted to a qualified laboratory for analysis of sodium, chloride and total dissolved solids; and
- (5) A hydrogeologic analysis report considering the impact of the proposed withdrawal on current ground water users and a minimum twenty (20) year impact on the aquifer for potential future users shall be submitted by the Applicant. The report must be prepared by a licensed professional geologist or engineer with experience in such analysis.

(d) Class 3 Permit:

- (i) Applies to any proposed well located in the Remaining Area designed and constructed to pump more than 20 gallons per minute and less than 250 gallons per minute and use less than 25 acre-feet of water per year, except a domestic well that pumps 50 gallons per minute or less is not required to obtain a permit;

(A) The requirements for a Class 3 permit shall be as follows:

- (1) Water quality samples to be collected at the end of a 24-hour pump test. Any well must be pumped at 100% of its designed rate. The samples shall be submitted to a qualified laboratory for analysis of sodium, chloride and total dissolved solids; ~~and~~
- ~~(2) If the well is located within 600 feet of an existing registered well with a higher preference of use, except for a well owned by the applicant, the District shall require:~~
 - ~~(a) A copy of the well log to determine geologic formation;~~
 - ~~(b) An accurate static water level measurement to estimate saturated thickness of the aquifer;~~
 - ~~(c) An aquifer test including all necessary drawdown and pumping data as required by the District. The aquifer test must be designed and supervised by a licensed professional geologist or engineer with experience in such analysis.~~

- (e) Class 4 Permit:
 - (i) Applies to any proposed well in the Remaining Area designed to pump 250 gallons per minute or more, or pump 25 acre-feet or more of water per year;
 - (A) The requirements for a Class 4 permit shall be as follows:
 - (1) A copy of the well log to determine geologic formation;
 - (2) An accurate static water level measurement to estimate saturated thickness of the aquifer;
 - (3) An aquifer test including all necessary drawdown and pumping data as required by the District. The aquifer test must be designed and supervised by a licensed professional geologist or engineer with experience in such analysis;
 - (4) Water quality samples to be collected at the end of a 24-hour pump test. Any well must be pumped at 100% of its designed rate. The samples shall be submitted to a qualified laboratory for analysis of sodium, chloride and total dissolved solids; and
 - (5) A hydrogeologic analysis report considering the impact of the proposed withdrawal on current ground water users and a minimum twenty (20) year impact on the aquifer for potential future users shall be submitted by the Applicant. The report must be prepared by a licensed professional geologist or engineer with experience in such analysis.
- (f) Salt water well permit:
 - (i) A salt water well permit shall be required if an Applicant desires to pump salt water from any proposed well for a beneficial use. The Applicant is required to demonstrate that ground water withdrawals from the proposed well will not cause salt water intrusion. The requirements for a Class 1, 2, 3, or 4 well permit, stated above, shall apply to any salt water well permit.
 - (ii) The requirements for salt water well permits applies to all permit sized wells described in Class 1, 2, 3, and 4 well permits above, in which either:
 - (A) The total dissolved solids of the water quality sample taken at the end of a 24-hour pump test are 2500 parts per million or more and the intended use of the water is for a beneficial use; or
 - (B) The intended use of the well is to pump salt water from an aquifer that is expected to contain salt water under ambient conditions. In this case, the Applicant may choose to fulfill the requirements below during the 24-hour pump test as required for the appropriate Class 1, 2, 3, or 4 permit.
 - (iii) The requirements for a salt water well permit shall be as follows:

- (A) The applicant must collect water quality samples at various times during a 24-hour pumping test at 100% of proposed pumping rate. The samples shall be submitted to a qualified laboratory for analysis of sodium, chloride and total dissolved solids. One sample each shall be collected:
 - (1) within 15 minutes after the start of pumping;
 - (2) within 15 minutes of the half-way point between the beginning and end of the pump test. Typically this will be 12 hours after the start of pumping; and
 - (3) within 15 minutes prior to the end of pumping.

Rule 3 Granting, Denying or Cancelling a Water Well Permit in a Ground Water Reservoir

- (a) An application for a permit or late permit for any water well in a Ground Water Reservoir shall be granted unless the District finds any of the following conditions:
 - (i) The location or operation of the proposed water well or other work would conflict with any regulations or controls adopted by the District or of other applicable laws of the State of Nebraska;
 - (ii) The proposed use would not be a beneficial use of water for domestic, agricultural, manufacturing, or industrial purposes;
 - (iii) The applicant refuses to cooperate with the District in ground water monitoring activities;
 - (iv) An applicant refuses to equip the well with a water well flow meter;
 - (v) In the case of a late permit only, that the applicant did not act in good faith by failing to obtain a timely permit;
 - (vi) For a Class 1 Permit:
 - (A) The total dissolved solids from a water quality sample taken at the end of a 24-hour pump test are 2500 parts per million or more, and an applicant does not choose to apply for a salt water well permit.
 - (B) An applicant shall have the option to apply for a salt water well permit prior to denial of the permit.
 - (vii) For a Class 2 Permit:
 - (A) The hydrogeologic analysis indicates potential short or long-term detrimental effects to the aquifer and/or if the drawdown as determined by an aquifer test would adversely affect a nearby well with a higher preference of use; and/or
 - (B) The total dissolved solids from a water quality sample taken at the end of a 24-hour pump test are 2500 parts per million or more, and the applicant does not choose to apply for a salt water well permit.

- (C) An applicant shall have the option to apply for a salt water well permit prior to denial of the permit.
- (viii) For a Salt Water Well Permit:
 - (A) The water quality samples indicate the potential for salt water intrusion.

Rule 4 Granting, Denying or Cancelling a Water Well Permit in the Remaining Area

- (a) An application for a permit or late permit for a water well in the Remaining Area shall be granted unless the District finds any of the following conditions:
 - (i) The location or operation of the proposed water well or other work would conflict with any regulations or controls adopted by the District or of other applicable laws of the State of Nebraska;
 - (ii) The proposed use would not be a beneficial use of water for domestic, agricultural, manufacturing, or industrial purposes;
 - (iii) An applicant refuses to cooperate with the District in ground water monitoring activities;
 - (iv) An applicant refuses to equip the well with a water well flow meter;
 - (v) In the case of a late permit only, that the applicant did not act in good faith by failing to obtain a timely permit;
 - (vi) For a Class 3 Permit:
 - (A) The total dissolved solids from a water quality sample taken at the end of a 24-hour pump test are 2500 parts per million or more, and the applicant does not choose to apply for a salt water well permit.
 - (B) An applicant shall have the option to apply for a salt water well permit prior to denial of the permit.
 - ~~(C) If the well is located within 600 feet of an existing registered well with a higher preference of use, except for a well owned by the applicant, and the aquifer test indicates the potential short or long term detrimental effects to the aquifer and/or if the drawdown as determined by an aquifer test would adversely affect a nearby well with higher preference of use.~~
 - (vii) For a Class 4 Permit:
 - (A) The total dissolved solids from a water quality sample taken at the end of a 24-hour pump test are 2500 parts per million or more, and the applicant does not choose to apply for a salt water well permit.
 - (B) An applicant shall have the option to apply for a salt water well permit prior to denial of the permit.
 - (C) The hydrogeologic analysis indicates potential short or long-term detrimental effects to the aquifer and/or if the drawdown as determined by an aquifer test would

adversely affect a nearby well with higher preference of use.

(viii) For a Salt Water Well Permit:

(A) The water quality samples indicate the potential for salt water intrusion.

Rule 5 Water Well Permit Fees and Required Information

- (a) The application shall be accompanied by a fifty dollar (\$50.00) filing fee payable to the District.
- (b) Any person who has failed or in the future fails to obtain a permit required by Rule 1 shall make application for a late permit on forms provided by the District and the application shall be accompanied by a two hundred fifty dollar (\$250.00) fee payable to the District, and shall contain the same information required in Rules 1 and 2.

Rule 6 No Right to Violate

- (a) The issuance by the District of a permit pursuant to *Neb. Rev. Stat. §46-736* or registration of a water well by the Director of the Department of Natural Resources pursuant to *Neb. Rev. Stat. §46-602* shall not vest in any person the right to violate any District rule, regulation, or control in effect on the date of issuance of the permit or the registration of the water well or violate any rule, regulation, or control properly adopted after such date.

Rule 7 Ground Water Monitoring

- (a) All applicants for a water well permit shall, as a condition of the permit, agree to cooperate with the District, at its request, in ground water monitoring activities to include water level measurements and water quality sampling.

Rule 8 Water Well Commence Construction and One-Year Completion

- (a) When any permit is approved pursuant to *Neb. Rev. Stat. §46-736* the applicant shall commence construction as soon as possible after the date of approval and shall complete the construction and equip the water well prior to the date specified in the conditions of approval, which date shall not be more than one year after the date of approval, unless it is clearly demonstrated in the application that one year is an insufficient period of time for such construction. If the applicant fails to complete the project under the terms of the permit, the District may cancel the permit. If the permit is cancelled, the applicant may apply for a new permit in accordance with these rules and regulations.

Rule 9 Replacement Water Well Permits

- (a) The permit for a replacement water well of any Class may be granted by the District without the hydrogeologic analysis and/or water quality sampling results if the replacement water well:

- (i) is located within 150 feet of the well to be replaced, as long as such location does not violate existing well spacing requirements;
 - (ii) is drilled to a depth similar to and is screened over an interval similar to the well being replaced;
 - (iii) is constructed and equipped such that the yield of the replacement well does not exceed the most current records of the yield of the well to be replaced; and
 - (iv) meets all other statutory and regulatory requirements for such a well.
- (b) For a replacement irrigation well, the District may require the hydrogeologic analysis and/or water quality sampling results for the permit if additional irrigated acres are requested.

Rule 10 Water Well Spacing

- (a) No new water well requiring a permit from the District shall be located within 600 feet of an existing registered water well with the same or higher preference of use, except for a water well owned by the applicant, or a properly permitted replacement well.
- (b) All additional spacing requirements as set forth in Nebraska statute and/or State regulations shall apply.

Section D Required Water Well Flow Meters

Rule 1 Water Well Flow Meters

- (a) The District shall require all new and replacement water wells requiring a water well permit to be equipped with a flow meter as a condition of the water well permit.
- (b) After the effective date of these regulations, any water well capable of pumping more than 50 gallons per minute shall be equipped with a water well flow meter prior to use. No water well capable of pumping more than 50 gallons per minute shall be pumped without first installing a water well flow meter.
- (c) The District may, in its sole discretion, require water flow meters on existing wells in the Remaining Area that pump 20 to 50 gallons per minute, on a case by case basis to manage ground water quality and/or quantity .
- (d) Any well owner and/or operator who has a well equipped with a water flow meter shall provide water usage information on the volume of water pumped to the District annually. Any well owner and/or operator is required to maintain each flow meter in working condition on each well pumped.

Section E Phases for Designated Areas of Management

- Rule 1 Phases for Designated Areas of Management
- (a) Phase I for quality and quantity has been designated District-wide and the District has established educational programs, ground water monitoring and best management practices. Phase II shall establish cost-share incentives to promote best management practices and require educational certification. Phase III shall establish regulatory requirements to address ground water quality and/or quantity degradation.

Section F Ground Water Monitoring Networks

- Rule 1 Monitoring Network in Ground Water Reservoirs
- (a) The District shall establish a ground water monitoring network for ground water quality and quantity.
- Rule 2 Monitoring Network in Remaining Area
- (a) The District shall establish a ground water monitoring network for ground water quality and quantity.
- Rule 3 Monitoring Network in Community Water System Protection Areas
- (a) The District shall establish a monitoring well network for ground water quality and quantity in Community Water System Protection Areas.

Section G Ground Water Phase Triggers

- Rule 1 Phase I Quality and Quantity
- (a) The entire geographic area of the District has been designated as a Phase I Quality and Quantity Ground Water Management Area.
- Rule 2 Ground Water Quality Phase Triggers in a Ground Water Reservoir
- (a) The Phase II trigger shall occur when at least 50% of the monitoring wells in the network are at or above 50% of the Maximum Contaminant Level for a contaminant for not less than two (2) consecutive years.
 - (b) The Phase III trigger shall occur when at least 80% of the monitoring wells in the network are at or above 80% of the Maximum Contaminant Level for a contaminant for not less than two (2) consecutive years.
- Rule 3 Ground Water Quantity Phase Triggers in a Ground Water Reservoir
- (a) The Phase II trigger shall occur when spring static ground water elevations in 30% of the monitoring network wells have declined from the established upper elevation of the saturated thickness to an elevation that represents greater than or equal to a percent reduction in the saturated thickness and has remained below that elevation for a not less than two (2) consecutive years.~~s. period.~~

- (b) The Phase III trigger shall occur when spring static water elevations in 50% of the monitoring network wells have declined from the established upper elevation of the saturated thickness to an elevation that represents greater than or equal to a percent reduction in the saturated thickness and has remained below that elevation for not less than two (2) consecutive years.~~period.~~
- (c) The percent reduction for each ground water reservoir and Phase is:

	Phase II (30% of the wells)	Phase III (50% of the wells)
Lower Salt Creek Ground Water Reservoir	15%	30%
Missouri River Ground Water Reservoir	8%	15%
Platte River Ground Water Reservoir	8%	15%
Crete-Princeton Ground Water Reservoir	8%	15%
Dwight-Valparaiso Ground Water Reservoir	8%	15%

Rule 4 Ground Water Quality Phase Triggers in the Remaining Area

- (a) The Phase II trigger shall occur when at least 50% of the monitoring wells in the network are at or above 50% of the Maximum Contaminant Level for a contaminant for not less than two (2) consecutive years.
- (b) The Phase III trigger shall be when at least 80% of the monitoring wells in the network are at or above 80% of the Maximum Contaminant Level for a contaminant for not less than two (2) consecutive years.

Rule 5 Ground Water Quantity Phase Triggers in the Remaining Area

- (a) The Phase II trigger shall occur when spring static ground water elevations in 30% of the monitoring network wells have declined from the established upper elevation of the saturated thickness to an elevation that represents greater than or equal to a 8% reduction in the saturated thickness and has remained below that elevation for not less than two consecutive years.~~period.~~
- (b) Phase III trigger shall occur when spring static water elevations in 50% of the monitoring network wells have declined from the established upper elevation of the saturated thickness to an elevation that represents greater than or equal to a 15% reduction in the saturated thickness and has remained below that elevation for not less than two consecutive years.~~period.~~

Rule 6 Ground Water Quality Phase Triggers in a Community Water System Protection Area

- (a) The Phase II trigger shall occur when at least 50% of the monitoring wells in the network are at or above 50% of the Maximum Contaminant Level for a contaminant for not less than two (2) consecutive years.
- (b) The Phase III trigger shall occur when at least 80% of the monitoring wells in the network are at or above 80% of the Maximum Contaminant Level for a contaminant for not less than two (2) consecutive years.

Rule 7 Ground Water Quantity Phase Triggers in a Community Water System Protection Area

- (a) The quantity Phase triggers for a Community Water System Protection Area shall occur in the same manner as the triggers of the ground water reservoir or remaining area in which it is located.

Rule 8 Ground Water Monitoring Results Reporting

- (a) Each year the District shall disseminate the results of the ground water monitoring activities to monitoring well cooperators, the Board of Directors, appropriate state and federal agencies and the general public.

Section H Salt Water Intrusion

Rule 1 Investigation

- (a) When any ground water well in the District shows evidence of salt water intrusion as described herein, the District shall conduct an investigation.

Rule 2 Investigation Procedures

- (a) Any investigation conducted as a result of salt water intrusion shall include but not be limited to the sampling of the well(s) to determine the concentration of total dissolved solids; collection of historical ground water quality data; pumping rates and ground water usage of wells in the vicinity; ground water level measurements; evaluation of well(s) stratigraphy, depth and pump installation.

Rule 3 Action Plan

- (a) Upon completion of the salt water intrusion investigation and a determination by the District that salt water intrusion is occurring, the District shall develop an action plan for the affected area. The action plan can provide for incentives to implement best management practices to stabilize and reduce the salt water intrusion. The action plan shall also include a trigger and time line based on the concentration of total dissolved solids in the effected wells to develop and implement rules and regulations.

Rule 4 Rules and Regulations

- (a) When the action plan trigger has occurred, the District shall develop and implement rules and regulations to require well owners to operate their wells in such a manner as to limit or reduce the salt water intrusion.

Section I Ground Water Verification Studies for Management Phase Determination

Rule 1 Ground Water Quality

- (a) When the District's monitoring network in a designated area of management shows that the trigger for either Phase II or Phase III has occurred, the District shall conduct a two (2) year verification study to

determine if non-point source contamination has occurred and/or is occurring.

Section J Ground Water Management Phase Actions

- Rule 1 Annual Review for All Phases of Management Actions
- (a) The District shall prepare for the Board of Directors annually, by March 1st, a report reviewing the Ground Water Management actions, even though a Phase has not been triggered.
- Rule 2 Phase I Ground Water Management Actions.
- (a) The District shall require all lands irrigated with ground water to be certified. After the effective date of these regulations, any lands irrigated with ground water shall first be certified by the District prior to those lands being irrigated with ground water. The number of acres of lands certified as being irrigated with ground water shall correspond with the number of irrigated acres recorded by county assessors. Lands not certified as irrigated with ground water shall not be irrigated with ground water without being first certified by the District.
 - (i) If a landowner wishes to decertify irrigated acres, he or she shall provide evidence for such decertification by completing a form supplied by the District.
 - (b) The District shall establish incentive programs to implement best management practices for ground water quality and quantity.
 - (c) The District shall establish programs to educate all District constituents on ground water conservation, management and utilization.
 - (d) The District shall develop, in conjunction with the Department of Natural Resources, integrated management plans for any lands found by the Department to be hydrologically connected by surface water and ground water under *Neb. Rev. Stat. §46-712* if not fully appropriated or under *Neb. Rev. Stat. §§46-713 and 46-715* if fully appropriated.
- Rule 3 Phase II Ground Water Management Actions
- (a) Upon the Board of Directors designation of a Phase II area, the District shall establish an advisory group of stake holders from within the Phase II area to assist the District in developing Phase II rules and regulations, incentives to adopt best management practices and educational certification requirements.
- Rule 4 Phase III Ground Water Management Actions
- (a) Advisory Group. Upon the Board of Directors designation of a Phase III area, the District shall establish an advisory group of stake holders from within the Phase III area to assist the District in developing Phase III rules and regulations. The rules and regulations shall require the implementation of best management practices, and shall require landowner reports relating to the contaminant and/or ground water.

Section K Phase II Rules and Regulations

**Section K(1) Ground Water Quality Management Area Phase II
Lower Salt Creek Ground Water Reservoir, and the Davey, Hickman, Otoe
County Rural Water District #3/Weeping Water, Pleasant Dale, Union and
Valparaiso Community Water System Protection Areas**

Rule 1 Determination and Designation of Phase II.

- (a) Pursuant to these rules and regulations, the District has determined that the criteria have been met to designate the following areas of management as Phase II Ground Water Quality Management Areas for nitrate-nitrogen, and therefore designates Phase II Ground Water Quality Management Areas on the following land, to wit (see maps for each area in Appendix A):

Lower Salt Creek Ground Water Reservoir

Lancaster County, Nebraska:

Township 10 North, Range 7 East,
Sections 4, 5, and 6

Township 11 North, Range 7 East,
Sections 13, 14, 23, 24, 25, 26, 27, 32, 33, 34, and 35;

Township 11 North, Range 8 East,
Sections 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 30;

Township 12 North, Range 8 East,
Section 36;

Cass County, Nebraska:

Township 11 North, Range 9 East,
Sections 6 and 7;

Township 12 North, Range 9 East,
Sections 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, and 32;

Saunders County, Nebraska:

Township 12 North, Range 9 East,
Sections 1, 2, 3, 4, 5, 7, 8, 9, 10, and 11.

Davey Community Water System Protection Area

Lancaster County, Nebraska

Township 12 North, Range 6 East:

Section 24: East $\frac{1}{2}$ of the Southwest $\frac{1}{4}$; West $\frac{1}{2}$ of the Southeast $\frac{1}{4}$; and
the Southeast $\frac{1}{4}$ of the Southeast $\frac{1}{4}$

Section 25: North $\frac{1}{2}$ of the Northeast $\frac{1}{4}$

Township 12 North, Range 7 East

Section 19: South $\frac{1}{2}$ of the Southwest $\frac{1}{4}$

Section 30: North $\frac{1}{2}$ of the Northwest $\frac{1}{4}$

Hickman Community Water System Protection Area

Lancaster County, Nebraska

Township 7 North, Range 7 East:

Section 9: Southeast $\frac{1}{4}$;

Section 10: South $\frac{1}{2}$;

Section 15: North $\frac{1}{2}$ and Southwest $\frac{1}{4}$; and

Section 16.

Otoe County Rural Water District #3/Weeping Water Community Water System Protection Area

Cass County, Nebraska:

Township 11 North, Range 11 East:

Section 1: South $\frac{1}{2}$ of the Southwest $\frac{1}{4}$;

Section 2: South $\frac{1}{2}$ of the Southeast $\frac{1}{4}$;

Section 11: Northeast $\frac{1}{4}$ and South $\frac{1}{2}$;

Section 12: Northwest $\frac{1}{4}$ and South $\frac{1}{2}$;

Section 13: North $\frac{1}{2}$ and North $\frac{1}{2}$ of the South $\frac{1}{2}$;

Section 14: North $\frac{1}{2}$ and North $\frac{1}{2}$ of the South $\frac{1}{2}$;

Section 15: Northeast $\frac{1}{4}$; North $\frac{1}{2}$ of the Southeast $\frac{1}{4}$; and

The portion of the South $\frac{1}{2}$ of the Southeast $\frac{1}{4}$ within the Village of Manley as of January 1, 2011;

Township 11 North, Range 12 East:

Section 7: South $\frac{1}{2}$ of the Southwest $\frac{1}{4}$; and

Section 18: Northwest $\frac{1}{4}$ and North $\frac{1}{2}$ of the Southwest $\frac{1}{4}$.

Pleasant Dale Community Water System Protection Area

Seward County, Nebraska:

Township 9 North, Range 4 East:

Section 2: The portion of the North $\frac{1}{2}$ north of the Burlington-Northern Santa Fe railroad tracks;

Section 3: Northeast $\frac{1}{4}$ and the portion of the Southeast $\frac{1}{4}$ north of the Burlington-Northern Santa Fe railroad tracks;

Township 10 North, Range 4 East:

Section 34; and

Section 35: South $\frac{1}{2}$; Northwest $\frac{1}{4}$; South $\frac{1}{2}$ of the Northeast $\frac{1}{4}$; and West $\frac{1}{2}$ of the North $\frac{1}{2}$ of the Northeast $\frac{1}{4}$.

Union Community Water System Protection Area

Cass County, Nebraska:

Township 10 North, Range 13 East:

Section 22: Southeast $\frac{1}{4}$; and the portion of the South $\frac{1}{2}$ of the Northeast $\frac{1}{4}$ south of Nehawka Road;

Section 23: Southwest ¼; and that portion of the Southwest ¼ of the Southeast ¼ within the Village of Union as of November 1, 2013;
Section 25: Southwest ¼ of the Northwest ¼; and the Northwest ¼ of the Southwest ¼;
Section 26: North ½; Southeast ¼; and the portion of the Southwest ¼ north of Weeping Water Creek; and
Section 27: Northeast ¼.

Valparaiso Community Water System Protection Area

Saunders County, Nebraska:

Township 13 North, Range 5 East:

Sections 14, 15, 21, 22, 23, and the southeast quarter of Section 16.

- Rule 2 Continue Phase I Rules.
- (a) The District shall continue to enforce all rules set forth in Ground Water Management Area Phase I, with respect to the land designated in these rules and regulations.
- Rule 3 Establishment of Cost-Share Programs.
- (a) The District will establish cost-share programs to implement Best Management Practices (BMP's) on the land designated in Rule 1 above, which may include, but is not limited to, irrigation scheduling, proper timing and application of nitrogen fertilizers, proper chemigation techniques, crop rotation, residue management, irrigation surge and pivot conversions, water efficiency techniques, ground water nitrate analysis kits and contaminant source inventories. All guidelines for BMP cost-share programs offered in the areas specified in these rules and regulations shall be made available by the District.
- (b) The District may also approve cost-share assistance for land in neighboring NRDs as long as the land is in a LPSNRD designated CWSPA, the landowner is certified as per these rules and regulations, and there is a jointly approved Interlocal Agreement allowing cost-share to be paid.
- Rule 4 Required Certification Programs.
- (a) The District requires educational certification for persons engaged in the use, application and storage of nitrogen fertilizers. Persons required to complete the nitrogen management certification are those that make the nitrogen management decisions on the land to be fertilized to include but not limited to: operators of agricultural lands who fertilize 20 acres or more; farm managers; commercial applicators; operators of lawn service companies; operators of golf courses; operators of sod farms; and anyone engaged in the application of manure/bio-solids/bio-liquids on five acres or more. The District will notify landowners when person(s) have

completed nitrogen management certification. Nitrogen management certification can be obtained in one of four ways:

- 1) Attend a nitrogen management certification class in person,
- 2) Complete a Nebraska Association of Resources Districts nitrogen management certification course online,
- 3) Complete a nitrogen management certification home study course and open book exam, or
- 4) Obtain certification in nitrogen management from an adjoining natural resources district. The operator shall provide proof of certification to the District.

Certification classes will be scheduled each year when necessary from January through March. Certification will be required once every four years. The District will contact each certified person one year prior to the certification expiration date to verify if they are required to be re-certified.

Rule 5 Annual Review.

- (a) The District will conduct an annual review no later than January 31 of each calendar year to assess Phase II actions and effectiveness on the land designated in Rule 1 above, including but not limited to the nitrogen management certification program and the BMP cost-share programs. After review by the appropriate subcommittees and/or advisory groups, the annual review will then be reported to the Board of Directors no later than March 1 of each calendar year.

Rule 6 Suspension of Phase II.

- (a) When the District's ground water quality monitoring data indicates that levels of a contaminant have dropped below the Phase II trigger for a period of not less than three (3) consecutive years, the District may choose to suspend Phase II requirements. In making such a decision, the District will consider all available information, including its ground water quality monitoring data, vadose zone data, land use information, and all other pertinent information.
- (b) Upon the District's determination that levels of a contaminant have dropped below the Phase II trigger, the District shall:
 - (i) suspend the requirement for nitrogen certification in that Phase II area until such time as the District should determine that Phase II trigger levels have again been exceeded;
 - (ii) notify all persons within that Phase II area who are required to obtain/maintain nitrogen certification of the District's determination that levels of a contaminant have dropped below the Phase II trigger and that nitrogen certification requirements have been suspended;
 - (iii) continue to offer cost-sharing on approved Best Management Practices; and

- (iv) continue to offer nitrogen certification training, but on a rotating, voluntary basis. Persons who had been required to obtain/maintain nitrogen certification shall be notified of such voluntary training.

Section L Phase III Rules and Regulations

**Section L(1) Ground Water Quality Management Area Phase III
Elmwood Community Water System Protection Area**

Rule 1 Determination and Designation of Phase III

- (a) Pursuant to Rule 4, Section I, the District has determined that the criteria have been met to designate the Elmwood Community Water System Protection Area a Phase III Ground Water Quality Management Area for nitrate-nitrogen and hereby designates a Phase III Ground Water Management Area on the following land, to wit (see map in Appendix A):

Elmwood Community Water System Protection Area

Cass County, Nebraska:

Township 10 North, Range 10 East:

Section 8: Southeast $\frac{1}{4}$

Section 9: South $\frac{1}{2}$

Section 16: The portion of the Northeast $\frac{1}{4}$ north of the MoPac Trail; Northwest $\frac{1}{4}$; and the portion of the Southwest $\frac{1}{4}$ north of the MoPac Trail

Section 17: Northeast $\frac{1}{4}$ and the portion of the Southeast $\frac{1}{4}$ north of the MoPac Trail.

Rule 2 Continue Phase I and II Rules.

- (a) The District will continue to enforce all rules set forth in Section I, Ground Water Management Area Phases I and II.

Rule 3 Required Certification Programs.

- (a) The District requires educational certification for persons engaged in the use, application and storage of nitrogen fertilizers. Persons required to complete the nitrogen management certification are those that make the nitrogen management decisions on the land to be fertilized to include but not limited to: operators of agricultural lands who fertilize 20 acres or more; farm managers; commercial applicators; operators of lawn service companies; operators of golf courses; operators of sod farms; and anyone engaged in the application of manure/bio-solids/bio-liquids on five acres or more. The District will notify landowners when person(s) have completed nitrogen management certification. Nitrogen management certification can be obtained in one of four ways:
 - 1) Attend a nitrogen management certification class in person,

- 2) Complete a Nebraska Association of Resources Districts nitrogen management certification course online,
- 3) Complete a nitrogen management certification home study course and open book exam, or
- 4) Obtain certification in nitrogen management from an adjoining natural resources district. The operator shall provide proof of certification to the District.

Certification classes will be scheduled each year when necessary from January through March. Certification will be required once every four years. The District will contact each certified person one year prior to the certification expiration date to verify if they are required to be re-certified.

Rule 4 Annual Review.

- (a) The District shall conduct an annual review no later than January 31 of each calendar year to assess Phase III actions and effectiveness on the land designated in Rule 1 above, including but not limited to the nitrogen management certification program and the BMP cost-share programs. After review by the appropriate subcommittees and/or advisory groups, the annual review will then be reported to the Board of Directors no later than March 1 of each calendar year.

Rule 5

Except as otherwise provided by Rule 6 below, any landowner, operator, farm manager or applicator who intends to apply nitrogen on any crop is required to conduct soil sampling each year prior to planting such crop. One soil sample shall be collected for each field between 10 and 40 acres, or each 40 acre area within a larger field. Soil samples for each 40 acres shall consist of a minimum of the following:

- One shallow composite sample consisting of 10-15 individual samples randomly collected from a depth of 0-8" and thoroughly mixed; and
- One deep composite sample consisting of 6-8 individual samples randomly collected from a depth of 8-30" and thoroughly mixed. NOTE: The University of Nebraska recommends that deep samples be taken to a depth of 36".

Rule 6

If any landowner, operator, farm manager or applicator applies nitrogen only as a starter, then the soil sampling described by Rule 5 above is not required.

Rule 7

Nitrogen fertilizer shall only be applied after the results of the soil sampling has been duly considered by the landowner, operator, farm manager or applicator and in no event shall such application exceed the crop nitrogen recommendations as determined according to the most current University of Nebraska formula.

Rule 8

Landowners, operators, farm managers or applicators required to conduct soil sampling shall report to the District the results of soil sampling and the amount of nitrogen applied to the field(s) sampled during any calendar year by the end of that calendar year.

- Rule 9 Landowners, operators, farm managers or applicators are prohibited from applying nitrogen fertilizer between harvest and March 1 of any crop year.
- Rule 10 The District encourages landowners of abandoned feedlots to identify and implement practices that will increase the uptake of existing nitrogen in the soil below the normal crop root zone and will consider developing programs to provide assistance.
- Rule 11 The District encourages the establishment of grass or other buffer zones surrounding all public or community water wells and will consider developing programs to provide assistance.
- Rule 12 Suspension of Phase III
- (a) When the District's ground water quality monitoring data indicates that levels of a contaminant have dropped below the Phase III trigger for a period of not less than three (3) consecutive years, the District may choose to suspend Phase III requirements and revert to Phase II programs. In making such a decision, the District will consider all available information, including its ground water quality monitoring data, vadose zone data, land use information, and all other pertinent information.
- (b) Upon the District's determination that levels of a contaminant have dropped below the Phase III trigger, the District shall:
- (i) suspend all regulatory requirements enacted for Phase III;
 - (ii) develop and adopt Phase II regulations for that area consistent with other Phase II areas;
 - (ii) notify all persons within that Phase III area who are required to comply with Phase III regulatory provisions that contaminant levels have dropped below the Phase III trigger, and that the area shall revert to Phase II requirements (i.e. nitrogen certification training only); and
 - (iii) offer cost-sharing on approved Best Management Practices.

Section M Improper Irrigation Runoff

- Rule 1 The District by implementing these rules and regulations intends to conserve ground water supplies and prevent the inefficient or improper runoff of ground water used for irrigation. Each person who uses ground water for irrigation within the boundaries of the District shall take action to prevent or control the inefficient or improper runoff of ground water used for irrigation. These rules and regulations are not intended to prevent the *De Minimis* surface runoff of water derived from ground water irrigation, onto the land of another person.

Rule 2 The District has no jurisdiction over the spray of ground water from an irrigation system directly onto another person's land.

Rule 3 Prevention or Control of Inefficient or Improper Runoff

- (a) Each person who uses ground water for irrigation shall control or prevent the inefficient or improper runoff of such water by implementing structural or non-structural procedures, measures, or combinations thereof designed to prevent or control inefficient or improper irrigation runoff, including but not limited to:
- (i) Limitation of ground water utilized so that structural measures are not necessary to prevent or control such inefficient and improper irrigation runoff and the utilization of proper operation and management of the irrigation system, including any reuse or other control measures installed;
 - (ii) Construction of a runoff collection and/or retention system such as a sump or dugout, together with a reuse pump and/or ditch to return the water to the same or other field for beneficial use;
 - (iii) Blocking of rows or field borders to contain irrigation water within the property where the ground water is pumped;
 - (iv) The execution and performance of an agreement between two or more landowners, including tenants if any, and approved by the District for utilization of any inefficient and improper irrigation runoff; and
 - (v) Any other procedure or measure approved by the District.

Rule 4 Irrigation Runoff Utilization

- (a) Any landowner, including a tenant if any, whose inefficient and improper irrigation runoff is capable of being captured and utilized by another landowner, including a tenant if any, in a manner which will prevent or control the inefficient or improper irrigation runoff may enter into an agreement with such landowner and tenant if any, with the consent and approval of the District. The agreement may be terminated at any time by either party or by the District whenever it is determined that such agreement no longer prevents or controls the inefficient or improper irrigation runoff. If the District terminates the agreement, written notice shall be provided to all parties. If one of the parties to the agreement causes the termination, written notice shall be provided to all other parties and to the District.

Section N Transfer of Ground Water

Rule 1 Transfer of Ground Water

- (a) Any person who withdraws ground water for any purpose pursuant to a ground water remediation plan as required under the Environmental Protection Act, including the providing of water for domestic purposes, from aquifers located within the State of Nebraska may transfer the use of

the ground water off the overlying land if the ground water is put to a reasonable and beneficial use within the State of Nebraska and further complies with the requirements of *Neb. Rev. Stat. §46-691*. Ground water transfers will be allowed for domestic or municipal uses. Ground water transfers for environmental, recreational, agricultural and industrial uses from a ground water reservoir to lands outside of a ground water reservoir are prohibited.

Section O Enforcement Procedures for the Nebraska Ground Water Management and Protection Act

Rule 1 General

- (a) The District shall enforce the provisions of The Nebraska Ground Water Management and Protection Act and all rules and regulations adopted pursuant thereto by the issuance of cease and desist orders in accordance with the procedure hereinafter specified and by bringing appropriate actions in the District court of the county in which any violations occur for enforcement of such orders. Cease and desist orders may be issued for the following reasons:
 - (i) To enforce any of the provisions of the act or of orders or permits issued pursuant to the Act;
 - (ii) To initiate suits to enforce the provisions of orders issued pursuant to the Act; and
 - (iii) To restrain the construction of illegal water wells or the withdrawal or use of water from illegal wells.

Rule 2 Any person who violates any of the provisions of *Neb. Rev. Stat. §§46-721 to 46-734, and §46-748* for which a penalty is not otherwise provided, other than the Director of Natural Resources, or the Department of Natural Resources, shall be subject to a civil penalty of not more than five hundred dollars. Each day of continued violation shall constitute a separate offense.

Rule 3 Complaints

- (a) Any person who owns or leases land within the boundaries of the District, any person who resides within the District, any non-resident person who can show that the actions of any person within the District directly affects him or her, or the Board on its own motion may file a written complaint against a person alleging a violation of these rules and regulations or that such person is constructing, operating or possessing an illegal water well.
- (b) Complaints shall be filed at the office of the District, 3125 Portia Street, at Lincoln, Lancaster County, Nebraska, on complaint forms prepared by said District which shall be available at such office or at such other office or offices from time to time the Board of Directors shall designate.

Rule 4 Investigations

- (a) The alleged violation shall be investigated by a person authorized by the Board to conduct such investigations within five (5) days following the day of the filing of the complaint exclusive of Saturday, Sundays, and legal holidays. A copy of the complaint shall be delivered to the alleged violator in person, or at his or her place or residence, or be sent by certified mail prior to the investigation.
- (b) Upon completion of the investigation, the investigator shall file a report of his or her findings in the District office and shall deliver a copy of said report to the alleged violator and to the complainant, if other than the Board, in person, or at their place of residence, or shall transmit the same by certified mail.

Rule 5 Submittal of Investigation Report and Subcommittee Consideration Alleging Violation and Alleged Violators Alternatives

- (a) A Subcommittee consisting of District Board members shall assist the District staff in administering these rules and regulations and make a determination as to whether a probable violation of these rules and regulations has occurred. Such determination shall be based upon the investigator's report completed pursuant to these rules and regulations and an on-site inspection by the Subcommittee, if warranted. The Subcommittee may also request that both the alleged violator and the complainant appear before them to discuss the complaint. The Subcommittee shall report its findings to the Board, the alleged violator and the complainant with a recommendation of further actions as follows:
 - (i) If the Subcommittee determines that no violation of these rules and regulations has occurred, it shall recommend and the Board may dismiss the complaint. The complainant shall be given an opportunity to appear before the entire Board before the Board acts on the recommendation;
 - (ii) If the Subcommittee determines that a probable violation of these rules and regulations has occurred, the alleged violator shall be informed of its findings by letter delivered in person or sent by registered or certified mail. The letter shall specify the options available to the alleged violator, including:
 - (A) Agree with and accept as true and correct the Subcommittee's findings that the alleged violation has in fact occurred or is occurring, consent to cease and desist from continuing or allowing the reoccurrence of such violation, and submit a plan which shall provide for the discontinuance and/or non-reoccurrence of the violation. If appropriate, such plan shall include the identification and description of all proposed procedures or measure to prevent, control, or abate improper ground water irrigation runoff. The alleged violator shall agree to implement and abide by the terms of such plan. If such plan involves structural measures, the alleged violator shall

simultaneously submit a schedule of compliance on forms provided by the District. The schedule of compliance shall provide for the submittal of a work order within ten days following approval of the plan in the manner hereinafter provided; or

- (B) Reject the findings of the Subcommittee and request that a formal hearing before the Board be scheduled and conducted in accordance with the rules and regulations of the District. The alleged violator shall be granted no less than seven (7) days (excluding Saturdays, Sundays and legal holidays) from the date that said report and notice is provided to him or her to respond and to indicate any actions intended.

Rule 6

Action Subsequent to Person's Consent to Cease and Desist

- (a) When an alleged violator has been notified in accordance with Rule 4 of this section and has consented to cease and desist in accordance therewith, a District compliance officer shall review the complaint, the investigator's report, the consent order and any plan for discontinuance and schedule of compliance to determine whether the actions agreed to by the person will, when applied, bring such user into compliance with these rules and regulations, prevent construction, operation or possession of an illegal water well, or prevent improper ground well irrigation runoff. If the compliance officer determines that the proposed actions of the person are adequate and will prevent future non-compliance within a reasonable timer period, he or she shall approve such action or plan and approve the schedule of compliance. If the District compliance officer determines that implementation of the proposed plan and/or schedule of compliance would be inadequate to prevent improper ground water irrigation runoff, he or she shall indicate the additions or changes he or she deems necessary. There after the person shall have five (5) days to consent to such additions or changes in the event of which the compliance officer shall approve the plan and/or schedule of compliance as amended, or, the person may refuse to agree to such additions or changes and request the scheduling of a formal hearing on the issues, which shall be held no less than ten days from the date of request. The original actions under these rules and regulations and the documents filed in accordance therewith by the person shall not be considered at such hearing unless introduced into record by that person. The complainant shall be notified of any such action by the District compliance officer approving the plan and/or schedule of compliance submitted by the person within three (3) days following such approval. If no objections to the action taken are received from the complainant, other than the Board itself, or from any members of the Board if the Board is the complainant within five (5) days after such notification, the proposed plan and/or schedule of compliance shall be considered as having received final approval, if any such complainant or

Board member objects to the approval granted by the compliance officer within five (5) days after notification, a formal hearing before the Board shall be scheduled not less than ten (10) days following notification to all affected parties and shall be conducted in the same manner as if the person had requested the hearing in accordance with these rules and regulations..

- Rule 7 Board Action Subsequent to Person's Request for Hearing
- (a) At a meeting of the Board prior to which an alleged violator, complainant, or Board member has, in accordance with these rules and regulations, requested a formal hearing, the Board shall hold such formal hearing. If, following a hearing, the Board determines that such person is violating or has violated these rules and regulations or is constructing or operating an illegal water well, it shall adopt and transmit to such person, in person or by certified mail, an order directing such user to immediately cease and desist from all activities determined by the Board to be violations and specifying any actions deemed necessary and appropriate by the Board.
- Rule 8 Board Action if Person Fails to Respond or Appear
- (a) At a meeting of the Board prior to which an alleged violator has been notified in accordance with these rules and regulations, and such alleged violator has failed to respond there under, or has failed to appear at any properly scheduled formal hearing, the Board shall review the complaint and the investigator's report as well as any other pertinent information and issue such order or orders in accordance with these rules and regulations as are deemed appropriate.
- Rule 9 Person's Actions Following Issuance of Cease and Desist Order
- (a) Any person against which a cease and desist order has been issued in accordance with these rules and regulations may within seven (7) days following receipt of such order, submit a schedule of compliance. Any such schedule of compliance requested shall be accompanied by a work order on forms provided by the District and the schedule of compliance and the work order shall be approved by the District and the schedule of compliance and the work order shall be approved by the District compliance officer if such request is in accordance with any and all guidance given by the Board at the time of issuance of the order.
- Rule 10 Board Authorization to Initiate Court Action
- (a) The Board shall, at the time it takes any action in accordance with these rules and regulations, designate a representative of the Board to initiate appropriate legal actions in the District Court of the County of which the violation has occurred ten days after the notice to the person affected by issuance of any orders of the District which orders have not been complied with nor a schedule of compliance approved. In addition, if any schedule of compliance or work order approved by the Board or the District compliance officer is not initiated as agreed to or is not being properly and

timely carried out, unless due to circumstances beyond the control of the person, the Board shall authorize immediate initiation of appropriate litigation.

- Rule 11 Cease and Desist Order
- (a) Any violation of a cease and desist order issued by the Lower Platte South Natural Resources District pursuant to *Neb. Rev. Stat. §46-656.08* shall be a Class IV misdemeanor.

Section P Request for Variance

- Rule 1 Information Required
- (a) Name, address, phone number, e-mail address;
 - (b) State the section and rule pertaining to the variance request;
 - (c) Aerial photo showing location of the variance request;
 - (d) State why the variance is needed;
 - (e) Map showing the name and address of all adjoining landowners;
 - (f) A signed acknowledgement of notice by the adjoining landowners and water well owners;
 - (g) Any other information the person making the request deems relevant; and
 - (h) Any other information the District deems necessary.
- Rule 2 Fee For Variance Request
- (a) Any applicant for a variance shall deliver to the District a non-refundable fee of \$500.00 for each variance request.
- Rule 3 Appearance Before the Directors of the Lower Platte South NRD
- (a) Variance applicant may be required to appear before the Water Resources Subcommittee to explain the variance request.
 - (b) Variance applicant may be required to appear before the Board of Directors.
- Rule 4 Consideration of the Variance Request
- (a) All variance requests will be considered on a case by case basis.
 - (b) All variance requests shall be acted upon by the Board of Directors.
- Rule 5 Variance Terms and Conditions
- (a) The Board of Directors may place terms and conditions on the variance that the applicant must agree to by signing an affidavit which shall be recorded with the Register of Deeds.
 - (b) If such terms and conditions are required by the Board, the applicant must provide the District with documentation that the affidavit was recorded within thirty (30) days of the granting of the variance.

Section Q Hydrologically Connected Area

Rule 1 Designation of Hydrologically Connected Areas of Ground Water and Surface Water

- (a) The Nebraska Department of Natural Resources has determined that ground water and surface water in portions of Lancaster, Saunders, and Cass Counties in the Lower Platte South Natural Resources District are hydrologically connected. The District hereby adopts the following as a Hydrologically Connected Area (HCA) for the purpose of managing ground water and surface water (see map in Appendix A):

Lancaster County: Township 11 North, Range 7 East, Section 24; Township 11 North, Range 8 East, Sections 1, 2, 3, 9, 10, 16, 17, 18, 19, and 20; and Township 12 North, Range 8 East, Sections 25, 35, and 36.

Saunders County: Township 12 North, Range 9 East, Sections 2, 3, 4, 8, 9, and 10; Township 13 North, Range 9 East, Section 36; and Township 13 North, Range 10 East, Sections 31 and 32.

Cass County: Township 12 North, Range 9 East, Sections 15, 16, 17, 19, 20, 21, 22, 29, 30, and 31; Township 12 North, Range 10 East, Sections 4, 5, 9, 10, 11, 12, 13, 14, and 24; Township 12 North, Range 11 East, Sections 1, 11, 12, 14, 15, 16, 18, 19, 20, and 21; Township 12 North, Range 12 East, Section 6; Township 12 North, Range 13 East, Sections 1, 2, 3, 4, and 12; Township 13 North, Range 12 East, Sections 25, 26, 27, 28, 31, 32, 33, 34, 35, and 36; Township 13 North, Range 13 East, Sections 28, 30, 31, 32, 33, 34, 35, and 36; and Township 13 North, Range 14 East, Section 31.

Rule 2 District to Maintain Status

- (a) The District intends to maintain the status of not fully appropriated as determined by the Nebraska Department of Natural Resources by adopting and implementing the rules and regulations herein.

Rule 3 Certification of Historically Irrigated Acres

- (a) Within the HCA, only acres that are certified by the District as historically irrigated or approved for expansion may be irrigated.
- (b) The District has completed certification of acres historically irrigated with ground water within the Hydrologically Connected Area, and determined that 2,964 acres should be so certified.

Rule 4 Expansion of Irrigated Acres

- (a) The District shall allow for the **annual** expansion of irrigated acres ~~not to exceed 20% of the 2,964 irrigated acres in the HCA that have been certified by the District as historical, which means that the District will allow a maximum annual expansion of 593 acres within the HCA. in consideration of the allowable new depletions in each five-year increment~~

as agreed upon by the Lower Platte River Basin Water Management Plan Coalition.

- (b) To expand irrigated acres, landowners shall apply to the District on forms provided by the District.
- (c) The District shall consider each application and either approve or deny the application based on the following criteria and considerations:
 - (i) Whether or not the land is suitable for irrigation of the crops grown using criteria established by the U.S. Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS);
 - (ii) Whether or not the proposed expansion is considered to be “sodbusting” as defined by USDA/NRCS;
 - (iii) Whether or not the landowner is implementing practices designed to conserve water such as converting from furrow to center pivot irrigation or other practices designed to conserve water;
 - (iv) Whether or not the irrigation expansion utilizes an existing ground water source;
 - (v) Whether or not the ground water source is proposed to be withdrawn from an illegal water well; and
 - (vi) Any other criteria and considerations deemed relevant by the District.
- (d) Irrigation of land outside the HCA by a new well in the HCA is prohibited.
- (e) As of the effective date of these rules and regulations, if an existing well within the HCA is irrigating land outside the HCA, the District will allow that land to continue to be irrigated, but no expansion of irrigated acres will be allowed outside the HCA.

Rule 5 Transfer of Certified Irrigated Acres Designated by the District Within the Hydrologically Connected Area

- (a) Transfer of certified irrigated acres designated by the District within the HCA will be allowed only if:
 - (i) The transfer is acre-for-acre or less than acre-for-acre;
 - (ii) The land to which the acres are transferred is suitable for irrigation of the crops grown using criteria established by the USDA/NRCS;
 - (iii) The transfer is not to a furrow irrigation system; and
 - (iv) The requirements of LB477, 2009 Legislative Session, are followed.
- (b) If the transfer is less than acre-for-acre, the District reserves the right to claim credit for all ground water not used as a result of the transfer.

Rule 6 District to Claim Credit for Difference

- (a) Beginning with the effective date of these rules and regulations, the District reserves the right to claim credit for and set aside for future use the difference between:

- (i) Ground water used on the number of expanded irrigated acres approved by the District; and
- (ii) Ground water that would have been used on 20% of the acres located in the HCA and certified by the District as historical.

Rule 7 New Permits for Water Wells Located Within the Hydrologically Connected Area

- (a) The District will consider applications for new water well permits in the HCA if the applicants meet all conditions for water well permits set forth in Section C of the District's Ground Water Rules and Regulations as well as the conditions in these rules and regulations.
- (b) In addition to the reasons set forth in Section C of the District's Ground Water Rules and Regulations, the District shall deny any new water well permits in the HCA for:
 - (i) Furrow irrigation;
 - (ii) Irrigation of land determined by the District to be not suitable for irrigation of the crops grown using criteria established by the USDA/NRCS;
 - (iii) Irrigation of lands outside the HCA; or
 - ~~(iv) Any annual expansion of irrigated acres greater than 20% of the irrigated acres certified by the District as historical in the HCA.~~
- (c) Water well permits are not required for:
 - (i) Domestic wells pumping 50 gallons per minute or less;
 - (ii) Wells used to water range livestock and pumping 50 gallons per minute or less;
 - (iii) Test holes;
 - (iv) Dewatering wells with an intended use of 90 days or less;
 - (v) Monitoring or observation wells;
 - (vi) Wells designed for remediation of ground water contamination;
 - (vii) Surface water uses;
 - (viii) Wells for emergency human consumption or public health and safety; or
 - (ix) Wells permitted by the Nebraska Department of Natural Resources under the Municipal and Rural Domestic Transfers Permit Act prior to the stay imposed by the Nebraska Department of Natural Resources.

Rule 8 District to Claim Credit for Ground Water Pumped from Outside Hydrologically Connected Area

- (a) The District reserves the right to claim credit for future use the discharge from all municipal, community, or industrial water systems if such systems obtain their water from wells located outside the HCA and such discharge is returned to the Platte River Basin.

Rule 9 Enforcement and Variance

- (a) The District will enforce the rules and regulations adopted herein pursuant to and in accordance with the Enforcement Procedures provided in the

Ground Water Rules and Regulations of the District, as may from time to time be amended.

- (b) Any requests for a variance from these rules and regulations will be governed by the Ground Water Rules and Regulations of the District, as may from time to time be amended.
- (c) If a landowner is not satisfied with any determination made pursuant to the rules and regulations adopted herein, he or she may request a formal hearing before the Board as provided in these rules and regulations.

Section R Special Management Area

Rule 1 The District may designate a Special Management Area for the protection of ground water quantity in a portion or portions of the District where additional controls are necessary for the protection of ground water quantity in that area. Such additional controls are in the public interest and for the promotion of the health and welfare of the District because they will minimize pumping conflicts and protect ground water supplies for all beneficial uses.

Rule 2 Dwight-Valparaiso-Brainard (DVB) Special Management Area.
(a) The District hereby designates an area, which includes the Dwight-Valparaiso Ground Water Reservoir and portions of the Remaining Area, as a Special Management Area for additional ground water quantity controls to address short term problems, in response to the situation where the existing ground water quantity Phase Triggers for this Ground Water Reservoir are not responsive. This area includes the following land, to wit (see map in Appendix A):

Butler County, Nebraska

Township 14 North, Range 4 East
Sections: 1-5, 8-18, 20-29 and 32-36.

Township 13 North, Range 4 East
Sections: 1-5, 8-18, 20-30, and 32-36.

Saunders County, Nebraska

Township 14 North, Range 5 East
Sections: 4-9, 16-21, and 28-33.

Township 13 North, Range 5 East
Sections: 1-36.

Township 13 North, Range 6 East
Sections: 3-11, 14-23, and 26-35.

Seward County, Nebraska

Township 12 North, Range 4 East

Sections: 1-3.

Lancaster County, Nebraska
Township 12 North, Range 5 East
Sections: 1-6, and 10-12.

- (b) No New Irrigated Acres.
- (i) There shall be no new ground water irrigated acres from any water well located in the Special Management Area beyond those acres certified by the District on March 1, 2014 as irrigated acres by ground water.
- (c) Allocation.
- (i) The use of ground water for agricultural purposes from any water well for irrigation of certified acres in the Special Management Area shall be subject to an allocation. The District hereby establishes ~~the~~ three (3) year rolling allocation of twenty-one (21.0) acre-inches per irrigated acre not to exceed a nine (9.0) acre-inch annual maximum. ~~for sprinkler irrigation and thirty (30.0) acre inches per irrigated acre not to exceed a twelve (12.0) acre inch annual maximum for gravity irrigation beginning in calendar year 2014. At the end of each 3-year allocation period, the District shall review and evaluate such allocation. The rolling allocation shall remain in effect until such time as the District modifies or removes it.~~ The District shall also maintain a local advisory committee.
- (A) ~~As of the effective date of these regulations, t~~ There shall be no required allocation for that portion of the Special Management Area located in Township 13 North, Range 6 East, Saunders County.
- (ii) If a ground water user has exceeded the annual maximum allocation during any year ~~one or two~~ of the three (3) year rolling allocation period, any remaining allocation for such period shall be reduced by an amount equal to two (2) times the amount in excess of such annual maximum allocation.
- ~~(iii) If at the end of such three (3) year allocation period, any ground water user has used more than the total allocation for such three (3) year allocation period, or more than the maximum annual allocation in the third year, the excess amount shall be multiplied by two (2) and carried over as a reduction and subtracted from any subsequent allocation period.~~
- (d) Required Certification Programs.
- (i) The District shall require educational certification in irrigation management for those persons making the management decisions for using a well to irrigate agricultural land. The irrigation management certification may be obtained by attending class, as a take home test, or on-line. After June 1, 2015, the name of each person so certified must be on file with the District for each ground water well irrigating agricultural lands in the Special Management Area. Irrigation certification will be

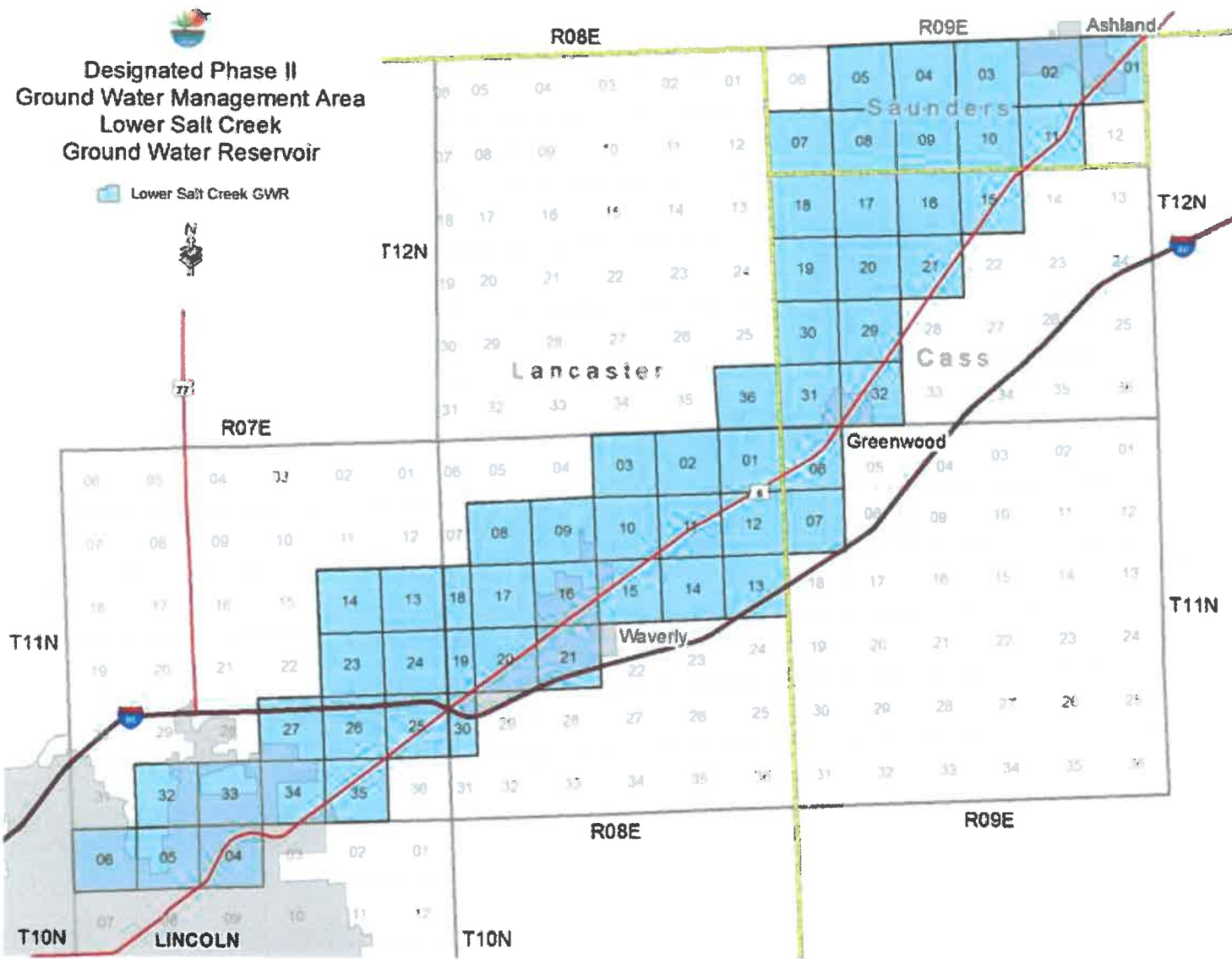
required once every four years. The District will accept certification in irrigation management from other natural resources districts upon providing proof of certification.

- (e) Establishment of Cost-Share Programs.
 - (i) The District will establish cost-share programs to implement Best Management Practices (BMP's) on the land designated in these rules and regulations, which may include but is not limited to, irrigation management practices.

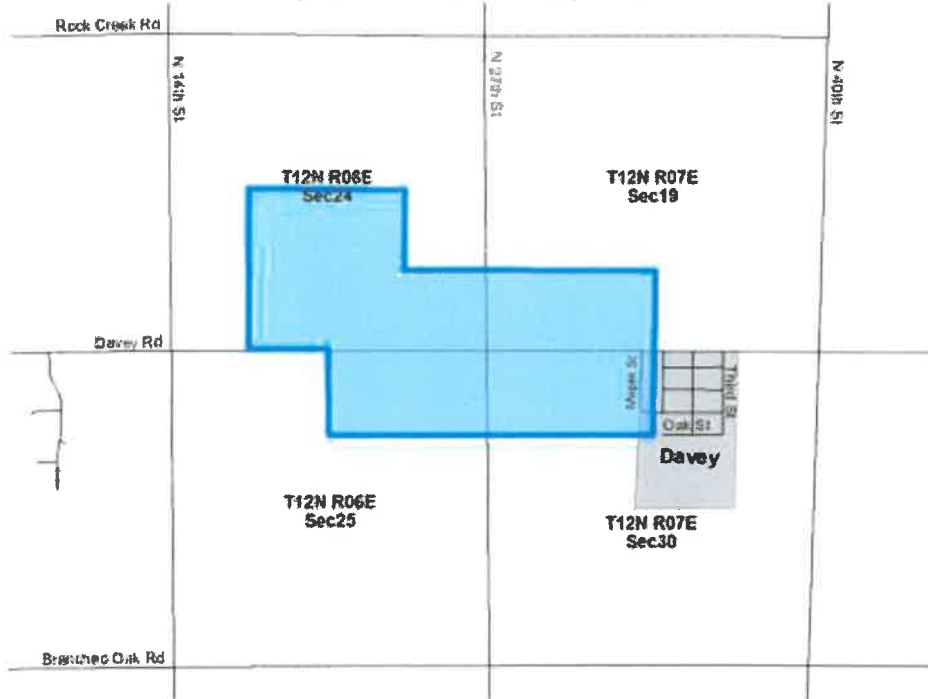
- (f) New or Replacement Wells.
 - (i) All new or replacement water wells to be used for domestic or other purposes, excluding monitoring and other non-consumptive wells, shall be constructed to such a depth that they are less likely to be affected by seasonal declines caused by other water wells in the same area.
 - (ii) Except for wells listed as exceptions to stays in *Neb. Rev. Stat. §46-714(3)*, all applications for wells in the Special Management Area for which permits are required shall be presented to the Board of Directors for consideration. The District may request an applicant to provide a hydrogeologic assessment from a qualified professional geologist or engineer with experience in such analysis showing the extent of any impact from this new or replacement well on existing wells. The Board may deny an application for a permit if it finds that the operation of a new or replacement well will adversely impact an existing well or wells or if such well is not in the public interest. ~~Public interest shall include consideration of the economic, social, and environmental impacts of the proposed new or replacement well and whether and under what conditions other sources of water are available for use proposed for the new or replacement well.~~

Appendix A

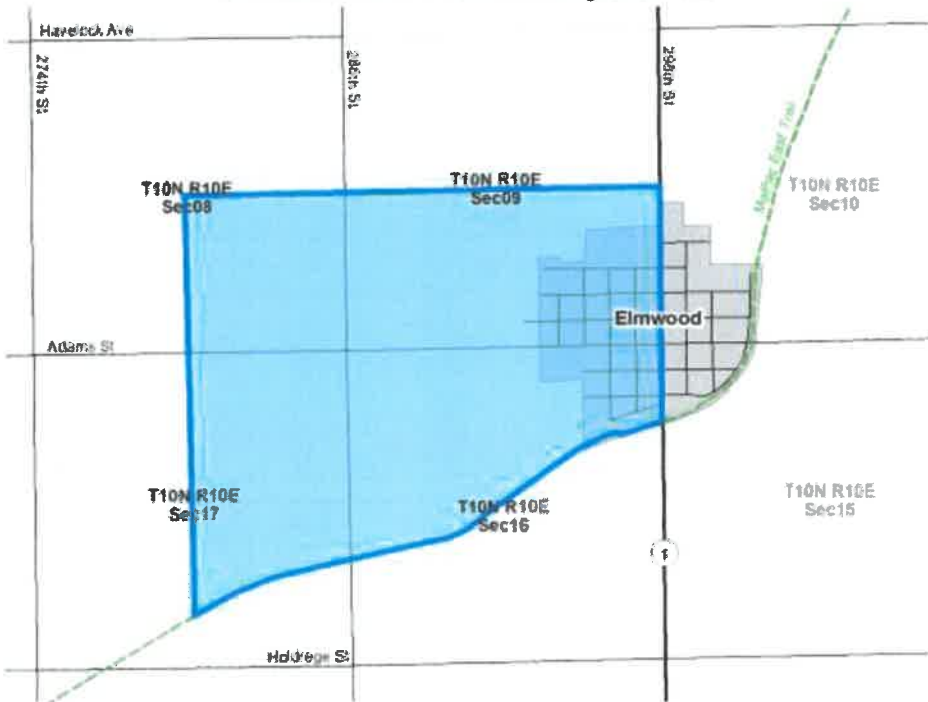
Maps



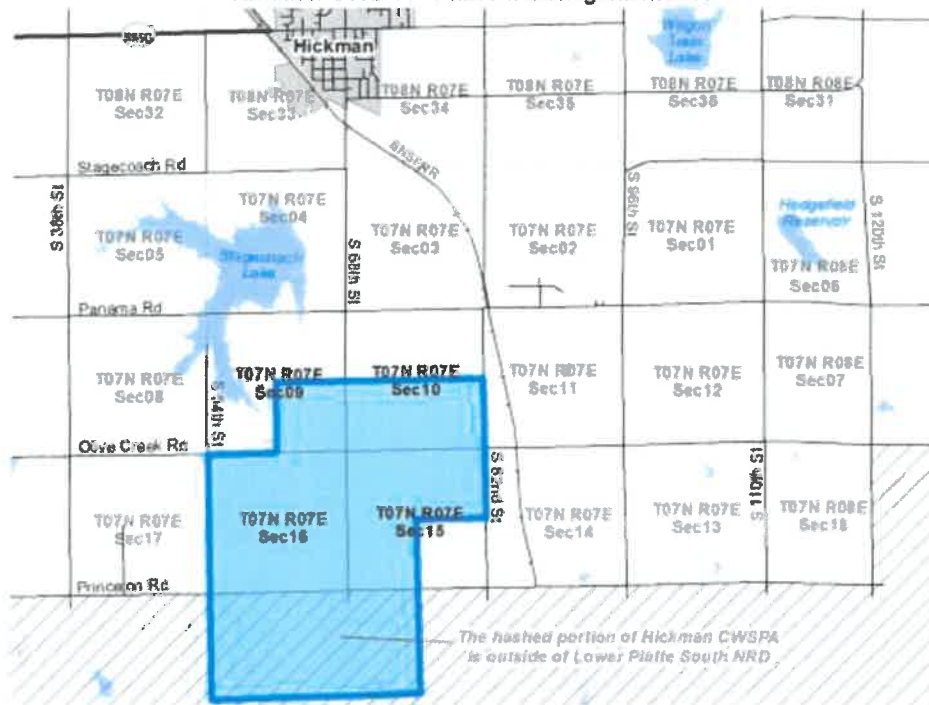
Davey CWSPA - Phase II Management Area



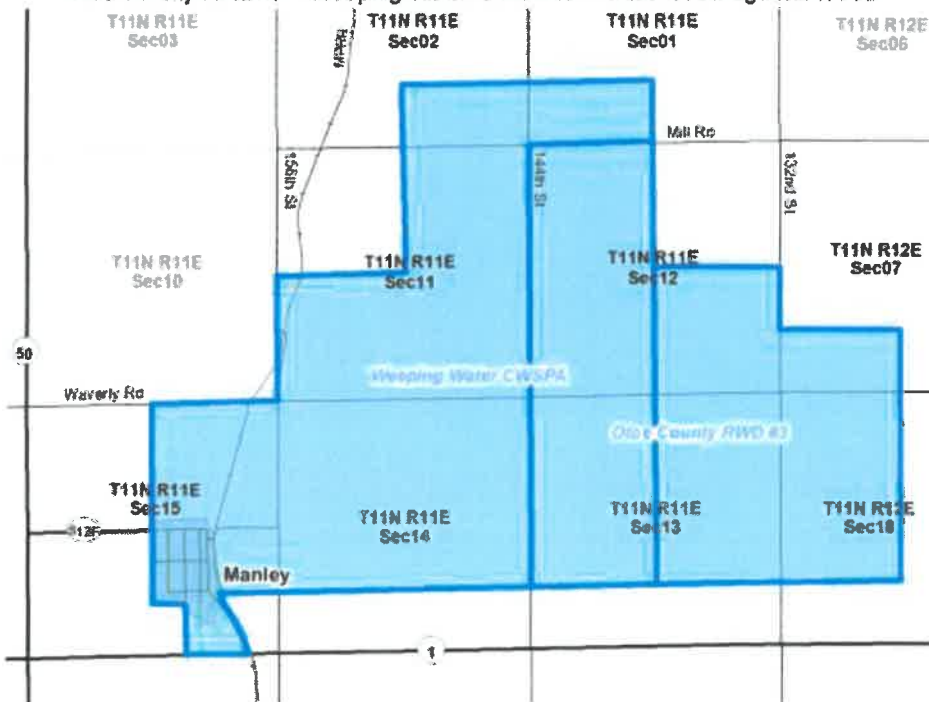
Elmwood CWSPA - Phase III Management Area



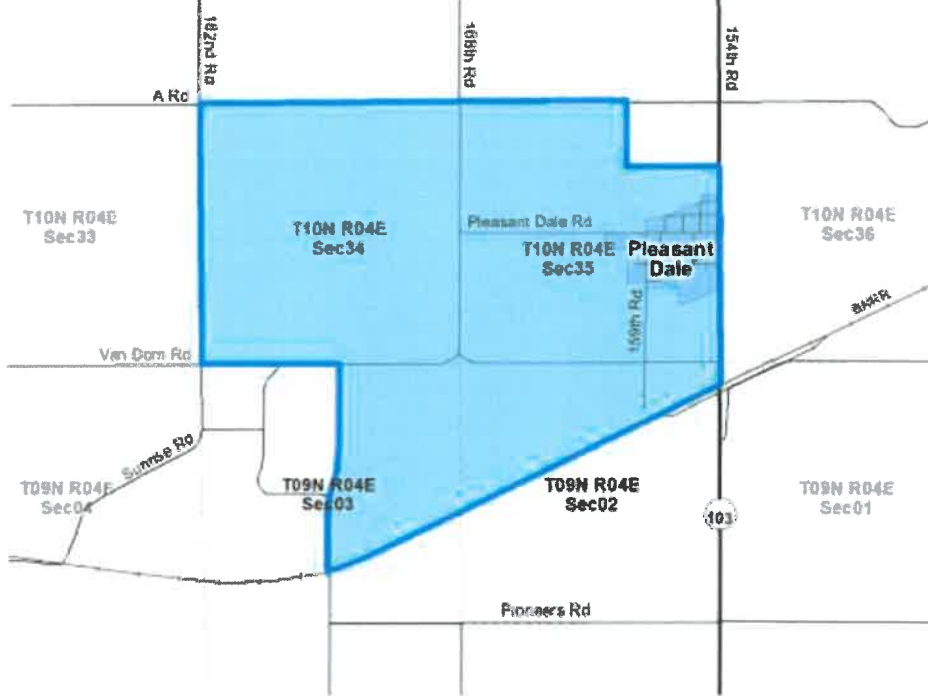
Hickman CWSPA - Phase II Management Area



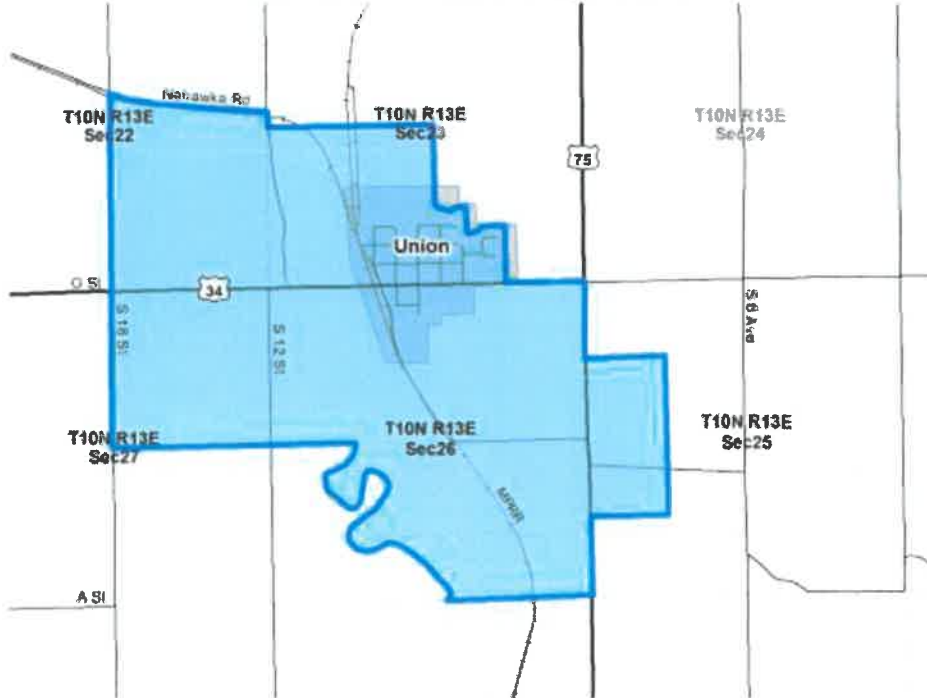
Otoe County RWD#3 + Weeping Water CWSPAs - Phase II Management Area



Pleasant Dale CWSPA - Phase II Management Area



Union CWSPA - Phase II Management Area





Hydrologically Connected Area - Lower Platte South Natural Resources District

