Memorandum

Date: March 13, 2020
To: Each Director
From: Paul D. Zillig, General Manager
RE: Water Resources Subcommittee Meeting Minutes.

The Water Resources Subcommittee met in the NRD Office at 5:30 p.m. on Thursday, March 12, 2020. Subcommittee members present included Bob Andersen, Karen Amen, Greg Osborn, David Landis, Don Jacobson, and Dan Steinkrugger. Subcommittee members participating via teleconference included Vern Barrett. Others present included Larry Ruth, Dick Ehrman, Maclane Scott, Chris Witthuhn, Dan Schulz, Mike Murren, and myself.

Chair Andersen opened the meeting and called on Dick Ehrman to present the review of the Groundwater Management Plan for 2019. Ehrman reviewed a power point highlighting the 2019 accomplishments of the report (report is on the NRD website). A summary of many of the accomplishments is attached. The Subcommittee discussed the report and asked questions. Andersen reported that Ehrman will again make a further condensed report at the Board Meeting.

The next item on the agenda concerned the Dwight-Valparaiso-Brainard Special Management Area and the need to appoint a replacement to fill the DVBSMA Advisory Group vacancy for one of the two Domestic Well representatives. A copy of a summary of the allocation history for the DVBSMA was distributed earlier and is attached along with an explanation of the purpose and members of the Advisory Group. Schulz reported that Louis Tesinsky served on the Advisory Group since the beginning until he passed away late last year. Staff contacted several other interested domestic well owners and recommends Vince Tesinsky (Louis’ son) be appointed to fill the vacancy.

The Subcommittee discussed the importance of the Advisory Group and their appreciation for the work of the Advisory Group members. It was moved by Landis, seconded by Amen, and unanimously approved by the Subcommittee members present to recommend the Board of Directors appoint Vince Tesinsky to the Dwight-Valparaiso-Brainard Special Management Area Advisory Group to represent Domestic well owners.
The next item on the agenda was to consider approval of a utility relocation agreement with Lancaster County Rural Water District No. 1 for the Upper Salt 3-A Watershed Rehabilitation Project near Sprague. Mike Murren reported that the remaining items before the project can be bid is to receive the 404 Permit from the US Army Corps of Engineers and have the utility owners in the area to relocate their lines (water, phone, & power lines). Murren explained the rural water line is located in the construction area and must be relocated at the expense of the project. Murren reviewed the attached Removal and Replacement Agreement & site map.

The Subcommittee discussed the project and the need for the water line relocation to be completed. It was moved by Jacobson, seconded by Landis, and unanimously approved by the Subcommittee members present to **recommend the Board of Directors approve the Removal and Replacement Agreement with Lancaster County Rural Water District No. 1 for a water line relocation for the Upper Salt Creek 3-A Watershed Rehabilitation Project**.

The final item were reports. Mike Murren reported on the construction activities at Oak-Middle 82-B north of Garland. Murren reported that the contractor has hired a new subcontractor that will be the primary contractor on the project. They will continue with construction in the near future. Earlier it was reported that ENWRA will have several agreements that will need NRD Board approval in April. Amen discussed the ongoing consideration by Lancaster County of adopting new rules for animal facilities/feedlots/poultry barns and how those may be tied to groundwater supply and well permits.

There being no additional business the meeting adjourned at 6:45 pm.

PDZ/pz

cc: Steve Seglin
    Corey Wasserburger
2019 Highlights

• Completed annual ground water network sampling and level measurements

• Nitrate levels in several designated management areas steady or in slight decline (LSC GWR, Hickman, Union, Valparaiso)

• No new exceedances of Phase II/III triggers
  — Emerald, Greenwood, Waverly (Phase II), & Pleasant Dale (Phase III) studies initiated in 2018; anticipate completion in 2020
  — Ashland & Raymond (Phase II) studies will begin in 2020

• Received 9th annual reports of water usage from 337 metered wells; calculated water usage for these wells pumping a total of about 2.5 billion gallons (compare with 3.4 billion gallons for 2018); 53% of total used for irrigation (4,087 acre-feet)—wet weather meant about 25% decline in use

• Ground water levels increased in 123 measured wells and decreased in only 5 wells; District-wide average increase of 1.62’

• AEM report for western NRD completed 11/2019; AEM data collection essentially complete; next steps include geologic & ground water modeling

• Issued 7 new well permits (compare with 11 in 2018)

• Continued development of voluntary Integrated Management Plan & participation in Lower Platte River Basin Coalition
## WATER USE SPREADSHEET

### West Block (Under allocation)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rainfall</th>
<th>Total Wells Pumped</th>
<th>&lt; 3 inches</th>
<th>3-5 inches</th>
<th>5-7 inches</th>
<th>7-9 inches</th>
<th>&gt; 9 inches</th>
<th>Average Pumped (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0.63</td>
<td>49</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>13</td>
<td>21 (4 gravity, 17 pivots)</td>
<td>7.38</td>
</tr>
<tr>
<td>2013</td>
<td>2.11</td>
<td>63</td>
<td>2</td>
<td>7</td>
<td>21</td>
<td>17</td>
<td>16 (6 gravity, 10 pivots)</td>
<td>6.93</td>
</tr>
</tbody>
</table>

### 2014 DVB Special Management Area Rules take effect (3-Year Allocation)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rainfall</th>
<th>Total Wells Pumped</th>
<th>&lt; 3 inches</th>
<th>3-5 inches</th>
<th>5-7 inches</th>
<th>7-9 inches</th>
<th>&gt; 9 inches (Gravity)</th>
<th>Average Pumped (in.)</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>8.05</td>
<td>64</td>
<td>22</td>
<td>38</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3.18</td>
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<tr>
<td>2015</td>
<td>6.71</td>
<td>64</td>
<td>43</td>
<td>18</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2.39</td>
</tr>
<tr>
<td>2016</td>
<td>8.5</td>
<td>66</td>
<td>33</td>
<td>22</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>3.08</td>
</tr>
</tbody>
</table>

### January 1, 2017 Revised DVB SMA Rules (46 irrigation wells (34 pivots, 12 gravity) subject to another 3-Year Allocation)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rainfall</th>
<th>Total Wells Pumped</th>
<th>&lt; 3 inches</th>
<th>3-5 inches</th>
<th>5-7 inches</th>
<th>7-9 inches</th>
<th>&gt; 9 inches (Gravity)</th>
<th>Average Pumped (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>9.37</td>
<td>41</td>
<td>19</td>
<td>21</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>3.02</td>
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<tr>
<td>2018</td>
<td>5.7</td>
<td>35</td>
<td>29</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1.36</td>
</tr>
<tr>
<td>2019</td>
<td>6.87</td>
<td>36</td>
<td>26</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1.87</td>
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</table>

### East Block (No allocation)

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<tr>
<th>Year</th>
<th>Rainfall</th>
<th>Total Wells Pumped</th>
<th>&lt; 3 inches</th>
<th>3-5 inches</th>
<th>5-7 inches</th>
<th>7-9 inches</th>
<th>&gt; 9 inches</th>
<th>Average Pumped (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>9.37</td>
<td>23</td>
<td>15</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2.58</td>
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<tr>
<td>2018</td>
<td>5.7</td>
<td>18</td>
<td>17</td>
<td>1</td>
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<td>0.92</td>
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<tr>
<td>2019</td>
<td>6.87</td>
<td>22</td>
<td>16</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2.20</td>
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Dwight-Valparaiso-Brainard Special Management Area
Stakeholder Advisory Group

Purpose: To provide input to the NRD Board on ground water management in the DVB Special Management Area and to serve as a liaison with the residents and property owners in the Area. Input areas would include review of water use and other reports, rules & regulations and potential changes, best management practices and incentive programs, and problems with water supply or quality.

Advisory Group schedule: Meet upon initial appointment and then meet no less than annually (additional meetings can be scheduled if desired).

Stakeholders to be represented and appointed by the NRD Board:
- Domestic well owner (2) – Lee Quick, Vince Tesinsky (recommended)
- Livestock well owner (1) – Randy Komenda
- Pivot/sprinkler irrigator (3) – Lyle Jakub, Lawrence Stuchlik, Jerry Maher
- Gravity irrigator (1) – Vaden Hellerich
- Dryland farmer (1) – Jerome Kudlacek
- Local business owner (1) – Leo Benes
- Village of Valparaiso (1) – Greg Bouc
- Village of Brainard (1) – Elaine Fortik
- Village of Dwight (1) – Larry Urbanek

NRD Advisory Group Meeting attendees/invitees: The NRD’s Water Resources Management Subcommittee shall designate at least one member to attend along with the NRD Board members that represent the DVB Special Management Area.
- NRD will hire an impartial facilitator to conduct Advisory Group meetings.
- NRD staff will provide support for the Advisory Group meetings.
- The Advisory Group will operate on a non-voting basis.
- Members will serve at the pleasure of the NRD Board.
REMOVAL AND REPLACEMENT AGREEMENT

This Agreement made and entered into on ____________, 20__ by and between LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, a political subdivision of the State of Nebraska (the “District”) and LANCASTER COUNTY RURAL WATER DISTRICT NO. 1, a political subdivision of the State of Nebraska (“RWD #1”), hereinafter collectively referred to as the Parties.

RECITALS

A. Upper Salt 3-A is one of 26 floodwater retarding structures built in Lancaster County as part of the Upper Salt Creek Watershed, Watershed Protection and Flood Prevention, as required by the Watershed Work.

B. The District intends to rehabilitate structure 3-A by upgrading the site to current design criteria for a high hazard dam by increasing the auxiliary spillway capacity, raising the top of the dam, flattening the side slopes, and replacing the conduit and principal spillway riser ("Rehabilitation Project"). The Rehabilitation Project requires additional land which the District has acquired.

C. RWD #1 has an existing underground waterline ("Waterline") that lies within the land acquired by the District and will interfere with the construction of the Rehabilitation Project.

D. The Rehabilitation Project will cause the realignment of SW 2nd Street, as shown on Exhibit "A" attached hereto and incorporated herein by this reference. The realignment in turn will necessitate the relocation of the Waterline.

E. The Parties desire to provide for the removal or abandonment in place of the Waterline in its present location and replace it with a new Waterline in a different location.

NOW, THEREFORE, in consideration of the above Recitals and the mutual promises and covenants contained herein the parties agree as follows:

1. RWD #1 will remove or abandon its existing Waterline on or before a date agreed upon in writing by the Parties. The District agrees to reimburse RWD #1 for the cost of removal within 30 days after receipt, review and approval of an itemized statement.

2. RWD #1 will replace the existing Waterline with a new Waterline of a similar size and length in a location that is mutually agreed upon by the Parties and the Nebraska Department of Natural Resources – Dam Safety Engineer, on or before a date agreed upon in writing by the Parties. The District will reimburse RWD #1 for the cost of replacement within 30 days after receipt, review and approval of an itemized statement.

3. The general location of the existing Waterline is identified on the Map attached as Exhibit "A".

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by their duly authorized representatives on ______________, 2020.

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT,

BY: ________________________________

Paul D. Zillig, General Manager

LANCASTER COUNTY RURAL WATER DISTRICT No. 1,

BY: ________________________________

Authorized Representative