MINUTES OF THE OCTOBER 13, 2020
BOARD OF DIRECTORS MEETING OF
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT

The Board of Directors of North Plains Groundwater Conservation District met in regular session on October 13, 2020, at 9:30 a.m. at the North Plains Conservation Center Barn, 6045 County Road E., Dumas, Texas 79029. The following persons participated in the Meeting:

**Members Present at 9:38 a.m.:**

- Bob B. Zimmer, Vice-President;
- Mark Howard, Secretary;
- Harold Grall, Director;
- Justin Crownover; and
- Zac Yoder, Director.

**Staff present during part or all of the meeting:**

- Steve Walthour, General Manager;
- Kirk Welch, Assistant General Manager — Outreach;
- Kristen Blackwell, Executive Assistant; and
- Odell Ward, Field Supervisor.

**Others present during part or all of the meeting:**

- Nich Kenny;
- Laura West, Trust Officer, FirstBank Southwest, Perryton, Texas
- Alan Meier;
- Brandon A. Meier;
- Mandi Boychuk, Natural Prairie & Northside Farmland;
- Shelly C. Burnett;
- Craig Custer, appearing via telephone, because of exposure to COVID-19;
- F. Keith Good, General Counsel for the District; and
- Ellen Orr, Paralegal.

Vice-President, Bob B. Zimmer, declared a quorum present and called the meeting to order at 9:38 a.m. Director, Mark Howard, gave the invocation and Vice-President Zimmer led the pledge.

At 9:40 a.m. Vice-President Zimmer recessed the regular Board meeting and called the following matters for hearing:

**NPGCD Show Cause Hearing No. 020-003**, regarding Lone Star Family Farms for the alleged violation of District Rule 9; and,

**NPGCD 020-004**, regarding Braden Gibson, doing business as Gibson Farms, for the alleged violation of District Rule 9.

At 11:54 a.m., Vice-President Zimmer closed the Show Cause hearings and reconvened into regular session at 11:56 a.m.

**1 — Public Comment**

No Public Comment was made to the Board.

**2 — Consent Agenda**

The Consent Agenda was discussed by the Board and consisted of: the review and approval of the Minutes of the regularly scheduled Board of Directors Meeting held on
September 8, 2020; the review and approval of un-audited District expenditures for September 1, 2020 through September 30, 2020, including the General Manager’s expense and activity report; and the review and approval of payment to Lemon, Shearer, Phillips & Good, P.C. for professional services and out-of-pocket expenses incurred from September 1, 2020 through September 30, 2020, in the amount of $7,200.85.

Harold Grall moved to approve the Consent Agenda. Mark Howard seconded the motion and it was unanimously approved by the Board.

**Action Agenda 3.b. - Consider final compliance approval of water well permits as active and complete wells.**

The General Manager reported that District Rule 2.13 provides, after the site inspection is complete, and it is determined that the Well (and all Wells within the Groundwater Production Unit) is/are in compliance with the Rules of the District, and the Well Permit application, the General Manager shall submit the Well Permit to the Board for final compliance approval.

The General Manager reported that the District staff had processed 35 Water Well Permits which are ready for Board consideration and approval. These permits, listed in the table below, represent completed Wells that have been inspected and are in compliance with District Rules. The inspections verify that the Wells were completed as required by the respective Permits, including proper Well location, Well classification, maximum yield, and proper installations of check valves and flow meters. Copies of the individual permits were presented to the Board.

<table>
<thead>
<tr>
<th>Well</th>
<th>Class</th>
<th>Section</th>
<th>Block</th>
<th>Survey</th>
<th>Yards N S</th>
<th>Yards E W</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA-10542</td>
<td>C</td>
<td>9</td>
<td>3</td>
<td>CSS</td>
<td>566</td>
<td>345</td>
</tr>
<tr>
<td>DA-11022</td>
<td>C</td>
<td>41</td>
<td>6</td>
<td>CSS</td>
<td>180</td>
<td>290</td>
</tr>
<tr>
<td>DA-11355</td>
<td>C</td>
<td>21</td>
<td>2</td>
<td>B&amp;B</td>
<td>288</td>
<td>9</td>
</tr>
<tr>
<td>DA-11356</td>
<td>C</td>
<td>6</td>
<td>0</td>
<td>Day Land &amp; Cattle Co.</td>
<td>982</td>
<td>427</td>
</tr>
<tr>
<td>DA-11357</td>
<td>C</td>
<td>6</td>
<td>0</td>
<td>Day Land &amp; Cattle Co.</td>
<td>1219</td>
<td>750</td>
</tr>
<tr>
<td>DA-11365</td>
<td>B</td>
<td>14</td>
<td>48</td>
<td>H&amp;TC</td>
<td>109</td>
<td>251</td>
</tr>
<tr>
<td>DA-11366</td>
<td>C</td>
<td>16</td>
<td>48</td>
<td>H&amp;TC</td>
<td>777</td>
<td>817</td>
</tr>
<tr>
<td>DA-9544</td>
<td>A</td>
<td>11</td>
<td>48</td>
<td>H&amp;TC</td>
<td>292</td>
<td>14</td>
</tr>
<tr>
<td>HA-10846</td>
<td>B</td>
<td>29</td>
<td>48</td>
<td>H&amp;TC</td>
<td>457</td>
<td>425</td>
</tr>
<tr>
<td>HA-11198</td>
<td>D</td>
<td>74</td>
<td>48</td>
<td>H&amp;TC</td>
<td>260</td>
<td>860</td>
</tr>
<tr>
<td>HA-11368</td>
<td>C</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>24</td>
<td>569</td>
</tr>
<tr>
<td>HA-11370</td>
<td>C</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>575</td>
<td>21</td>
</tr>
<tr>
<td>HA-11371</td>
<td>C</td>
<td>4</td>
<td>14</td>
<td>CSS</td>
<td>675</td>
<td>4</td>
</tr>
<tr>
<td>HA-11373</td>
<td>C</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>74</td>
<td>561</td>
</tr>
<tr>
<td>HA-11374</td>
<td>C</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>352</td>
<td>856</td>
</tr>
<tr>
<td>HA-11375</td>
<td>C</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>898</td>
<td>545</td>
</tr>
<tr>
<td>HA-11377</td>
<td>C</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>21</td>
<td>494</td>
</tr>
<tr>
<td>HA-11378</td>
<td>D</td>
<td>5</td>
<td>14</td>
<td>CSS</td>
<td>310</td>
<td>799</td>
</tr>
<tr>
<td>HN-0691</td>
<td>D</td>
<td>1</td>
<td>5-T</td>
<td>T&amp;NO</td>
<td>29</td>
<td>197</td>
</tr>
<tr>
<td>HN-0940</td>
<td>D</td>
<td>133</td>
<td>45</td>
<td>H&amp;TC</td>
<td>770</td>
<td>733</td>
</tr>
<tr>
<td>HN-11340</td>
<td>D</td>
<td>166</td>
<td>2</td>
<td>GH&amp;H</td>
<td>111</td>
<td>115</td>
</tr>
<tr>
<td>HU-11070</td>
<td>D</td>
<td>1</td>
<td>HC</td>
<td>H&amp;OB</td>
<td>849</td>
<td>116</td>
</tr>
<tr>
<td>HU-11446</td>
<td>D</td>
<td>4</td>
<td>M-23</td>
<td>TC&amp;RY</td>
<td>866</td>
<td>202</td>
</tr>
<tr>
<td>LI-12331</td>
<td>D</td>
<td>60</td>
<td>10</td>
<td>HT&amp;8</td>
<td>760</td>
<td>878</td>
</tr>
<tr>
<td>MO-11177</td>
<td>B</td>
<td>328</td>
<td>44</td>
<td>H&amp;TC</td>
<td>684</td>
<td>682</td>
</tr>
<tr>
<td>MO-11475</td>
<td>D</td>
<td>302</td>
<td>44</td>
<td>HT&amp;8</td>
<td>779</td>
<td>113</td>
</tr>
<tr>
<td>OC-10943</td>
<td>D</td>
<td>922</td>
<td>43</td>
<td>H&amp;TC</td>
<td>548</td>
<td>113</td>
</tr>
<tr>
<td>OC-10945</td>
<td>D</td>
<td>1009</td>
<td>43</td>
<td>H&amp;TC</td>
<td>523</td>
<td>879</td>
</tr>
<tr>
<td>OC-11575</td>
<td>D</td>
<td>75</td>
<td>4-T</td>
<td>T&amp;NO</td>
<td>765</td>
<td>107</td>
</tr>
<tr>
<td>OC-11576</td>
<td>D</td>
<td>75</td>
<td>4-T</td>
<td>T&amp;NO</td>
<td>207</td>
<td>480</td>
</tr>
<tr>
<td>Well</td>
<td>Class</td>
<td>Section</td>
<td>Block</td>
<td>Survey</td>
<td>Yards N S</td>
<td>Yards E W</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td>--------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>SH-10976</td>
<td>D</td>
<td>10</td>
<td>1</td>
<td>PSL</td>
<td>215 N</td>
<td>42 E</td>
</tr>
<tr>
<td>SH-11398</td>
<td>C</td>
<td>446</td>
<td>1-T</td>
<td>T&amp;NO</td>
<td>223 S</td>
<td>338 e</td>
</tr>
<tr>
<td>SH-11400</td>
<td>B</td>
<td>375</td>
<td>1-T</td>
<td>T&amp;NO</td>
<td>118 S</td>
<td>638 W</td>
</tr>
<tr>
<td>SH-11409</td>
<td>C</td>
<td>223</td>
<td>1-C</td>
<td>GH&amp;H</td>
<td>332 N</td>
<td>422 W</td>
</tr>
<tr>
<td>SH-11601</td>
<td>B</td>
<td>11</td>
<td>3-B</td>
<td>GH&amp;H</td>
<td>77 N</td>
<td>644 W</td>
</tr>
</tbody>
</table>

Harold Grall moved to approve all of the Well Permits on the Well Permit Schedule, with the exception of MO-11177 and MO-11475, noting that the Wells are properly equipped and otherwise comply with District Rules. Mark Howard seconded the motion, and it was unanimously approved by the Board.

Justin Crownover moved to approve Well Permits MO-11177 and MO-11475, noting that the Wells are properly equipped and otherwise comply with District Rules. Mark Howard seconded the motion and the motion passed by the majority vote of the Board with Harold Grall abstaining from the vote.

**Executive Session - Section 551.071 of the Texas Government Code.**

At 12:00 Noon, Zac Yoder moved to go into Executive Session in compliance with the Texas Open Meetings Act, Chapter 551 of the Texas Government Code, §551.071, to obtain legal advice on matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas conflicts with Chapter 551. Mark Howard seconded the motion, and it was unanimously approved by the Board.

Executive Session: At 12:10 p.m., the Board went into Executive Session. At 1:14 p.m., Harold Grall moved that the Board reconvene into regular session. Zac Yoder seconded the motion, and it was unanimously approved by the Board.

The Board reconvened into regular session at 1:19 p.m.

**Action Agenda 3.a. - Consider action regarding Show Cause Hearings.**

Harold Grall moved to adopt the following Board Order regarding Show Cause Hearing No. 020-003 in re: Lone Star Family Farms:

**NPGCD BOARD ORDER NO. 020-003**

On October 13, 2020, at 9:30 a.m., the North Plains Groundwater Conservation District ("District") Board of Directors, under Presiding Officer, Bob B. Zimmer, convened a Show Cause Hearing ("Hearing") under District Rule 11.5. The Hearing was convened to permit Lone Star Family Farms, a Texas General Partnership, P.O. Box 540, Sunray, Texas 79086 ("Lone Star") to come before the Board and show cause as to why Lone Star should not be assessed a civil penalty, or why the District should not suspend, cancel, or otherwise limit Lone Star's operating authority or Well(s) permit(s) for violation of District Rule 9.2.6. The Hearing was duly recorded by Court Reporter, Shelly Burnett.

After hearing the evidence submitted by General Manager, Steve Walthour, Justin Crownover, Craig Custer, and Laura West, Trust Officer of FirstBank Southwest, Perryton, Texas, and comments by the District's General Counsel, Keith Good, the District's Board of Directors finds:

**FINDINGS**

Lone Star is a Texas general partnership, who is a Tenant of Duke Farm, LLC. Lone Star is producing Groundwater from the Southwest pivot in GPU No. 7032 located in Section One Hundred Fifty-one (151), Block Ten (10), SPRR Survey, Lipscomb County, Texas ("the Property");
On July 24, 2020, District staff observed and reported to Lone Star that Groundwater being produced from the Property was escaping the Property as irrigation tailwater and was entering onto adjacent real property West of the Property, specifically Section One Hundred Fifty (150), Block Ten (10), SPRR Survey, Lipscomb County, Texas ("Section 150"), which is owned by FirstBank Southwest, Trustee of the Harry M. Teare Trust, 201 South Main Street, Perryton, Texas 79070. Craig Custer, P.O. Box 130, Booker, Texas 79005, is the Tenant on Section 150;

Lone Star has failed to prevent Groundwater being produced from the Property from escaping the Property as irrigation tailwater and entering onto Section 150, in accordance with District Rules;

There was no evidence presented at the hearing that showed Lone Star had permission from the Owner/Tenant of Section 150 to discharge groundwater from the Property onto Section 150;

The North Plains Groundwater Conservation District ("District") was established by the Texas Legislature under enabling legislation ratified on January 27, 1955. The District is authorized under Texas Water Code, Section 36.101, to make and enforce Rules to govern the conservation, preservation, protection, recharging, and prevention of waste of groundwater within the District. Further, under Sections 36.114, 36.115 and 36.117(h) of the Texas Water Code, the District is authorized to require the permitting and registration of water Wells;

District Rule 9.1., Waste of Groundwater Prohibited, precludes any Person from Wasting Groundwater.;

District Rule 9.2.6, Conditions Constituting Groundwater Waste provides in pertinent part: [Groundwater shall not be produced or used within the District in such a manner or under such conditions as to constitute waste. "Waste" means any one or more of the following: 1. withdrawal of Groundwater 2. Groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the Owner of the Well unless permission has been granted by the occupant of the land receiving the discharge; * * *];

The District issued its Order for a Show Cause Hearing to Lone Star on September 10, 2020 for violation of District Rule 9.2.6;

The District’s Order for a Show Cause Hearing set the location of the Hearing at the North Plains Groundwater Conservation District Water Conservation Center Barn, 6045 County Road E, Dumas, Texas 79029-7201; set the date for October 13, 2020; and set the time at 9:30 a.m.;

Lone Star was submitted notice of the District’s Show Cause Hearing Order by certified and regular U. S. mail delivery;

Pursuant to Texas Water Code, Section 36.102 and under District Rule 12.1.2, the District may assess a civil penalty against Lone Star for failure to comply with the District’s Rules;

The violation of District Rule 9.2.6 may be enforced by the District by assessing a Class 1 civil penalty against Lone Star for the violation;

A Class 1 civil penalty shall not be less than $50, nor more than $10,000 per violation, and each day of a continuing violation shall be deemed a separate violation; and

All of Lone Star’s administrative remedies have been exhausted in this matter under the District’s Show Cause Rule number 11.5.
ORDER

IT IS THEREFORE ORDERED that Lone Star shall pay the District the sum of ONE THOUSAND, SEVEN HUNDRED FIFTY AND NO/100THS DOLLARS ($1,750.00) by check to the District on or before November 12, 2020.

IT IS FURTHER ORDERED that Lone Star develop a management plan for its farming practices on the Property reflecting how it can preclude Groundwater from escaping the Property as irrigation tailwater and entering onto Section One Hundred Fifty (150) and provide the same to the District on or before December 31, 2020.

IT IS FURTHER ORDERED that all of Lone Star’s administrative remedies have been exhausted in this matter under the District’s Show Cause Rule number 11.5.

Mark Howard seconded the motion and it passed by the majority vote of the Board with Justin Crownover abstaining from the vote.

Mark Howard moved to adopt the following Board Order regarding Show Cause Hearing No. 020-004 in re: Braden Gibson, doing business as Gibson Farms:

NPGCD BOARD ORDER NO. 020-004

On October 13, 2020, at 9:30 a.m., the North Plains Groundwater Conservation District ("District") Board of Directors, under Presiding Officer, Bob B. Zimmer, convened a Show Cause Hearing ("Hearing") under District Rule 11.5. The Hearing was convened to permit Braden Gibson, doing business as Gibson Farms, P.O. Box 777, Dumas, Texas 79029 ("Gibson") to come before the Board and show cause as to why Gibson should not be assessed a civil penalty, or why the District should not suspend, cancel, or otherwise limit Gibson’s operating authority or Well(s) permit(s) for violation of District Rule 9.2.6. The Hearing was duly recorded by Court Reporter, Shelly Burnett.

After hearing the evidence submitted by General Manager, Steve Walthour, Braden Gibson, Alan Meier and Brandon A. Meier, and comments by the District’s General Counsel, Keith Good, the District’s Board of Directors finds:

FINDINGS

Gibson is a Tenant of Alvin Gene Born and Clayton Born. Gibson is producing Groundwater from GPU-521 located in Section One Thousand Forty-one (1041), Block Forty-three (43), H&TC Survey, Lipscomb County, Texas ("the Property");

On or about July 9, 2020, the District received a complaint from a landowner adjacent to the Property, alleging that Groundwater was being produced from the Property and was escaping the Property as irrigation tailwater and entering onto adjacent real property, specifically, GPU-8032, located in Section One Thousand Seventy-two (1072), Block Forty-three (43), H&TC Survey, Lipscomb County, Texas ("Section 1072");

On or about July 23, 2020, the District received a second complaint from a landowner adjacent to the Property, alleging that Groundwater was being produced from the Property and was escaping the Property as irrigation tailwater and entering onto adjacent real property, specifically, GPU-8032, located in Section 1072.

On July 24, 2020, District staff observed, and reported to Gibson, that Groundwater being produced from the Property was escaping the Property as irrigation tailwater and was entering onto Section 1072 because of a center pivot area upper elbow expansion joint malfunction.

On July 28, 2020, Gibson was notified by the District that Gibson must cease discharging irrigation tailwater from the Property onto Section 1072 by August 7, 2020.
Gibson failed to prevent Groundwater being produced from the Property from escaping the Property as irrigation tailwater and entering onto Section 150 by August 7, 2020, in accordance with District Rules.;

There was no evidence presented at the hearing that showed Gibson had permission from the Owner/Tenant of Section 1072 to discharge groundwater from the Property onto Section 1072;

The North Plains Groundwater Conservation District ("District") was established by the Texas Legislature under enabling legislation ratified on January 27, 1955. The District is authorized under Texas Water Code, Section 36.101, to make and enforce Rules to govern the conservation, preservation, protection, recharging, and prevention of waste of groundwater within the District. Further, under Sections 36.114, 36.115 and 36.117(h) of the Texas Water Code, the District is authorized to require the permitting and registration of water Wells;

District Rule 9.1., Waste of Groundwater Prohibited, precludes any Person from Wasting Groundwater.;

District Rule 9.2.6, Conditions Constituting Groundwater Waste provides in pertinent part: [Groundwater shall not be produced or used within the District in such a manner or under such conditions as to constitute waste. "Waste" means any one or more of the following: 1. withdrawal of Groundwater * * * 6. Groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the Owner of the Well unless permission has been granted by the occupant of the land receiving the discharge; * * * ];

The District issued its Order for a Show Cause Hearing to Lone Star on September 10, 2020, for violation of District Rule 9.2.6;

The District’s Order for a Show Cause Hearing set the location of the Hearing at the North Plains Groundwater Conservation District Water Conservation Center Barn, 60-45 County Road E, Dumas, Texas 79029-7201; set the date for October 13, 2020; and set the time at 10:30 a.m.;

Gibson was submitted notice of the District’s Show Cause Hearing Order by certified and regular U. S. mail delivery;

Pursuant to Texas Water Code, Section 36.102 and under District Rule 12.1.2, the District may assess a civil penalty against Gibson for failure to comply with the District’s Rules;

The violation of District Rule 9.2.6 may be enforced by the District by assessing a Class 1 civil penalty against Lone Star for the violation;

A Class 1 civil penalty shall not be less than $50, nor more than $10,000 per violation, and each day of a continuing violation shall be deemed a separate violation; and

All of Gibson’s administrative remedies have been exhausted in this matter under the District’s Show Cause Rule number 11.5.

ORDER

IT IS THEREFORE ORDERED that Gibson shall pay the District the sum of ONE THOUSAND, SEVEN HUNDRED FIFTY AND NO/100THS DOLLARS ($1,750.00) by check to the District on or before November 12, 2020.

IT IS FURTHER ORDERED that Gibson shall repair all leaks on the sprinkler system located on Section 1071 on or before December 31, 2020.
IT IS FURTHER ORDERED that all of Gibson's administrative remedies have been exhausted in this matter under the District's Show Cause Rule number 11.5.

Zac Yoder seconded the motion, and it was approved by the majority vote of the Board with Justin Crownover abstaining from the vote.

**Action Agenda 3.c. - Receive report and consider action as needed regarding District Agriculture and other Conservation Education Outreach Programs**

Nich Kenny presented the following report to the Board:

**Figure 1: 2020 WCC Field plan for Corn and Cotton Rotation**

**Cotton**

The final planned irrigation on the North SDI cotton blocks was 28 August for the West ½ and 29 August on the East ½. An additional 4 hours of irrigation were applied on all SDI cotton blocks during the last week of September and a frost prevention application was applied on the East Pivot in early September.

The East pivot irrigation was terminated on 28 August and re-started making 2/10” applications on 6 September in anticipation of an early frost predicted for 8-9 September. Kenny stated, the principle is that energy stored in the soil can protect the crop during sensitive frost-risk hours, but for the heat to transfer, there must be a conduit. Surface water has proven to be an effective conductor for this energy transfer. The soil temperature at WCC was in the low-70’s during this period which provides a 40 F temperature store to help in a frost event.

The effect of the early September cold front was that the cotton paused for approximately 5 days. The cotton remained mostly green and transpiring. A 0.25” application was applied on 29 September across all SDI zones based on observations from the AquaSpy probes.

The cotton has received the following gross irrigation values (Preliminary):

- East Pivot: 7.23” Irrigation
- Cotton Zones 1-4: 6.69” Irrigation
- Cotton Zones 5-8: 6.04” Irrigation (one early irrigation event is under evaluation)

At the time of this update, the soil profiles are drawn down substantially and an additional small pivot application of ¼” may have been beneficial. Three PGR (Stance and mepiquat) applications have been made across the farm (except East 2 of SOT which only had 2 PGR applications).
Irrigation was managed in the East Pivot and the North SDI to set-up the crop for cut-out, boll maturation, and termination. The plants are currently in the early boll opening stage. Yield estimates are in the 2.5-3 bale range, but quality is of concern due to the May and September cool fronts.

**Figure 2:** GroGuru moisture chart of East Pivot cotton. Total irrigation applied is 7.23" in 2020. Notice that the chart shows an increase in profile moisture through July during rainfall events and then a dramatic drawdown in August the blip in September is a frost-mitigation application followed by about 4 days of very low water use.

**Figure 3:** AquaSpy Chart of the West ½ of the North SDI Cotton blocks. Total irrigation applied is 7" in 2020. Notice that the chart shows steady water extraction until early August and then extreme water use. The strategy was to manage the soil water in the 70% plant available water range until the end of August and then allow the crop to finish on residual soil moisture. Notice the stall in early September matching the early cold front and then an additional 0.25" application on 29 September to help finish.

**Figure 4:** Cotton North SDI Blocks in early September. This picture is from Dr. Jourdan Bell who had taken the opportunity to measure temperature differences on boll maturity with the projection of a cold snap. She is already capturing data by marking boll initiation dates and tracking them to harvest. This observation could be helpful in understanding how an early cool spell will affect finishing cotton. It is difficult to see in the picture, but the crop is already beginning to senesce in early Sept.
Corn

WCC Corn was irrigated through 9 September on the South SDI Blocks and the East Pivot Corn is progressing through brown layer and is expected to harvest the week of 12 October. As of 28 September, the corn was at 26-28% moisture. Yield estimates are in the 240 bushel / acre range.

In July and August, the South SDI was able to be halted for 19 Days, or an approximate irrigation savings of 4" from capacity. In the same period, the Pivot was off approximately 7 days. The Pivot vs SDI comparison and the SDI timing evaluation look to be very revealing from a water use standpoint.

The final corn irrigation numbers are as follows:

- West Pivot: 21.8" (including the pre-water)
- SDI 9-10 (1x): 17.82"
- SDI 11-12 (2x): 15.55"
- SDI 13-14 (3x): 19.34"
- SDI 15-16 (4x): 19.31"

The variation in SDI application depths across zones is due to programming limitations with the Netafim controller, noticed mostly during start-up and stop events where zones were re-run or skipped. Ideally, each of the SDI zones would be identical. This trend was noticed during the season, but there was not an obvious method to correct it. Alternative control tools are being pursued.

*Figure 5: Ceres infrared aerial images from 3 September. We are trying to differentiate between the blue and green signatures in the corn. Also notice the very clear stripe on the East side of the West corn pivot. This strip has been evident the entire season and aligns with 2019 season’s cotton population test.*
Figure 6: GroGuru chart of West Pivot corn, demonstrating aggressive water use beginning in late June with the profile beginning to draw down. Rainfall in July and August was timed very well to fill the profile. Final irrigation was on 9 September and the soil reserves were depleted until early October.

![GroGuru chart of West Pivot corn](image)

Figure 7: GroGuru chart of South SDI Blocks 9 & 10. This is on the daily irrigation schedule with application based on 4 GPM 1 acre or 0.21" 1 day. Notice the extended periods of downtime, and the trends of when capacity is less than ET Notice that in September, the trend is rising again as the weather cools and the crop's vigor declines. Irrigation was ended on 9 September and the crop steadily consumed stored soil moisture.

![GroGuru chart of South SDI Blocks 9 & 10](image)

Assistant General Manager, Kirk Welch, presented the following report to the Board:

**Virtual Field Day**

The Outreach Team, along with the District contract ag engineer Nick Kenny and other collaborators will present a virtual field day again this year. The virtual field days were started last year, prior to the pandemic, to try to make the information more accessible to all District growers, as well as those outside the geographic area. Since the onset of COVID-19 the idea has even more merit and practical application. A live field day is still under consideration.
WCC Rainwater Harvesting Project

The District is conducting landscaping work to complete the Rainwater Harvesting Demo and Xeric Pollinator Garden at the WCC. The rainwater system and the demonstration garden are a cooperative effort of the District and the United States Department of Agriculture - Natural Resources Conservation Service (NRCS). As part of the NRCS Texas Urban and Rural Conservation Project, NRCS will provide $5,000 to support the project. The dirt work and hardscape will be completed within the next few weeks. Plants will be placed in the spring to insure the best chance for survival. The District is compiling the final report and payment request to be sent to NRCS.

Agricultural Loan Program

Outreach staff are working on rolling-out a promotional campaign for the District’s loan program in late October or early November and continuing it through the first of the year. The campaign will include social media, email, radio, newspaper, and community presentations as opportunities are available. The District has approximately $900,000 available at 2.59 percent interest for loans on new, more efficient pivot irrigation systems and upgrades that will improve the efficiency of the system.


General Manager, Steve Walthour, presented the following report to the Board:

On September 24, 2020, Groundwater Management Area -1 Joint Planning Committee met to elect officers; consider proposed Desired Future Condition environmental impacts TWC 36.108(d)(4) and private property rights TWC 36.108(d)(7); and plan for future and by consensus kept the same officers. Copies of the meeting agenda, packet and supporting materials are attached to this item. Director Zimmer recognized Texas Water Development Board (TWDB) Director, Kathleen Jackson, who provided comment at the beginning of the meeting. Vice-President Zimmer remains committee chairman. The committee did vote to retain Director Krienke as the GMA-1 representative to Region A Water Planning Group.

Environmental Impacts

The committee considered other environmental impacts, including impacts on spring flow and other interactions between groundwater and surface water. The Ogallala aquifer and the Lower Dockum aquifer naturally outflow (discharge) and receive inflow (recharge) from rivers and streams. According to the most recent groundwater availability model (GAM), the Ogallala aquifer gains slightly more water from surface than it discharges with about 30,000 acre-feet net annual increase to the aquifer in 2020. By 2080, the net inflow into the Ogallala aquifer from rivers and stream will be about 195,000 acre-feet per year. The GAM estimates that the Dockum aquifer interaction with the surface provides a net 9,000 acre-feet annual aquifer inflow from rivers and streams. By 2080 the GAM estimates the net inflow into the aquifer will increase to about 43,000 acre-feet annually.

As outflows diminish from and inflows increase to the Dockum and Ogallala aquifers, water supplied by the aquifer to streams that support wildlife, vegetation, livestock and recreation in the area through will also diminish.

Property Rights

The District adopted rules in 2014 to achieve DFCs based largely on the on TWDB 2011 and 2012 Modeled Available Groundwater (MAG). For regulatory and consistency purposes, the District will continue to use those original runs as an indicator for groundwater production is currently well within those MAGs and will continue to review its groundwater production based on those MAGs set in the first round of planning as well as future MAGs prepared by the TWDB.
The Joint Planning Committee considered the impact of the DFCs on the interests and rights in private property, including ownership and the rights of management area landowners and their lessees and assigns in groundwater as recognized under Texas Water Code Section 36.002. Wade Oliver referenced the legal evaluation by Keith Good and others provided in the 2016 joint planning cycle as still relevant and should be applied to this planning cycle. The committee considered the predicted groundwater supply from the proposed MAG compared the 2017 and 2022 State Water Plans. For Hansford, Hutchison, Ochiltree and Lipscomb counties, the supply exceeds demand for each decade through 2070. For the Dallam, Hartley, Moore, and Sherman counties, the proposed MAG shows that supply is generally below demand through 2070. County by county graphs for the decades from comparing TWDB historical pumping (2000-2018), anticipated regional water demands and expected MAG for the decades 2020 to 2070 are as follows:

[Graphs showing historical and expected water demands for Dallam and Hansford counties, with bars indicating predicted supply and SWP 2022 and 2017 demands.]
If the expected MAG is pumped from 2020 to 2080, the resulting change in Ogallala- Rita Blanca saturated thickness and Dockum draw-down are as follows:
The General Manager anticipated that pumping in Hansford, Ochiltree, and Lipscomb Counties through 2080 would be significantly less than predicted by the expected MAG. Therefore, the Ogallala saturated thickness declines will not be as significant as shown in the predicted CY 2080 Ogallala Aquifer Saturated Thickness Map. However, as experienced in 2011 and 2012 in at least one well in these counties, groundwater quality can and probably will be affected over the next 60 years as water levels decline. The extent water quality will be affected is not known.

Today, pumping in Dallam, Hartley, Hutchinson, Moore, and Sherman Counties closely approximates the predicted MAG. Though Hutchinson County appears to have more water supply available than the current demand, Walthour anticipates a significant part of the county's water supply is located south of the Canadian River and outside of the District. The declines in saturated thickness and draw-down in these counties may not be as significant as shown in the CY 2080 maps because as water levels decline the transmissivity and conductivity of the associated aquifers also decline. Well owners in the District are experiencing this phenomenon today as they continue to drill wells to simply sustain groundwater production need. To sustain current production rates for irrigated agriculture, producers will need to find alternative water sources.

During this round of Joint Planning, the committee has considered:

- Aquifer uses or conditions (10/28/2019).
- Water supply needs and management strategies (12/12/2019).
- Hydrological conditions (12/12/2019).
- Other environmental impacts (9/25/2020); and
- Impact on private property rights (9/25/2020).

The next Joint Planning Committee meeting is scheduled for November 19th. The committee is scheduled to consider impacts on subsidence and socioeconomic impacts. The committee will consider the feasibility of achieving the DFCs and any other relevant information after the meeting in November.

**Action Agenda 3.e. - Receive Regional Water Planning Area A and Interregional Planning Council report.**

The General Manager presented the following report to the Board:

**Regional Water Planning Area A**

Region A Water Planning Group met on September 28th to address administrative and contract funding issues, elect officers, consider adoption of the 2021 Regional Water Plan, prioritize water management strategies projects of the 2021 Regional Water Plan, and consider action regarding administration of the 2026 regional water planning cycle. TWDB Director Paup addressed the Regional Water Planning Group at the beginning of the meeting.

The group moved administrative funds to a contractual line item under TWDB Contract item since the funds from the TWDB could not be used for administrative purposes. The group amended the Freese and Nichols Inc. contract to use the funds for consulting services. The group elected the same officers with C.E. Williams as chairman. Mr. Williams has served as chairman since the inception of the current regional water planning process. Mr. Williams said that he would serve as chairman through the remainder of this regional water planning cycle and state planning cycle but would not continue as chairman in subsequent years. The Group adopted the 2021 Regional Water Plan and adopted the water management priorities for the plan.

The planning group designated the PRPC to administer the 6th cycle of regional water planning for the 2026 Regional Water Plan, authorized PRPC to provide the various
public notices associated with planning and authorized PRPC to request proposals for technical consultants for the 2026 plan.

**Interregional Planning Council**

Regional water planning identifies regional solutions to water supply problems with resulting lower water supply costs and allows to access to low-interest TWDB loans for financing water supply projects. Opportunity to identify regional solutions to water supply problems with resulting lower water supply. North Plains GCD has used the information from the regional water planning process to assist in understanding future water needs for all water users within the District as well as applying for conservation grants to assist District stakeholders in applying conservation measures when using our groundwater resource.

In 2019, the 86th Texas Legislature passed House Bill 807 and established the Interregional Planning Council which consists of one member of each regional water planning group. The council improves coordination among the RWPGs, and between the RWPGs and the TWDB in meeting goals of the state water planning process; facilitate dialogue regarding regional water management strategies; and share operational best practices of the regional water planning process. Steve Walthour serves Region A as a Council Member. Since earlier this year, Mr. Walthour and other council members have investigated regional planning challenges identified by the Legislature. The Council established three committees to provide proposals to address its Legislative mandates. Mr. Walthour is the Chairman of the Best Practices for Future Regional Planning Committee. The committee shares best practices regarding operation of the regional water planning process such as better ways to engage and educate planning groups and the public; more effectively communicate planning goals, challenges, and solutions; and simplifying the planning process.

On September 30, the Council considered proposed recommendations of the Best Practices Committee, as well as the recommendations of two other committees, which will permit the Council to complete a final report due to the TWDB later this fall.

Additional information on Council committee meetings and work products may be found by clicking http://www.twdb.texas.gov/waterplanning/rwp/ipc/committees.asp.

**Action Agenda 3.f. - Consider action as needed regarding evaluating 1982 Study.**

By consensus, this item was tabled by the Board until its next regular Board Meeting.

**Action Agenda 3.g. - Receive report and consider action regarding compliance and contested matters before the District.**

**Executive Session - Section 551.071 of the Texas Government Code.**

At 2:20 p.m., Harold Grall moved to go into Executive Session in compliance with the Texas Open Meetings Act, Chapter 551 of the Texas Government Code, §551.071, to obtain legal advice on matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas conflicts with Chapter 551. Zac Yoder seconded the motion, and it was unanimously approved by the Board.

Executive Session: At 2:20 p.m., the Board went into Executive Session. At 2:50 p.m., Harold Grall moved that the Board reconvene into regular session. Mark Howard seconded the motion, and it was unanimously approved by the Board.

The Board reconvened into regular session at 2:50 p.m.
**Action Agenda 4.a.**

*District Director Reports regarding meetings and/or seminars attended, weather conditions and economic development in each Director's precinct.*

District Director reports were presented to the Board regarding meetings and/or seminars attended, weather conditions and economic development in each Director's precinct.

**Discussion Agenda 4 b.**

*Committee Reports.*

No Committee reports were presented to the Board.

**Discussion Agenda 4 c.**

*General Manager’s Report.*

Steve Walthour presented the General Manager’s Report, which included the General Manager’s activity summary and the District’s activity summary, and upcoming meetings and conferences.

**Discussion Agenda 5.**

*Discuss Items for Future Board Meeting Agendas and Set Next Meeting Date and Time.*

By consensus, the Board set its next regular Board meeting via ZOOM at 9:30 a.m. on November 12, 2020.

**Agenda 6 - Adjournment.**

There being no further business to come before the meeting, Mark Howard moved to adjourn the meeting. Zac Yoder seconded the motion, and it was unanimously approved by the Board. Vice-President Zimmer declared the meeting adjourned at 3:00 p.m.

**Bob B. Zimmer, Vice-President**

**Mark Howard, Secretary**