

**MINUTES OF THE FEBRUARY 11, 2014  
BOARD OF DIRECTORS MEETING OF  
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT**

The Board of Directors of North Plains Groundwater Conservation District met in regular session February 11, 2014, at 9:30 a.m. in the Conference Room of the Hampton Inn, 2010 South Dumas Avenue, Dumas, Texas 79029. The following persons were present:

**Members Present:**

Gene Born; President  
Daniel L. Krienke, Director;  
Brian Bezner, Director;  
Harold Grall, Director;  
Bob Zimmer, Secretary; and,  
Justin Crownover, Director.

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

Steve Walthour, General Manager;  
Dale Hallmark, Assistant General Manager and Hydrologist;  
Odell Ward, GIS and Natural Resource Tech Lead;  
Kristen Alwan, Executive Assistant; and,  
Paul Sigle, Agricultural Engineer.

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

Marty Jones, Esq.;  
Sabrina Leven;  
Ashley Handy;  
Amy Haschke;  
Jim Barker;  
David Ford;  
Zachary Yoder;  
Steve Yoder;  
Leon New;  
F. Keith Good, Attorney; and,  
Ellen Orr, Paralegal.

President Born declared a quorum present and called the meeting to order at 9:31 a.m.

Director Harold Grall gave the invocation and President Born dispensed with the pledge because no flag was located in the meeting room.

President Born asked if there were persons present who desired to make public comment. No public comment was made.

Bob Zimmer moved to remove the review and approval of the minutes of the regular Board Meeting held on January 14, 2014 from the Consent Agenda. Danny Krienke seconded the motion and the motion passed unanimously.

Bob Zimmer moved to approve the remaining items on the Consent Agenda consisting of the District expenditures for November 1, 2013 through January 31, 2014; the approval of payment of professional services and out-of-pocket expenses to Lemon, Shearer, Phillips & Good, P.C. in the amount of \$7,290.66 for January 1, 2014, through January 31, 2014; the adoption of the resolution presented to the Board to not collect optional personal property taxes for 2014 including, but not limited to, personal boats; personal

vehicles; airplanes; motor homes; and trailers in Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore and Hutchinson Counties, Texas; the approval of homestead exemptions for 2014 of 5% or \$5,000 – Homestead; \$50,000 - Over 65; \$50,000 - Disability SS; and the maximum percentage for Disabled Veterans. Brian Bezner seconded the motion and it was unanimously approved by the Board.

Bob Zimmer moved to approve the Minutes of the Board of Director’s Meeting of January 14, 2014 as presented. Harold Grall seconded the motion and it was unanimously approved by the Board.

Danny Krienke moved that the Board Order the Directors’ Election for the North Plains Groundwater Conservation District to be held on the Uniform Election Date of May 10, 2014 and to instruct the General Manager to prepare the Order of Election, Notice of Election, and post and/or publish notices, news releases, obtain all the necessary supplies, and secure the judges and polling places for the election in Director Precinct 1 - Dallam County, Precinct 2 – Hartley County, Precinct 3 – Sherman County, and Precinct 4 – Moore County. Bob Zimmer seconded the motion and it was unanimously approved by the Board.

The Schedule of Well Permits set forth below was presented to the Board for its review. Brian Bezner moved to approve the Schedule of Well Permits presented to the Board because the Wells are properly equipped and otherwise comply with District Rules. Justin Crownover seconded the motion and it was unanimously approved by the Board.

County	Owner	Well	Meter Location	CL	Max	Qtr	Sec	Blk	Sur	Yards N S	Yards E W
Dallam	Hillwood WIS Llc	DA-5683	Well	C	800	SW	126	4	CSS	698S	1053W
Dallam	Dettle Farms LP	DA-5842	Well	D	1800	NE	21	1	CSS	163N	755E
Dallam	Dettle Farms LP	DA-5843	Well	D	1800	SW	22	1	CSS	129S	630W
Dallam	Jennifer Wells-Ewers	DA-5852	Well	C	800	SE	18	50	H&TC	443S	790E
Dallam	TXC Energy LLC	DA-6456	Well	B	400	NE	23	6	CSS	780N	711E
Hartley	Feris Farms Ltd	HA-5045	Pivot	C	400	SE	97	48	H&TC	105S	602E
Hartley	Randy Lenz	HA-5610	Well	B	400	NW	67	2	B&B	856N	523W
Hartley	A J Siebert	HA-5753	Well	D	1800	SE	0	0	J Beaty	1058S	101E
Hartley	Four Star Middlewater	HA-5776	Well	C	800	SW	60	13	CSS	305S	880W
Hartley	Winings Family Ltd	HA-6129	Well	C	800	SE	63	21	CSS	421S	448E
Hartley	Douglas Lathem	HA-6191	Well	C	800	SW	3	JM Sheldon	none	235S	603W
Hartley	Devries High Country	HA-6540	Well	C	800	NE	60	2	B&B	43N	85E
Hartley	JBS Five Rivers Cattle Feeding	HA-6667	Well	B	400	SW	95	2	B&B	449S	456W
Hansford	Beachner Family/Shawnee	HN-5167	Well	A	100	SW	7	2	PSFL	934S	103W
Hutchinson	Devine Franz Ranch, LLC	HU-5742	Well	D	1800	SW	0	0	T Ross	806S	1659W
Hutchinson	Lance Gaillard	HU-6158	Well	C	800	SW	32	3	GH&H	146S	502W
Moore	John Diedrichsen	MO-5737	Well	C	800	SE	354	44	H&TC	112S	869W
Moore	Paula Gibson	MO-6030	Well	D	1800	NW	325	44	H&TC	244N	546W
Moore	Craig Cartrite	MO-6077	Well	D	1800	SE	102	3-T	T&NO	639S	851E
Moore	Craig Cartrite	MO6145	Well	D	1800	SW	102	3-T	T&NO	367S	414W

In cooperation with local landowners, late in 2013 District staff collected water samples for analysis from three water wells near injection well sites in Lipscomb County. The samples were delivered to a certified laboratory (ASK LABS) in Amarillo, Texas for analyses for the presence of chlorides, TPH, and BTEX which are constituents that are likely to indicate the presence of inadvertent contamination related to injection well operations.

Collecting the groundwater samples and delivering them to the laboratory required ten hours of staff time and 320 miles of travel. Considering the cost to the District in staff time, vehicle fuel and associated expenses and the laboratory expense it is estimated that the total cost to the District is approximately \$350-\$450 per well sampled.

After considering the logistics, as well as the expenses verses the benefit to area residents, District staff has concluded that it would be beneficial in accomplishing the District’s groundwater protection goals to add such sampling as a routine service



to its Water Quality Monitoring Program. District staff believes that it will be beneficial to add analyses for Nitrates and Sulfates as well in future samplings.

District staff proposed the following for monitoring water quality near injection well sites:

1. At a resident's request, for residences located within 1-1/2 miles of an injection well, the District will collect and analyze or have analyzed groundwater samples from domestic wells to establish a groundwater quality baseline at District expense.
2. At a resident's request, for residences located between 1-1/2 and 2 miles of an injection well, the District will collect and analyze or have analyzed groundwater samples from domestic wells to establish a groundwater quality baseline for half the District's expense.
3. At a resident's request, for residences located further than 2 miles away from an injection well and for non-domestic wells, the District will collect and analyze or have analyzed groundwater samples to establish a groundwater quality baseline at the resident's expense.
4. The District will maintain electronic copies of the groundwater analyses and copies will be furnished to interested parties and in accordance with the Texas Open Records Act.

Danny Krienke moved that the Board direct the General Manager to implement the Water Quality procedures for establishing a base line water quality database for areas near injection wells as outlined above. Bob Zimmer seconded the motion and commended Steve Walthour and the District staff for their efforts on this issue. The motion passed by the unanimous vote of the Board.

Leon New presented the following report to the Board on the 200-12 Program for calendar year 2013:

### *Executive Summary*

In 2009, the District began planning a demonstration project, referred to as the "200-12 Project". Purpose of the project is to implement conservation technologies and practices to attempt to grow 200 bushels of corn on 12 inches of irrigation per crop acre. Corn irrigation averaged 21 inches per acre over 10 years according to the Agri-Partner field demonstrations conducted by AgriLife Extension. The 200-12 Project is a five year on-farm, field scale project that demonstrates how water conservation technologies and irrigation management practice adjustments can reduce groundwater use and allow agricultural irrigation producers to remain profitable and financially viable with restricted and/or diminishing groundwater resources. For the 2012 growing year, the District increased the number of demonstration sites from 3 that included 270 acres in 2009, 9 sites and 682 acres in 2011, to 24 sites and 2152 acres in 2012. In 2013, there were 22 demonstration fields that occupied 1672 acres.

In **2010**, three District directors (Harold Gra11, Danny Krienke and Phil Haaland) dedicated their own irrigated acres to the first year of the 200-12 Project. The cooperators implemented new and proven irrigation management technologies and practices to aid in strategic management of each reduced irrigation demonstration site. In **2011**, six more participants (Dennis Buss "JBS Hartley Feeders", Chad Hicks, Joe Reinart, James Born, Steve Shields, and Brian Bezner) joined the project and also implemented new strategic management practices. In **2012**, Brent Clark, David Ford, Frische Brothers, Richard Schad and Tommy Laubhan joined the project while James Born and Steve Shields did not participate. Each 2012 participant committed two fields to the project, one called the "200-12" field, the other the "control" field. Cooperating growers in **2013** were

the same as in 2012, except for Chad Hicks, who did not participate. There were twenty two fields in the project. Each grower selected a "200-12" field and different comparative "control" field.

2010 was a year with above average rainfall but 2011 was the opposite with well below average rainfall. Overall, 2012 was better than 2011 but beginning soil water and seasonal rainfall was below normal and limited production to less than expected and needed. High temperatures during the last two weeks in July and the first week in August, with only limited to no rainfall created the need for more irrigation. Six fields received hail damage that reduced harvest yields. Due to the lack of supplemental rainfall, one participant was forced to divert water to fields that required more input to prevent devastating financial loss. Another participant harvested silage. 2013 was a better year for everyone. However, rainfall varied from more normal 8 to 10 inches during the growing season to about half that. Two to three timely rains helped maintain yield potential in all fields. Also, temperatures were generally cooler creating less plant stress than in any year since 2010.

**Joe Reinart** of Sherman County dedicated 92 acres to the on-farm demonstration in two separate fields irrigated by different center pivot systems. Reinart strip tilled and planted 27 acres of corn at 25,000 seeds/acre on June 12 for his "200-12" field. He strip tilled and planted 65 acres at 32,000 seeds/acre on May 5 for his "control" field. The 200-12 field produced a 200 bushel per acre corn yield. Irrigation totaled 12.55 inches. Reinart only read and used the soil probe to irrigate the 200-12 field. Production in the control field was 238 bushels per acre, where seasonal irrigation was 24.11 and pre-water 4.15 inches to establish a total of 28.26 inches. The control field's net gain was \$18.90 per acre with 15.71 inches more irrigation used compared to production from the 200-12 field. Reinart stated, "an additional 600 acres across the rest of our farm that mirrored the 200-12 field averaged 185 bushels per acre. And that "we will continue to plant early and late corn using the strategies learned from the 200-12 project".

**Harold Grall** of Moore County dedicated 240 acres to the on-farm demonstration in two separate fields irrigated by different center pivots. Grail strip tilled and planted 120 acres of corn on June 4 at 26,000 seeds/acre for his "200-12" field. Grail planted 120 acres, also strip tilled, on June 2 at 24,000 seeds/acre for his "control" field. The 200-12 field produced a 198 bushel per acre corn yield. Irrigation totaled 15.06 inches. Production in the control field was 195 bushels per acre, where seasonal irrigation was 16.75 inches and pre-water 6.26 making total irrigation 23.01 inches. Grail says "he thinks soil water was low in the control field following the 2012 crop, so he decided to pre-water to help make a crop, considering he has only 300 gpm to irrigate 120 acres. And, that soil water was better in the 200-12 field". In comparison, the 200-12 field produced 3 more bushels per acre than the control with 7.95 less inches of irrigation. The 200-12 field's net gain was \$70.28 per acre with 7.95 inches less irrigation used compared to production from the control field.

**Brent Clark** of Hartley County dedicated 244 acres in two separate fields irrigated by different center pivots to the on-farm demonstration. Clark strip tilled and planted 122 acres of corn on April 25 at 28,000 seeds/acre for his "200-12" field. Clark planted 122 acres on April 25 at 32,000 seeds/acre, also strip tilled, for his "control" field. The 200-12 field produced a 219 bushel per acre corn yield. Irrigation totaled 17.26 inches. Production in the control field was 239 bushels per acre, where irrigation totaled 20.21 inches. In comparison, the control field produced 20 more bushels per acre than the "200-12" field with 2.95 more inches of irrigation. The control field's net gain was \$41.93 per acre with 2.95 inches additional irrigation used compared to production from the 200-12 field. Brent said "corn in the 200-12 field stressed for water more than he wanted when the pump was being repaired during five days at the critical growth stage the first week in July". Variable rate irrigation was (VRI) was planned for the 200-12 field but not initiated due to the untimely pump repair.



**Danny Krienke** of Ochiltree County dedicated 120 acres in one field irrigated by the same center pivot to the on-farm demonstration. Krienke strip tilled and planted 40 acres of corn on May 18 at 28,000 seeds/acre in the northeast quarter of the circle for his 200-12 field. He planted 40 acres in the north portion of the circle on May 18 at 28,000 seeds/acre, also strip tilled, for his control field. The northwest 40 acres were planted at 36,000 seeds/acre on June 25 for another comparison. Corn hybrid was short season. The 200-12 field produced a 231 bushel per acre corn yield. Irrigation totaled 19.04 inches. Production in the control field was 240 bushels per acre.

Seasonal irrigation totaled 25.15 inches. There was no pre-season irrigation. The control field produced nine more bushels per acre than the control and irrigation was 6.11 inches more. The control field's net gain was \$2.78 per acre with 6.11 inches more irrigation used compared to production from the 200-12 field. Yield from the late planted field was 201 bushels per acre. Irrigation totaled 19.96 inches. The 200-12 field's net gain was \$148.78 per acre with 0.92 inches less irrigation compared to the late planted short season hybrid field.

**Brian Bezner** dedicated 222 acres in two fields irrigated by separate center pivot irrigation systems to the on-farm demonstration. Bezner strip tilled and planted 98 acres of corn on May 20 at 27,000 seeds/acre for his 200-12 field. He planted 124 acres on May 17 at 32,000 seeds/acre, also strip tilled, for his control field. The 200-12 field produced 206 bushels per acre. Irrigation was 18.92 inches. Production in the control field was 274 bushels per acre, where seasonal irrigation totaled 22.86 inches. There was no pre-season irrigation in either field. The control field's net gain for corn grain is \$256.72 per acre with 3.94 inches more irrigation used compared to production from the 200-12 silage field. Variable rate irrigation (VRI) was planned in conjunction with Syngenta but never initiated because separate soil moisture sensors did not indicate the need.

**Richard Schad** of Hansford County dedicated 165 acres in two separate fields irrigated by different center pivots to the on-farm demonstration. Schad strip tilled and planted 41 acres of corn on May 18 at 26,000 seeds/acre in the east half circle for his "200-12" field. Schad planted 124 acres on May 17 at 32,000 seeds/acre, also strip tilled, for his control. The 200-12 field produced a 196 bushel per acre corn yield. Pre-Irrigation was 3.20 inches and in season 15.76 making a totaled of 19.53 inches. Production in the control field was 230 bushels per acre, where pre-water was 2.80 inches, in season 14.59 and total irrigation at 17.39 inches. In comparison, the control field produced 34 more bushels per acre than the 200-12 with 1.57 less inches of irrigation. The control field's net gain was \$121.65 per acre with 1.57 inches less irrigation used compared to production from the 200-12 field. Schad stated, "two timely rains came immediately following irrigation of the 200-12 fields, which could have reduced irrigation had I known. I am stretched for water, rotate irrigation between four center pivots and must keep the water moving".

**Frische Brothers** of Moore County dedicated 107 acres in one field irrigated by the same center pivot to the on-farm demonstration. Frische Brothers strip tilled and planted 53 acres of corn in the west half circle on May 7 at 28,000 seeds/acre for their 200-12 field. They planted the east half, 53 acres, on May 7 at 28,000 seeds/acre, also strip tilled, for their control field. The 200-12 field produced a 176 bushel per acre corn yield. Pre-Irrigation was 3.00 inches, in season 14.01 and the total 17.01 inches. Production in the control field was 223 bushels per acre. Pre-water was 3.00 inches, seasonal 19.40 and total irrigation 22.40 inches. In comparison, the 200-12 field produced 47 less bushel per acre than the control and irrigation was 5.39 inches less. The 200-12 field's net loss was \$184.55 per acre with 5.39 inches less irrigation used compared to production from the control field. Seasonal rainfall totaled only 4.85 inches. Frische Brothers is another demonstration site where rainfall was similar to previous years.

**Phil Haaland** of Hartley County dedicated 120 acres in one field irrigated by the same center pivot to the on-farm demonstration. Haaland strip tilled and planted 4 acres from, 124 to 136 degrees in the circle, to corn on May 15 at 28,000 seeds/acre for his 200-12 field.

He planted the remaining 116 acres in the circle on May 15 at 35,000 seeds/acre, also strip tilled, for his control field. The 200-12 field produced a 191 bushel per acre corn yield. Irrigation totaled 19.04 inches of which 3.01 were pre-water. Production in the control field was 287 bushels per acre. Seasonal irrigation totaled 27.35 inches. Pre-season irrigation was 4.93 inches making total irrigation 32.28 inches. In comparison, the 200-12 field produced 96 less bushels per acre than the control and irrigation was 13.24 inches less. The 200-12 field's net loss was \$312.25 per acre with 13.24 inches less irrigation used compared to production from the control field. Haaland says "the lack of beneficial rainfall here during the growing season, like in other areas, made continuous irrigation essential".

**David Ford** of Hartley County dedicated 120 acres in one field irrigated by the same center pivot to the on-farm demonstration. Ford strip tilled and planted 60 acres of corn in the east half circle on May 15 at 28,000 seeds/acre for his 200-12 field. He planted the west half circle 60 acres on May 15 at 28,000 seeds/acre, also strip tilled, for his control field. The 200-12 field produced a 178 bushel per acre corn yield. Irrigation totaled 19.08 inches, of which 2.31 inches was pre-water. Production in the control field was 191 bushels per acre. Seasonal irrigation was 19.97 inches, pre-water 2.10 and total irrigation 22.07 inches. The 200-12 field's net loss was \$42.54 per acre with 2.99 inches less irrigation used compared to production from the control field. Ford says "blowing was a problem early, especially on about 10 acres in the west "control" half where plant population was decreased. I could not get it stopped", he said. Ford says "not enough timely rainfall to help when needed most". Also Ford says "that reduced corn irrigation following a previous cotton crop is not a good farming practice". The 2013 corn crop followed wheat.

**Hartley Feeders (Dennis Buss)** of Hartley County dedicated 120 acres in two separate fields irrigated by different center pivots to the on-farm demonstration. Hartley Feeders strip tilled and planted 60 acres of corn on May 18 at 28,000 seeds/acre in the north half of the circle for their "200-12" field. Hartley Feeders planted the north half 60 acres, also strip tilled, on May 19 at 28,000 seeds/acre for their "control" field. The 200-12 field produced a 218 bushel per acre corn yield. Irrigation totaled 24.01 inches, of which pre-water was 1.56 inches. Production in the control field was 176 bushels per acre, where seasonal irrigation was 20.35 inches, pre-water .72 and total irrigation 21.07 inches. In comparison, the 200-12 field produced 42 more bushels per acre than the control with 2.94 inches more irrigation. The 200-12 field's net gain was \$181.80 per acre with 2.94 inches more irrigation used compared to production from the control field. Dennis Buss said "the soil probe really helped save water this summer. I was able to stop irrigation for the 200-12 field a whole week twice". Also, "Better Harvest saved a lot of money in fertilizer and corn was less stressed". And "the control field has an area of less productive soil that likely contributed to the reduced yield there, plus the crop used all irrigation and soil water available in July. A good rain then would have helped".

**Tommy Laubhan** of Lipscomb County dedicated 122 acres in the same field irrigated by the same center pivot to the on-farm demonstration. Laubhan strip tilled and planted 61 acres of corn in the southeast quarter of the circle on May 12 at a seeding rate of 31,700 seeds/acre for his "200-12" field. He planted the northeast quarter, 61 acres, also strip tilled, on May 12 at 31,700 seeds/acre for his "control" field. The 200-12 field produced a 189 bushel per acre corn yield. Irrigation totaled 21.07 inches. Production in the control field was 191 bushels per acre. Seasonal irrigation totaled 21.40 inches. There was no pre-season irrigation. The control field's net gain was \$7.30 per acre with 0.33 inches additional irrigation used compared to production from the 200-12 field. Laubhan lost his center pivot on June 3 in a storm that also dumped 4.05 inches of rainfall on his two fields. A new system was in place and running on June 15. Two hail storms in August damaged his crop resulting in 35 percent adjustment by insurance. Laubhan says the NPGCD 200-12 project provides good information and that he is glad to participate.

**Summary:** All 1672 acres dedicated to the project were harvested for corn grain. None was abandoned nor harvested as corn silage. Corn yields averaged 200 bushels per acre in eleven 200-12 fields. Irrigation averaged 18.36 inches. Average pre-water



in 5 200-12 fields was 2.37 inches. Production averaged 11.17 bushels (625 lbs) per inch of irrigation. Average Irrigation, rainfall plus net soil water totaled 26.25 inches. Production averaged 226 bushels per acre in 11 control fields. Average Irrigation was 23.28 inches. Production was 9.84 bushels (551 lbs) per inch of irrigation. Irrigation, rainfall and net soil water averaged 31.34 inches. No pre-water was applied in 10 of the 22 fields. A water summary table is in Appendix A. A summary of corn hybrids, seeding rates and planting dates selected by the eleven cooperators are in Appendix B.

### **What We Learned**

- Yields were boosted by LEPA equipped center pivots
- Planting tended to be later, mostly in May
- Mostly Drought tolerant hybrids were planted
- Crop Residue is essential
- Growers must manage for production per inch of water
- More knowledge of pre-season and seasonal soil moisture levels is needed
- Satellite crop imagery has potential as an additional management tool, but needs development

By reducing current irrigation volumes by as little as three inches over the one million acres of irrigated cropland within the District, it is possible to save up to 250,000 acre-feet of groundwater per year and prolong the viability of irrigated agriculture irrigation in the area. NRCS CIG and TWDB grant funds partially funded the 2013 NPGCD 200-12 Reduced Irrigation on Corn Demonstration Project.

Paul Sigle and Steve Walthour presented the following report to the Board regarding the EPIC Program and the District's outreach activities:

### **EPIC**

The Extension agents are currently collecting data and working on the report for their demonstration site. When the agents finish their reports, each report will be combined into the final yearly report. The agents will present their final report at the March board meeting.

### ***Outreach Activities***

January 13 – Pioneer Crop Production Clinic, Dalhart

January 14 - Pioneer Crop Production Clinic, Dumas

January 15 – Pioneer Crop Production Clinic, Stratford

January 16 - Pioneer Crop Production Clinic, Spearman

January 16 – High Plains Irrigation Conference, Amarillo

January 28 – Colorado Farm Conference - Greeley

February 12 - Panhandle and Southern High Plains  
Water Conservation Symposium, Amarillo

The Board recessed at 10:50 a.m. and reconvened at 11:02 a.m.

The Board discussed rules from the General Manager's draft of proposed rules. The Board discussed proposed Rule 2.3.2. Bob Zimmer suggested that the fourth line of paragraph 2, following the word determination, be modified by adding "by formal vote".

The Board discussed proposed Rule 4.5.7 and determined that the proposed Rule should be revised as follows:

7. For well distribution systems that are not designed to maintain constant pipe line

pressure or may inject chemicals for purposes other than disinfectant for potablewater supplies, an automatic low-pressure drain shall also be installed between the pump discharge and the check valve in such a position and manner that any fluid which may seep toward the Well around the flapper will automatically drain out of the pipe. The drain must discharge away from, rather than flow toward, the Well. The drainage must not collect on the ground surface or seep into the soil around the Well casing.

- A. The drain shall be at least three-fourths of an inch (3/4") in diameter and located on the bottom of the horizontal pipe between the pump discharge and the check valve.
- B. The drain must not extend beyond the inside surface of the bottom of the pipe unless special provisions, such as a dam located upstream of the drain, forces seepage to flow into the drain.
- C. The outside opening of the drain shall be at least two inches above the grade.

The Board also discussed proposed Rule 4.5.10 and determined that the proposed Rule should be revised as follows:

10. The port shall have a minimum four-inch diameter orifice or viewing area.

- A. The drain shall be at least three-fourths of an inch (3/4") in diameter and located on the bottom of the horizontal pipe between the pump discharge and the check valve.
- B. For all other distribution systems with pipelines too small to install a four-inch diameter inspection port or where an inspection port can cause a danger to human health or safety, the system must meet all other applicable health and safety standards of the State.

The Board discussed proposed Rule 5.1.4.B. as drafted. Harold Grall stated that if he could be shown how a flow meter at each Well more accurately measures groundwater withdrawals than placing a flow meter at a central collection point on a closed system, that he would consider changing his position on this issue. Director, Bob Zimmer, stated that no director on the Board wanted to punish any constituents of the District by requiring flow meters at each Well. In October of 2003, the Board wanted to move forward toward each non-exempt Well in the District being equipped with a flow meter, but the Board did not want to impose a "drop-dead" date to have flow meters installed. Mr. Zimmer stated that in example, there are some old timers in the East who don't want more Wells drilled and believe that the District needs to monitor the use of groundwater more closely if the District permits more wells to be drilled. Mr. Grall stated that it is more palatable to constituents when the installation of flow meters on other existing Wells that are not being effected by the drilling of a new Well on the property is the property owner's idea, rather than being mandated to do so by regulation. Mr. Zimmer stated that the majority of the constituents in his Counties wanted meters on all non-exempt Wells. Mr. Grall stated that the stakes are a lot higher now than they were in 2003 and no person wants to over-state production. Mr. Krienke stated that he did not like the proposal and stated the he might consider something different than the proposal. Mr. Krienke stated that he was interested in hearing comments on what was on the table. Brian Bezner stated that the proposal was not ok with him. Mr. Bezner stated that the proposal is illogical with the way the District works. Mr. Bezner stated that the only logical place to require a flow meter is where it comes out of the pump. Mr. Grall stated that the Board needed to be real clear about its intent. Mr. Grall inquired if this was the Board's way of deterring the drilling of new Wells? Mr. Zimmer responded to Mr. Grall and stated that it was not the Board's way of deterring the drilling of new Wells. Mr.



Zimmer stated that flow meters help improve the accuracy of the GAM and MAG. The General Manager commented and stated that the Board needed to remember that it would be submitting the proposed Rules for public comment and that the Board may adopt some, none, or all of the proposed Rules. Justin Crownover stated that he was hungry for the opinion of the audience and that he agrees that there should be a meter at every Well. He stated that he cringes at the thought of flow meters being located at the center pivot on a closed system. Mr. Crownover stated that he realized there was an issue of the expense of putting meters on each Well and maintaining the same. Mr. Crownover stated that when someone has to spend money it upsets them and they want to blame someone. Mr. Crownover stated that it should not be too financially cumbersome for constituents in the District to install meters at each Well if they were given a year or two to do so.

The Board determined that proposed Rule 5.1.4 should be revised as follows:

4. An Owner may use an Alternative Metering System or a central collection point to Report Groundwater withdrawals from a Groundwater Production Unit until the Owner applies for a Permit to construct a Well or amend an existing Well Permit on the Groundwater Production Unit. At that time;
  - A. Except as provided in Rule 5.1.4.B., the Owner must install meters at the pump on all Wells in the Groundwater Production Unit within 365 days after the date the Permit or amended Permit was approved.

Provided, however, for Groundwater Production Units that are 640 acres or less and are not contiguous with other Groundwater Production Units under common ownership, the Owner shall install a meter on the new Well and may continue to utilize, or may install, a meter at a central collection point to measure all Water produced from the Groundwater Production Unit.

The Board discussed proposed Rule 7.5 and determined that the proposed Rule should be revised as follows:

#### **7.5. Limitations on a Pooled GPU's Size and Shape:**

1. **Pooled GPUs 1600 Acres or Less:** The most distant diagonal corners of the pooled unit shall not be more than 15,000 feet apart and shall contain no more than 1,600 acres; or
2. **Pooled GPUs Greater than 1600 Acres:** An Owner of contiguous Water Right acreage in excess of 1600 acres may pool all of the acreage into one GPU. The GPU must comply with all permitting requirements, production reporting and production and spacing limitations prescribed in these Rules, and shall also be subject to, and comply with, the following:
  - A. The Allowable Annual Production shall be one and one-half (1.5) acre-feet per acre per year in the GPU unless reduced pursuant to these Rules.
  - B. Groundwater production from each Well in the GPU shall be strictly limited to 200 acre-feet per year.
  - C. Each producing Well in the GPU shall be metered at the pump.
  - D. While the GPU is eligible for the Conservation Reserve, the Conservation Reserve shall not apply to, and cannot be used to exceed, the 200 acre-feet per Well per year limitation.

Harold Grall moved to present the proposed Rule draft, as amended by the Board, to the public. Justin Crownover seconded the motion and it was unanimously approved by the Board.

The General Manager reported that on November 7, GMA-1 Joint Planning Committee amended its bylaws to incorporate changes in the law by the legislature. The committee also reviewed the timeline developed by Bill Mullican related to establishing Desired Future Conditions for GMA#1 that meet all guidelines and regulations including:

- Processes and roles in going through DFC consideration and adoption;
- Each GCD in GMA #1 will provide a status report on processes to amend management plans and rules necessary to achieve the various adopted Desired Future Conditions;
- Desired Future Condition of the Ogallala aquifer in the GMA#1 Planning Area;
- Desired Future Condition of other aquifers in the GMA#1 Planning Area; and
- Action relating to future planning and meeting schedules.

The Joint Planning Committee was scheduled to meet on February 6, 2014, but because of inclement weather, the meeting was rescheduled for February 21, 2014. Bob Zimmer also discussed with the Board the appropriate time to have meetings with stakeholders regarding the DFC for the next five years. Mr. Zimmer suggested that, in his opinion, it would be better to hold the DFC stakeholders' meetings as separate meetings from the proposed Rule stakeholders' meetings. Mr. Zimmer also believes that the DFC stakeholders' meetings should be held prior to the stakeholders' meetings on the proposed rules. It was determined by the consensus of the Board to hold the DFC stakeholders' meetings separately prior to the proposed Rule stakeholders' meetings and to hold all meetings in the evening.

Danny Kreinke reported on the Panhandle Regional Water Planning Group. Mr. Krienke discussed the Regional Water Plan and stated that basically, that Group took the MAG, the number from the Joint Planning Group, and the needs and balanced them like a checkbook. Mr. Krienke stated that Texas AgriLife has received Legislative money for its PET Network and that the demonstration projects have been included as an educational alternative. Mr. Krienke also stated that 20% of a Two Billion Dollar grant has been approved to be used in the area. It was stated that if a public water supply needed to update its system, it could apply for these funds.

In December, the General Manager and the owner of 605 1<sup>st</sup> Place reached a verbal agreement on the purchase of the property to add to the District's facilities. District staff is currently working with the owner, the District's attorney, and the District's real estate agent to finalize the sale. On January 21st, the Dumas Zoning Commission recommended that the City approve the special use permit application the District filed with the City. The City will hear the permit application on February 18, 2014. If the City approves the permit the District is clear to buy the property.

In December, the General Manager forwarded a letter from the District to Texas AgriLife Research and Extension on the general contractual conditions for use of the Water Conservation Center beginning in September 2014. Since the last Board meeting, the Ag Committee has met with various seed companies and the Texas Corn Producer's Board Research Committee regarding the status for the field. The district's direction for the field was well received. The General Manager reported that Leon New and the District staff are compiling a list of equipment and prices for the equipment. District staff is also applying for grants for the Water Conservation



Center. Personnel at the Water Conservation Center are being contacted by the General Manager of the District to determine if they would like to stay employed by the District. A proposal for seasonal research at the Water Conservation Center prepared by Dr. Sweeten is being reviewed that the Board would need to approve if the District desires to permit Texas Agri-Life to perform limited seasonal research. Dr. Sweeten does not like the locations of fields under the proposal and would like to construct roads to the test plots. Leon New stated that the dry land plot identified on Exhibit "A" that is proposed by Texas Agri-Life near the East pivot needs to be moved. Mr. New stated that the District needed to analyze the proposal further and it should be more clear exactly what AgriLife is going to furnish and what the District is going to be required to do. It was also suggested by Mr. New that the District obtain a listing of what equipment Texas Agri-Life is leaving at the Water Conservation Center and the value that AgriLife is placing on the same. Mr. New also stated that drip irrigation is coming in hard and fast and that he suggested that the District be very cautious on how it words things when speculating on drip irrigation and encouraged the Board to move forward with professional, scientific, fact-driven information regarding drip irrigation. Mr. New stated that drip irrigation doesn't save water, it uses more and that fact has been proven.

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

No Committee reports were presented.

Steve Walthour presented the General Manager's Report, including information concerning upcoming meetings and conferences and the General Manager's activity summary.

By consensus, the Board set its next Board Meeting at 9:30 a.m. on March 11, 2014.

Justin Crownover moved to adjourn the meeting. Brian Bezner seconded the motion and the motion was unanimously approved. President Born declared the meeting adjourned at 1:23 p.m.



Gene Born, President



Bob Zimmer, Secretary