# MINUTES OF THE JULY 21, 2015 BOARD OF DIRECTORS MEETING OF NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT

The Board of Directors of North Plains Groundwater Conservation District met in regular session July 21, 2015 at 9:00 a.m. in the Conference Room of the North Plains Water Conservation Center, 6045 County Road E., Dumas, Texas 79029. The following persons were present:

### Members Present at 9:11 a.m.:

Bob B. Zimmer, President; Danny Krienke, Secretary; Gene Born, Director; Harold Grall, Vice-President; Mark Howard, Director; and Zac Yoder, Director.

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

Steve Walthour, General Manager;
Dale Hallmark, Assistant General Manager/Hydrologist;
Kirk Welch, Assistant General Manager/Outreach;
Casey Tice, Compliance Coordinator;
Laura West, Production Monitoring Coordinator; and
Lynsey Meharg, Conservation Outreach Assistant.

# Others present during part or all of the meeting:

Leon New;
Stan Spain;
Taylor Brown;
Dr. Charles Hillyer;
C. C. Sysombath, City of Amarillo;
F. Keith Good, Attorney;
Jessica McCallie, Attorney; and
Ellen Orr, Paralegal.

President Zimmer declared a quorum present and called the meeting to order at 9:11 a.m. Director Yoder gave the invocation. President Zimmer led the pledge.

### 1 - Public Comment

President Zimmer asked if there were persons present who desired to make a public comment. No public comments were received.

## 2 - Consent Agenda

The Consent Agenda, consisting of the review and approval of the Minutes of the April 14, 2015 Board Meeting; the review and approval of the Minutes of the May 12, 2015 Board Meeting; the review and approval of District expenditures for May 1, 2015 through June 30, 2015; and considering approval of payment to Lemon, Shearer, Phillips & Good, P.C. for professional services and out-of-pocket expenses from May 1, 2015 through June 30, 2015 was discussed by the Board. Zac Yoder moved to remove the Minutes of the April 14, 2015 Board of Directors Meeting and the review and approval of District expenditures for May 1, 2015 through June 30, 2015 from the Consent Agenda. Danny Krienke seconded the motion and it was unanimously approved by the Board.

Harold Grall moved to approve the Minutes of the May 12, 2015 Board Meeting and payment to Lemon, Shearer, Phillips & Good, P.C. for professional services rendered and out-of-pocket expenses in the amount of \$10,780.09 for May 1, 2015 through June 30, 2015. Danny Krienke seconded the motion and it was unanimously approved by the Board.

Director Justin Crownover arrived to participate in the meeting at 9:15 a.m.

Director Zac Yoder stated that there was an error in the draft Minutes of the April 14, 2015 Board Minutes that were in the Board packet on page 12 in the roll-call vote regarding the Conservation Reserve. Mr. Yoder stated that the Minute draft reflected the following:

President Zimmer called for a roll-call vote:

Harold Grall – No Gene Born – Yes Justin Crownover – No Mark Howard – No Zac Yoder – No Danny Krienke – Yes Bob Zimmer – No

The motion failed with four (4) Board members opposing the motion.

Mr. Yoder stated that his roll-call vote on the Conservation Reserve motion was Yes, rather than the No reflected in the draft of the Minutes.

The General Manager stated that the blanks before the last names of Messrs. Baumann and Smulders in the draft Minutes under Others present during part or all of the meeting should be completed to reflect Mike Baumann and Joost Smulders.

Danny Krienke moved to approve the Minutes of the April 14, 2015 Board of Directors Meeting as amended. Mark Howard seconded the motion and it was unanimously approved by the Board.

President Zimmer stated that he wanted to see the detail and numbers on the District's payroll data and wanted the data to be consistently reported to the Board.

President Zimmer moved to a approve the summary and detail of the un-audited District expenses from May 1, 2015 through June 30, 2015, including the General Manager's expense and activity report. Danny Krienke seconded the motion and it was unanimously approved by the Board.

Action Agenda 3a - Consider Request of Johnny Valenzuela d/b/a Jesus Victory Welding to Waive Penalty and Interest of Moore County Delinquent Taxes.

The General Manager stated:

In June, the Moore County TAC and the District received a request to waive penalty and interest from Johnny Valenzuela dba Jesus Victory Welding. According to the Moore County TAC, The Moore County Appraisal District (MCAD) has received correspondence from Mr. Valenzuela or representative as follows:

 Correspondence from James Allen's office stating that Jesus Victory Welding was out of business December 31, 2007.

- Correspondence from Mr. Valenzuela stating that the business closed January 3, 2008.
- Correspondence from Mr. Valenzuela dated April 14, 2009 stating that as of January 3, 2008 Jesus Victory Welding was out of business and all equipment sold or liquidated to Cactus Construction and Justin Crownover.
- Correspondence dated March, 2004 that Jesus Victory Welding was out of business and all vehicles, supplies and equipment should be assessed to Johnny Valenzuela personally.
- Per motor vehicle registration records the vehicles in question were registered for 2008 in the name of Jesus Victory Welding or Johnny Valenzuela dba J's Victory Welding.

The Tax Code states that taxes are assessed on January 1 of each year and if you own the property or business on January 1 of the tax year the taxes are due for the full year. It also states that only the governing bodies have the option of waiving penalty and interest.

The Moore County TAC advised the District that Mr. Valenzuela signed a payout agreement with the tax office to pay these taxes on September 25, 2009 and in so doing he acknowledged the fact that he knew he owed the taxes. He never made a payment on that agreement and it was defaulted on March 11, 2010. The Moore County TAC filed a suit against Mr. Valenzuela for delinquent taxes in July, 2010. Now Mr. Valenzuela is coming in and asking for the penalty and interest to be waived because it has gotten out of hand and the penalty and interest is as much or more than the tax. Now Mr. Valenzuela has signed another Payout Agreement with the tax office and he has made the first payment and paid the court costs.

Documentation provided to the District by the Moore County TAC was presented to the Board. According to the Moore County TAC records, Mr. Valenzuela owes the North Plains Groundwater Conservation District \$33.23 as of June 2015. Mr. Valenzuela has been sent a letter via certified mail, regular mail and by email regarding the Board's consideration of this item.

The General Manager recommended that the Board deny the request of Mr. Johnny Valenzuela d/b/a Jesus Victory Welding to waive penalty and interest of Moore County delinquent taxes.

Harold Grall moved to deny the request of Johnny Valenzuela d/b/a Jesus Victory Welding to waive penalty and interest of Moore County delinquent taxes payable to the District. Danny Krienke seconded the motion and the motion passed by the majority vote of the Board with Justin Crownover abstaining from the vote.

# Action Agenda 3g - Discussion with Dr. Charles Hillyer, Texas A & M University, regarding Advancing Irrigation Management and Research in the District.

Dr. Charles Hillyer has been recently named assistant professor and irrigation engineering specialist for the Texas A&M AgriLife and Research Extension Center in Amarillo. Dr. Hillyer comes to the Panhandle from Oregon State University where he served as an assistant professor. Dr. Hillyer stated that his research interest "revolves around answering the question: How do we balance the economic goals of agriculture (where agriculture is a source of food, employment, and culture) with the ecological needs of the environment surrounding agricultural production." Dr. Hillyer has worked specifically on irrigation management for the last ten years, focusing on variable rate irrigation (VRI), using zone control VRI in combination with other irrigation technologies

to develop and refine water and energy saving management methods. Dr. Hillyer discussed VRI with the Board.

# Action Agenda 3b - Receive Report regarding the District's Conservation Outreach Program and the use of Social Media.

Kirk Welch presented the following report to the Board:

The Board is very aware of the importance of the Conservation Outreach aspect of the District's mission. The best recent examples have included the award-winning "200-12 Project," the annual water festivals reaching more than 6000 students over the last 10 years, and most recently the meter reimbursement program. But the Board also knows that, in addition to excellent outreach programs, an organization must get its story out in a compelling way to its target audiences. The Board and management have recognized that fact and have been progressive in the commitment to engage with the District's stakeholders. The Board and management have given Outreach the freedom to pursue any fiscally responsible means to accomplish this, and we have done so to the best of our ability. We have utilized traditional media; mostly newspapers, radio and television effectively. Over the past few years, the District has also focused on electronic media by revamping its website, and building an email list. The District has even started establishing a presence on some social media, but it seems the District is only scratching the surface of what it could do.

On May 18<sup>th</sup>, Lynsey Meharg joined the District staff full-time as the District's Conservation Outreach Assistant. Lynsey had been working part-time since February, telecommuting from Lubbock while completing her bachelor's degree in agricultural communications. Lynsey assists in all aspects of the conservation outreach program; and brings a special affinity for electronic and social media to the table, along with many other talents and qualities that will serve the District well into the future.

Lynsey Meharg presented the following information to the Board:

Why are we involved in social media? It's a free tool to distribute information, as well as build relationships with stakeholders.

## Potential for social media?

### 1. Boost public awareness

It's not always easy to let the public know what you're up to, but email and social media can help. If you work to grow your email list and social media following, you'll be able to reach your audience in real time. Awareness is a big piece of any marketing puzzle.

### 2. Increase involvement

At some point, every organization needs a helping hand. With email and social media marketing your organization can instantly engage with your audience.

# 3. Stay in front of supporters

By sending emails and being social, you can stay in front of your supporters.

# Importance of board interaction?

When we have individuals share our posts we see interactions are 10 times as high as posts without shares. This means 10 times as many people are engaging with the post.

# What is engagement?

Engagement rate is the percentage of people who saw a post that liked, shared, clicked or commented on it.

### **TWITTER**

## Common terms:

Hashtag- a word or phrase preceded by a hash or pound sign (#) and used to identify messages on a specific topic.

Followers- someone who subscribes to receive your updates.

Favorites- similar to the "like" button on Facebook.

Retweets- the repetition of another user's update, or tweets, on Twitter

# Why do we use hashtags?

Hashtags are a way for social media users to tag their posts with keywords, which in turn make them easier for social networks to organize and users to search.

### Post Content:

- Twitter is a news platform.
- NPGCD Twitter posts contain information pertinent to producers (metering program, deadlines, events and weather updates) as well as water conservation tips and interesting water news stories.

# Post Schedule (approximate times):

- Monday: 9 a.m., 3 p.m. and 10 p.m.
- Tuesday: 9 a.m., 3 p.m. and 10 p.m.
- Wednesday: 9 a.m., 3 p.m. and 10 p.m.
- Thursday: 9 a.m., 3 p.m. and 10 p.m.
- Friday: 9 a.m., 3 p.m. and 10 p.m.
- Saturday: Noon and 10 p.m.
- Sunday: Noon and 10 p.m.

### **District Hashtags:**

#water

#txwater

#txwx

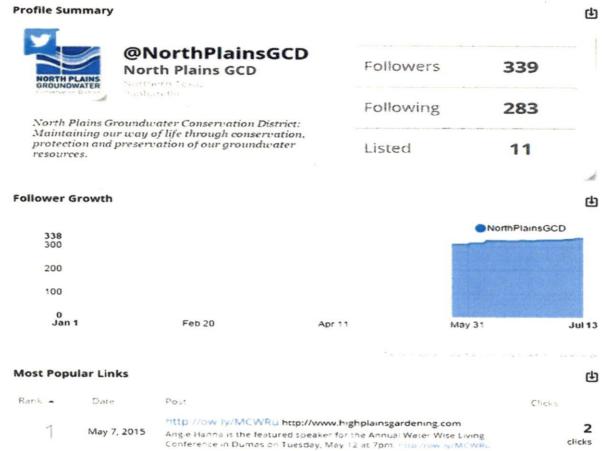
#conservation

#texas

#agriculture

### **Growth Seen:**

Jan 1, 2015 - Jul 13, 2015



## **Top Interactions:**

- 1. Carlos Rubenstein, TWDB Board Member
- North Texas Municipal Water District
- 3. Robert Mace, Water Science & Conservation group of the TWDB
- 4. Tom Kula, Executive Director of the North TX Municipal Water District
- 5. Water PR
- 6. Texas Water Journal
- 7. Texas Water Infrastructure Network
- 8. Blake Tregallas, Tregallas Family Farms

### **FACEBOOK**

# **Post Content:**

Likes- easy way for people to let a poster know that they enjoy a status without leaving

Shares- reposting content from someone else's page.

### Common terms:

NPGCD Facebook posts contain information such as water conservation tips, interesting water news stories, District updates and event features.

# Post Schedule (approximate times):

Monday: 10 p.m. Tuesday: 8 p.m.

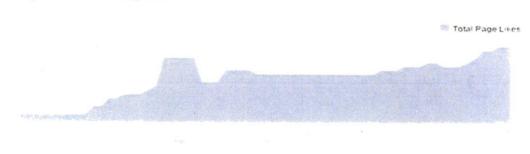
Wednesday: Noon Thursday: 10 p.m.

Friday: 8 p.m.

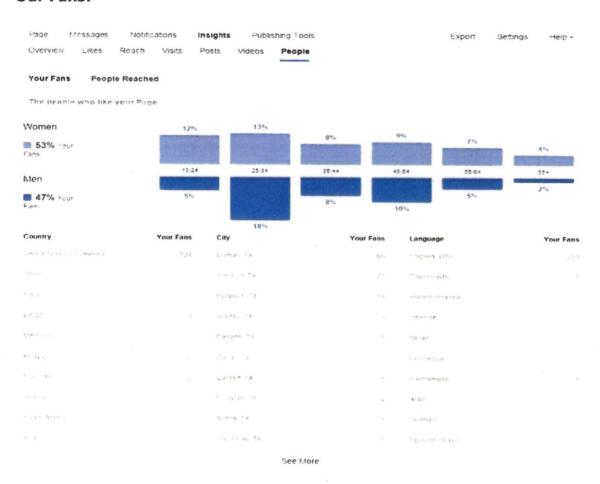
Saturday: 9 p.m.Sunday: 2 p.m.

### **Growth Seen:**

Total Page Likes as of Today 249



## **Our Fans:**



The Board recessed at 10:36 a.m. and reconvened at 10:56 a.m.

# Action Agenda 3c - Consider Approval of Water Well Permits as Active and Complete Wells.

District staff processed 49 Water Well permits that are ready for Board consideration and approval. These permits, listed in the attached table, 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 their 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. HA-4927 and HA-5443 are Well permits which were permitted prior to January 15, 2013 and may be metered at the Well, or at the pivot. It was noted that permits SH-8436 and SH-8437 were Well permits of Director, Justin Crownover.

Well Num	Class	Max Yield	QTR	Sec	Blk	Sur	NS	EW
DA-6374	В	400	NE/4	19	47.5	H&TC	51N	739E
DA-7006	С	800	SE/4	88	M E Hays	CRL	756S	577E
DA-7007	D	1800	NW/4	89	M E Hays	CRL	315N	230W
DA-7008	D	1800	SE/4	88	M E Hays	CRL	573\$	128E
DA-7437	В	400	NE/4	38	6	CSS	9115	46E
DA-7438	В	400	NW/4	39	6	CSS	490N	373W
DA-7439	В	400	NW/4	39	6	CSS	5815	456W
DA-7440	В	400	SE/4	38	6	CSS	730S	645E
DA-7441	В	400	SW/4	39	6	CSS	692S	115W
DA-7593	В	214.8	NW/4	3	2	SPRR	175N	418W
DA .7333		214.0	1400/4	3	WH	SFIRE	1/3/4	410
DA-7652	D	1800	NE/4	5	Pardue W H	NONE	455N	427E
DA 7794	С	800	NW/4	5	Pardue	NONE	451N	476W
DA-7848	С	800	SE/4	8	W H Pardue	NONE	8425	759E
DA-7898	С	800	NE/4	25	2	GH&H	158N	110.5E
DA-7941	С	800	NW/4	18	M.27	н&тс	474N	84E
DA-7944	С	800	SE/4	3	M.27	н&тс	664S	843E
					WH			
DA-8070	С	800	SE/4	8	Pardue	NONE	1735	222E
DA-8072	С	800	SE/4	9	W H Pardue	NONE	2145	206W
DA-8219	С	800	NE/4	8	W H Pardue	NONE	142N	273E
DA-8250	С	800	NW/4	73	M E Hays	CRL	51N	841W
DA-8277	С	800	NW/4	8	W H Pardue	NONE	200N	435W
DA-8282	С	800	SW/4	57	5	CSS	472S	434W
					WH			
DA-8307	С	800	NW/4	8	Pardue	NONE	526N	737W
DA-8369	С	800	SE/4	11	J C Patton	NONE	290S	175E
DA-8377	С	800	NE/4	34	NONE	ME HAYS	425 N	83 E
DA-8430	В	400	NE/4	1	1	B&B	811N	137E
DA-8474	D	1800	SW/4	59	M E Hays	BLK 1	78 S	675 W
DA-8493	С	800	NW/4	11	J C Patton	NONE	598 S	137 W
HA-4927	С	800	SE/4	0	0	GW CARLISLE	1035	752E
HA-5443	С	800	SW	5	11	CSS	4385	436W
HA-6140	В	400	SE/4	298	44	н&тс	1015	456E
HA-6171	С	800	SE/4	19	11	CSS	445	220E
HA-6190	С	800	SE/4	40	15	CSS	1325	394E
HA-6352	С	800	NW/4	5	11	CSS	838N	659W
HA6596	С	800	NE/4	40	15	CSS	120N	363E
HA7702	D	1800	NE/4	81	4	CSS	114N	131E
HA-7940	В	400	NW/4	379	44	н&тс	880N	529W
HN-8617	С	800	SE/4	19	2	SA&MG	720 S	341 E
HU-8370	С	800	SE/4	35	3	GH&H	111	446
LI-8460	D	1800	NE/4	979	43	н&тс	372 N	487 E
MO-8415	D	1800	SW/4	433	44	н&тс	16 S	410 W
MO-8446	С	800	NE/4	149	3.T	T&NO	18 N	392 E
SH-6593	С	800	NE/4	194	1C	GH&H	802N	416E
SH-6859	В	400	SW/4	440	1.T	T&NO	126S	21W
SH-7962	D	1800	NE/4	12	1	PSL	639N	634E
SH-8060	D	1800	NE/4	94	1.C	GH&H	128N	102E

SH-8372	В	400	NW/4	12	2.B	GH&H	447 N	519 W
SH-8436	С	800	SW/4	136	1.T	T&NO	807 S	445 W
SH-8437	С	800	SW/4	136	1.T	T&NO	100 S	755 W

Director Danny Krienke moved to remove Well permits SH-8436 and SH-8437 from the Schedule of Well Permits to be considered by the Board and to approve the remaining permits on the Schedule because the Wells are properly equipped and otherwise comply with District Rules. Zac Yoder seconded the motion it was unanimously passed by the Board.

Danny Krienke moved to approve Well Permits SH-8436 and SH-8437 because the Wells are properly equipped and otherwise comply with District Rules. Zac Yoder seconded the motion and the motion passed by the majority vote of the Board with Justin Crownover abstaining from the vote.

# Action Agenda 3d - Receive Report Regarding the District's Irrigated Agriculture 3-4-5 Demonstration Program.

Steve Walthour presented the following report to the Board:

Participants in the current "3-4-5" project will utilize variable rate irrigation to apply 3, 4, and 5 gallons per minute per-acre in side-by-side, production-field scale demonstrations. The "3-4-5" participants will not only apply the techniques and technologies used in the "200-12 project," but will utilize even more advanced individual grower remote irrigation management to demonstrate their applications under the different levels of irrigation selected for the new project. Early season rains have delayed planting for most participants in the "3-4-5" project. Once the crops are planted they will have the advantage of a full soil profile, because of the recent rains and the opportunity for some to leave water in the ground last year for the first time since 2011.

The 3-4-5 Project will consist of five different producers from this area. Harold Grall, Danny Krienke, Zac Yoder, Stan Spain and Hartley Feeders/Dennis Buss have all provided acres to perform the 3-4-5 project. In addition to the 3-4-5 Project, the District is performing a study comparing Precision Mobile Drip Irrigation (PMDI) to LEPA.

As of July 13<sup>th</sup>, the District has installed gypsum blocks at all sites except at Hartley Feeders. AquaSpy has installed all probes and all are fully functional. Better Harvest is collecting samples and providing reports for the fields. PivoTrac has installed all equipment and it is fully functional. On July 7<sup>th</sup>, Karlyle Haaland provided a training session for the new features PivoTrac is offering. These new features will help producers better manage their pivots.

Leon New presented a Cooperators' report to the Board which is attached hereto as Exhibit "A" and is incorporated herein for all purposes.

# Action Agenda 3e - Receive Report Regarding Agriculture Demonstrations at the North Plains Water Conservation Center.

Stan Spain and Leon New presented the following report to the Board:

Stan Spain and Crop Production Service planted corn in the east and west circles on May 29<sup>th</sup> and 30<sup>th</sup>. A total of 13 hybrids where planted in the east circle and a total of 12 hybrids where planted in the west circle. The east circle was planted at 32,000 seeds per acre and the west circle was planted at 24,000 seeds per acre. Table 1 and Table 2 list the hybrids planted in each circle. Mr. Spain presented a map and information from Mr. Spain's FieldView.

Table 1: East Pivot Hybrids

	Brand	Hybrid	Acres
1	Dyna-Gro	D55VP77RIB	29.7
2	Dyna-Gro	D58QC72	8.2
3	Dyna-Gro	D55QC73	7.7
4	Dyna-Gro	D54DC94RIB	7.3
5	Dyna-Gro	D53VC47RIB	6.8
6	Dyna-Gro	D52SS91RIB	6.4
7	Pioneer	P1690AM	5.9
8	Pioneer	P1266AM	5.5
9	DeKalb	DKC66-40	4.5
10	DeKalb	DKC62-98	4.1
11	Syngenta	N78S-3111	3.6
12	Syngenta	N75H-5122A	3.2
11	Channel	209-85VT3PRIB	3.2
Total	¥	1130113113113113113113113113113113113113	97.9

Table 2: West Pivot Hybrids

	Brand	Hybrid	Acres
1	Dyna-Gro	D55VP77RIB	19.2
2	Dyna-Gro	D58QC72	8.8
3	Dyna-Gro	D55QC73	8.3
4	Dyna-Gro	D54DC94RIB	7.7
5	Dyna-Gro	D53VC47RIB	7.2
6	Dyna-Gro	D52SS91RIB	6.7
7	Pioneer	P1690AM	6.2
8	Pioneer	P1266AM	5.7
9	DeKalb	DKC66-40	5.1
10	DeKalb	DKC62-98	4.6
11	Syngenta	N78S-3111	4.1
12	Syngenta	N75H-5122A	4.4
Total			88.0

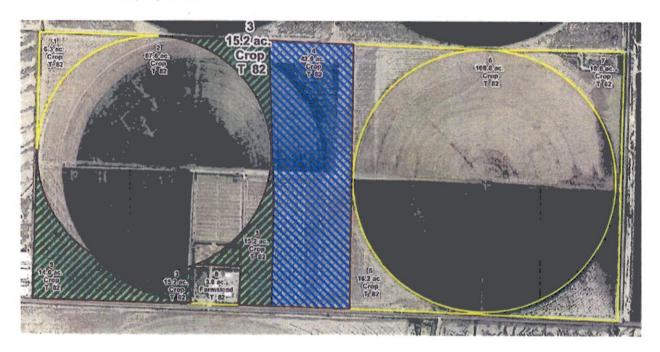
The North one-half of the West circle is Crop Production Service's fertility program and the South one-half is Stan's normal fertility program. The West circle is designated for limited irrigation. The South one-half of the East circle is the District's 3-4-5 project.

The wheat planted by the District was harvested July 1<sup>st</sup> and yielded 16 bushels per acre. A total of 100 acres of wheat was harvested and about 2.5 acres of the 100 acres was irrigated. Texas A&M AgriLife harvested their wheat during the week of June 29<sup>th</sup>.

# Action Agenda 3f - Receive Report and Consider Action as Necessary Regarding Implementation of Drip Irrigation at the North Plains Water Conservation Center.

NRCS has agreed to partially fund Stan Spain to install subsurface drip irrigation for the Water Conservation Center. The contract with NRCS will include planting 29.2 acres of grass and installing 42.6 acres of drip irrigation. The grass must meet NRCS guidelines on planting grass. In total, the drip irrigation system is estimated to cost \$105,000 and NRCS may possibly cost-share up to \$68,000. The contract presented to the Board indicates that the total NRCS contract obligation is \$40,630. \$5,460 is for planting grass in 2015 and \$35,140 is for drip irrigation installation. The cost-share is about \$824.88 per acre for drip spaced 60 inches apart. The proposed plan is to install drip lines spaced 30 inches apart is about

\$1,600 per acre. The NRCS agent will request the contract be amended to adjust to the cost sharing for the drip lines spaced 30 inches apart. The map below is the proposed location for the drip system and grass. The green section is the grass and the blue section is the drip system.



Leon New and Stan Spain provided the information attached hereto as Exhibit "B", which is incorporated herein for all purposes, to the Board regarding the drip irrigation proposal.

District staff is developing specifications for the project with the assistance of Leon New that will be used in Requests For Proposal ("RFP") for the installation of the drip system. Once the RFP is issued, respondents will have thirty days to submit their proposals. Mr. Walthour stated that the District had placed a Notice in the newspaper for Requests for Proposal for the drip irrigation project to be returned to the District by August 21, 2015 at 5:00 p.m.

The General Manager requested that the Board approve moving forward with the process to install drip irrigation at the Water Conservation Center and to authorize Stan Spain to review the proposals with assistance from District staff and the District's engineers and make a recommendation to the Board at a special meeting in August. Mr. Spain is the District's agent as the farmer on the property, and the General Manager stated that Mr. Spain is the appropriate party to evaluate the proposals because any installer of the drip system will need to work with him. If the drip system is authorized by the Board it would be installed at the end of this fiscal year, or the beginning of the 2015-2016 fiscal year.

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

At 12:07 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 from its attorney. Danny Krienke seconded the motion and it was unanimously approved by the Board.

Executive Session: At 12:12 p.m., the Board went into Executive Session. At 12:31 p.m., Director Danny Krienke moved that the Board reconvene into regular session. Justin Crownover seconded the motion and it was unanimously approved by the Board.

The Board reconvened into regular session at 1:10 p.m.

Action Agenda 3h - Receive Report and Consider Action Regarding the District's Development of Partnerships with the USDA NRCS to Advance Groundwater Conservation in the District.

Steve Walthour and Danny Krienke presented the following report to the Board:

Based on the District's previous experience, working in cooperation with the NRCS has proven to be a productive partnership. District staff is currently working on several projects to continue this progress into the future. Staff submitted two preliminary applications for funding through the NRCS Regional Conservation Partnership Program, one for the 3-4-5 Gallon Production Maximization Project (3-4-5 GPM Project) and another for the Master Irrigator Program. The District is also a cooperator in an RCPP application with several other entities including High Plains Underground Water Conservation District that would compensate farmers for leaving water in the ground. Each of these projects represents a unique opportunity to enhance the working relationship with NRCS to further the goals of the District and NRCS.

In addition to these applications for funding from the NRCS, the District is working through its legislative consultants to inform NRCS leaders about the District's conservation projects. In addition to seeking support for the District's applications through RCPP, Mr. Tom Forbes and Mr. John C. Padalino are jointly working for the District to receive an allocation of any NRCS funds remaining at the end of this funding year. Tom Forbes of Kemp-Smith, provided the General Manager an overview of this effort and received the General Manager's suggestions.

The District contracted with Kemp-Smith early in the year to assist the District in Washington to obtain funding for a Master Irrigator Program. The Kemp-Smith contract was a short-term contract for a three or four month "trial period". By mid-March, Kemp-Smith was working with the General Manager, Danny Krienke and others to better define the conservation project and has continued to work on the same. Mr. Forbes and the General Manager met with Salvador Salinas, of the NRCS in March to describe these various ideas of the District regarding the Master Irrigator Program (a concept which is being developed by the District to provide producers the tools to conserve groundwater).

Danny Krienke has been the major spokesman for the Master Irrigator Program. The General Manager recommended that the District use Danny Krienke as the spokesman for the Master Irrigator Program with NRCS and with potential partners. In May, the Board authorized Steve Amosson to assist in developing the Master Irrigator Program.

Mr. Padalino and Mr. Forbes have discussed potential partners for a regional Program (both public and private). They will help recruit partners for the Program and organize meetings, make presentations and follow up. The District has contacts across state lines and can utilize them to develop and promote the project. The advantage of developing a regional effort is:

- it follows the USDA's publicly announced preference;
- it will allow for a Program with greater impact; and
- it will reduce cost to the District by spreading the cost of the Program over a number of participants.

Mr. Forbes and Mr. Padalino's work is not intended to be perpetual. The General Manager requested, and the Members of the Ag Committee recommended, that the Board authorize continuing this effort with Mr. Forbes through September and requested that Mr. Krienke represent the District in discussions with NRCS. Mr. Forbes and Mr. Padalino have opened the doors with NRCS that can be rewarding for the

District and the District's stakeholders. By the end of September, the District will know whether those efforts will generate support for its Master Irrigator Program.

Danny Krienke moved for a three-month extension of the District's contract with Mr. Tom Forbes of Kemp-Smith to assist the District in Washington, D.C. and to appoint and authorize Danny Krienke as the District's representative to go to Washington to speak to the NRCS representatives to seek funding for the Master Irrigator Program. Mark Howard seconded the motion and it was unanimously approved by the Board.

# Continued Action Agenda 3e -

Receive Report Regarding Agriculture Demonstrations at the North Plains Water Conservation Center.

Harold Grall moved to instruct the General Manager and the District's General Counsel to enter into an agreement with Stan Spain, as a Construction Manager at-Risk, to work with Leon New, the District's design engineer, to develop criteria for specifications for the Requests for Proposal for the installation of a drip irrigation system at the District's Water Conservation Center. Mark Howard seconded the motion and it passed by the majority vote of the Board. Director Danny Krienke was absent from the room at the time of the vote.

# Action Agenda 3i -

Receive Report Regarding the Characteristics and Conditions of the Aquifers in the District and Groundwater Reporting.

Dale Hallmark gave a presentation to the Board on aquifer conditions within the District for 2015 and presented the "2014-2015 Hydrology and Water Resources Report" to the Board, a copy of which is attached hereto as Exhibit "C", and is incorporated herein for all purposes.

The tables set forth below show the estimated groundwater reported for the District from 2007 through 2014. In 2014 the groundwater production in the four western counties was down approximately 26,000 acre-feet while the four eastern counties showed an increase by 28,000 acre-feet.

District groundwater production in acre-feet from 2007 through 2014.

County	Year								
County	2007	2008	2009	2010	2011	2012	2013	2014	
Dallam	268,667	313,451	317,441	302,561	374,733	371,965	399,272	393,624	
Hansford	106,887	142,694	152,686	129,984	234,903	218,793	201,914	211,634	
Hartley	312,449	364,560	387,305	401,506	519,684	458,696	458,998	442,058	
Hutchinson	34,973	52,846	53,869	42,023	73,747	72,230	69,716	73,992	
Lipscomb	32,710	30,832	30,242	33,826	52,003	55,572	42,519	48,791	
Moore	148,159	191,409	200,220	178,336	271,684	234,688	228,297	209,907	
Ochiltree	53,658	75,527	65,840	62,269	114,392	109,213	98,280	106,278	
Sherman	220,530	275,128	285,571	261,608	407,265	348,012	346,685	361,336	
Total	1,178,033	1,446,447	1,493,174	1,412,113	2,048,411	1,869,169	1,845,681	1,847,620	

West Counties within the District groundwater production in acre-feet from 2007 through 2014.

County	Year									
	2007	2008	2009	2010	2011	2012	2013	2014		
Dallam	268,667	313,451	317,441	302,561	374,733	371,965	399,272	393,624		
Hartley	312,449	364,560	387,305	401,506	519,684	458,696	458,998	442,058		
Moore	148,159	191,409	200,220	178,336	271,684	234,688	228,297	209,907		
Sherman	220,530	275,128	285,571	261,608	407,265	348,012	346,685	361,336		

Γ	Total	949.805	1.144.548	1.190.537	1.144.011	1.573.366	1.413.361	1.433.252	1,406,925
						-,,		-,,	

East Counties within the District groundwater production in acre-feet from 2007 through 2014.

County	Year								
	2007	2008	2009	2010	2011	2012	2013	2014	
Hansford	106,887	142,694	152,686	129,984	234,903	218,793	201,914	211,634	
Hutchinson	34,973	52,846	53,869	42,023	73,747	72,230	69,716	73,992	
Lipscomb	32,710	30,832	30,242	33,826	52,003	55,572	42,519	48,791	
Ochiltree	53,658	75,527	65,840	62,269	114,392	109,213	98,280	106,278	
Total	228,228	301,899	302,637	268,102	475,045	455,808	412,429	440,694	

The District's 2014 production compared to the current estimated MAG from the Ogallala, Rita Blanca and Dockum aquifers.

	District	Production Av	erage	
County	Average Annual Production 2010-2014	Estimated MAG Average 2010-2014	Annual Average DFC Available Reserve	MAG Percent Above or Below Production
Dallam	368,431	398,214	29,783	7%
Hansford	199,446	280,125	80,679	29%
Hartley	456,188	417,103	-39,085	-9%
Hutchinson	66,342	60,721	-5,620	-9%
Lipscomb	46,542	289,167	242,625	84%
Moore	224,582	197,027	-27,556	-14%
Ochiltree	98,086	264,865	166,779	63%
Sherman	344,981	318,919	-26,062	-8%
Total	1,804,599	2,212,555	407,956	18%

2014 Production	Estimated		MAG Percent Above or	
		Reserve	Below Production	
393,624	383,754	-9,871	-3%	
211,634	275,661	64,028	23%	
442,058	402,260	-39,798	-10%	
73,992	60,137	-13,855	-23%	
48,791	287,824	239,032	83%	
209,907	190,262	-19,645	-10%	
106,278	260,268	153,990	59%	
361,336	313,973	-47,363	-15%	
1,847,620	2,174,138	326,519	15%	

West - Production Average							
County	Average Annual Production 2010-2014	Estimated MAG Average 2010-2014	Annual Average DFC Available Reserve	MAG Percent Above or Below Production			
Dallam	368,431	398,214	29,783	7%			
Hartley	456,188	417,103	-39,085	-9%			
Moore	224,582	197,027	-27,556	-14%			
Sherman	344,981	318,919	-26,062	-8%			
Total	1,394,183	1,331,390	-62,793	-5%			

2014 West Production Comparison						
2014 Production	2014 Estimated MAG	2014 DFC Available	MAG Percent Above or			
	PIAG	Reserve	Below Production			
393,624	383,754	-9,871	-39			
442,058	402,260	-39,798	-10%			
209,907	190,262	-19,645	-10%			
361,336	313,973	-47,363	-15%			
1,406,925	1,290,249	-116,676	-9%			

East - Production Average								
County	Average Annual Production 2010-2014	Estimated MAG Average 2010-2014	Annual Average DFC Available Reserve	MAG Percent Above or Below Production				
Hansford	199,446	280,125	80,679	29%				
Hutchinson	66,342	60,721	-5,620	-9%				
Lipscomb	46,542	289,167	242,625	84%				
Ochiltree	98,086	264,865	166,779	63%				
Total	410,416	894,878	484,463	54%				

2014 Production	2014 Estimated MAG	2014 DFC Available Reserve	MAG Percent Above or Below
211,634	271,198	F0 F64	Production 22%
211,034	2/1,198	59,564	22%
73,992	59,552	-14,440	-24%
48,791	286,480	237,689	83%
106,278	255,670	149,392	58%
440,694	872,901	432,206	50%

The Board directed the General Manager to place the "2014-2015 Hydrology and Water Resources Report" presented by Mr. Hallmark on the District's website.

Action Agenda 3n - Discuss and Consider District Meter Reimbursement Program.

In 2014, the Texas Water Development Board (TWDB) entered into a contract with the District for \$600,000 to cost-share flow meters for agricultural irrigation meters. The District executed a second contract in June 2015 with the TWDB for an additional \$800,000 to be passed on to producers who install new meters on their irrigation wells. That brings the total to \$1.4 million the TWDB is providing to fund the District's metering program. The funds granted to the District by the TWDB because meters are an accepted and effective management tool for producers and for groundwater conservation districts.

The \$800,000 from the latest grant will be available to continue to cost-share the purchase of irrigation Well meters after the first round of funding is expended. The TWDB funds will allow the District to assist in the purchase of approximately 2,300 meters across the District.

The District's reimbursement eligibility standards under the meter program are as follows:

- 1. Only meters used for agricultural irrigation are eligible for cost-share.
- One-half of the purchase price of agricultural irrigation meters is eligible for cost-share. Labor, piping, fittings and other equipment or materials are not eligible for cost-share.
- 3. Meters purchased since June 26, 2014 are eligible for cost-share.
- 4. All of the Wells in a Groundwater Production Unit (GPU) do not have to be metered for a meter to be eligible for cost-share.
- 5. Meters may be installed at the Well, or at the irrigation pivot.
- 6. Replacement meters not purchased with the District's cost-share program funds are eligible for cost-share.
- 7. Replacement meters for meters that have been purchased through the District's cost-share program are NOT eligible for cost-share.

Currently the District has registered 197 properties in the Meter Cost-Share Program. Approximately 700 meters have been installed through this Program.

Any Well owner that bought and installed a meter on irrigation wells within the District since June 26, 2014, is eligible for reimbursement if the owner agrees to provide information requested in the program.

The District has refunded \$188,850 and will likely refund up to an additional \$75,000 in July – September, 2015. The District has 30 days after the end of each quarter (March, June, September, December) 2015 to file a quarterly report with the TWDB. The District will receive a reimbursement for those expenses within 90 days after filing the reports. District staff is preparing to file its second quarterly report with the TWDB by the end of July.

As part of the Meter Program, the District maintains a guidance document for the program which it strictly follows. The document was originally issued to staff by the General Manager on June 30, 2015. The document may be amended as needed to reflect the procedures required to administer the District's Cost-Share Program.

The Cost-Share Program guidance document was presented to the Board. The General Manager requested that the Board review the document and provide input.

Bob Zimmer stated that on certain meters, one-half of the cost of the meter does not include the cost of certain bolts and flanges which are required for the meter to be operational. Mr. Zimmer stated that it this instance, it was his opinion that all of the bolts and flanges which were required for the meter to be operational should be included in cost of the meter to be cost-shared by the TWDB.

The General Manager stated that the District did not want to violate the terms of the TWDB contract. Mr. Walthour was requested to review the TWDB contract regarding this issue.

# Action Agenda 3j- Receive Report and Consider Action Related to Groundwater Management Area 1 Joint Planning.

Steve Walthour presented the following report:

On July 13th, the subcontractor to the Texas Water Development Board, Intera, provided preliminary runs from High Plains Aquifer System Groundwater Availability Model in anticipation of filing the final model for the High Plains Aquifer System. The model run report was discussed by the General Manager. This information is provisional and may be amended with further data.

Characteristics of the GMA-1 predictive run from the preliminary HPAS GAM:

		Aqui	fer						Note
Region	Ogallala	Rita Blanca	ETHP	Dockum	Reference Start Year		Simulation End Year	Decline Type	
NPGCD: West	40/50	2015 rate	n/a	40/50 (available drawdown)	2012	2062	2070	specialized for Ogallala*, linear for Dockum	Fixed rate in Dockum to approximate linear decline
NPGCD: East	50/50	n/a	n/a	n/a	2012	2062	2070	linear	Fixed rate in Ogallala to approximate linear
HCUWCD	80/50	n/a	n/a	n/a	2012	2062	2070	linear	Fixed rate in Ogallala to approximate linear
PGCD	50/50	n/a	n/a	50/50 (available drawdown)	2012	2062	2070	1.25%	

Ogallala declines were set such that total NPGCD (West) predictive rates approximately matched historical rates at the beginning of the simulation. NPGCD (West) is comprised of Dallam, Sherman, Hartley, and Moore Counties.

The following tables show the results of combining the Ogallala, Rita Blanca and Dockum aquifers within the District in each model. The measure is in acre-feet.

Combined preliminary HPAS GAM run from Intera for the Ogallala, Rita Blanca and Dockum aquifers.

County	2015	2016	2020	2030	2040	2050	2060	2070
Dallam	381,900	402,300	368,570	296,055	232,405	172,031	116,499	73,850
Hansford	237,633	265,814	265,814	265,814	265,814	265,814	265,814	265,814
Hartley	513,944	493,485	426,894	352,668	288,203	225,129	166,516	120,905
Lipscomb	54,556	252,671	252,671	252,671	252,671	252,671	252,671	252,671
Moore	273,874	222,548	216,254	189,793	154,418	117,623	83,597	55,652
Ochiltree	113,834	231,480	231,432	231,432	231,432	231,432	231,437	231,753
Sherman	404,616	406,849	407,166	355,248	285,336	213,577	146,933	90,391
Hutchinson	65,963	58,756	60,763	62,418	63,505	63,913	63,867	62,677
Total	2,046,320	2,333,903	2,229,564	2,006,099	1,773,784	1,542,190	1,327,334	1,153,713

Current combined modeled available groundwater for the Ogallala, Rita Blanca and Dockum aquifers.

County	Year							
County	2010	2020	2030	2040	2050	2060		
Dallam	404,607	352,474	309,076	270,317	234,813	203,491		
Hansford	284,588	262,271	240,502	218,405	197,454	177,536		
Hartley	424,813	368,430	319,149	276,075	238,186	205,137		
Hutchinson	61,306	58,383	50,723	44,360	39,048	34,580		
Lipscomb	290,510	283,794	273,836	256,406	237,765	219,100		
Moore	193,001	186,154	162,142	137,321	114,658	95,490		
Ochiltree	269,463	246,475	224,578	203,704	183,227	164,265		
Sherman	322,683	300,908	263,747	229,122	197,480	169,172		

Total 2,25	0,971 2,058,889	1,843,753	1,635,710	1,442,631	1,268,771
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GMA 1 has scheduled its next meeting on July 23rd at 9:00 am in the offices of the Panhandle Regional Planning Commission, Amarillo, Texas.

#### Action Agenda 3k -Discuss and Consider Action Related to Development of the District's 2015 - 2016 Budget.

Steve Walthour presented the following report to the Board:

The following draft budget was discussed by the Budget and Finance Committee on June 30th. The General Manager anticipates the Board will adopt a final budget in August or September. Not included in this proposed budget, is a proposed offset to the installation of the drip system at the Water Conservation Center. Potential income from pending grant applications filed with the NRCS and TWDB are not included in the draft budget. If all of the funds are expended in the draft budget, the total amount of District reserves will be reduced by the amounts shown at the bottom of the following table.

Budget Item	Proposed Amended	Draft Proposed
	2014-2015	2015-2016
Income	Budget	Budget
Taxes	2,038,001.53	2,038,001.53
North Plains Water CC	150,000.00	50,000.00
Refunds	2,500.00	2,500.00
Fees for District Services	150,000.00	125,000.00
Other Income	100,000.00	80,000.00
TWDB Grant	65,000.00	65,000.00
TWDB Meter Grant	300,000.00	400,000.00
TWDB Loan	620,000.00	0.00
Investment Income	15,494.96	12,000.00
Conservation Innovation Grant	30,000.00	0.00
Dallam Co. Untaxed (fees)	60,000.00	70,000.00
Total Income without tax Increase	3,530,996.49	2,842,501.53
Total Income with 8% Tax Increase in effective rate		3,005,541.65
Expenses		
Director's Expense	105,000.00	100,000.00
Personnel	1,229,598.40	1,235,944.84
Administrative	133,500.00	130,000.00
Contracted Services	96,000.00	81,000.00
Professional Fees	305,000.00	227,500.00
Technical, Communications & Utilities	155,000.00	100,000.00
Vehicle, Building & Field Supplies, Repair, Maintenance & Fuel	125,000.00	105,000.00
Capital Outlay	370,000.00	125,000.00
Aquifer Science	290,000.00	200,000.00
Conservation Outreach	441,000.00	540,000.00
Conservation Demo Project	190,000.00	175,000.00
North Plains WCC	682,500.00	322,174.00
Total Expenses	4,122,598.40	3,341,618.84
Net Income and Expenses without tax increase		-499,117.31
Net Income and Expenses with tax increase		-336,077.19
-		,0

Executive Session -Section 551.071 of the Texas Government Code. At 2:43 p.m., Gene Born 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 from its attorney. Justin Crownover seconded the motion and it was unanimously approved by the Board.

Executive Session: At 2:46 p.m., the Board went into Executive Session. At 3:06 p.m., Director Harold Grall moved that the Board reconvene into regular session. Gene Born seconded the motion and it was unanimously approved by the Board.

The Board reconvened into regular session at 3:10 p.m.

# Action Agenda 31 - Consider Budget and Finance Committee Recommendation to Amend the 2014 - 2015 Budget.

On June 30<sup>th</sup>, the Budget and Finance Committee met to review the 2014-2015 District budget and to propose budget amendments as necessary to complete the fiscal year. The Committee proposed the following amendments to the 2014- 2015 budget to assist in reducing the District's 2015-2016 budget discussed in Action Agenda Item 3k (Discuss and Consider Action Related to Development of the District's 2015 – 2016 Budget). The General Manager does not expect to spend all of the funds in the budget below, and believes the final expenses by the end of the year will be lower. The Committee's recommendations are as follows:

	Current	Increase	Proposed	
<b>Budget Item</b>	Budget	or	Budget	
description	Amount	(Decrease)	Amount	Explanation
Contracted Services	91,000.00	5,000.00	96,000.00	Increased to pay for PWPG in September 2015 so the budget can be reduced in 2015-2016.
Professional Fees	270,000.00	35,000.00	305,000.00	Increased to cover anticipated professional expenses in 2014-2015 and decreased in 2015-2016 because of generally lower fees in all categories
Technical, Communications & Utilities	125,000.00	30,000.00	155,000.00	Increased in 2014-2015 to purchase software. Reduced in 2015-2016 less equipment and software needed.
Vehicle, Building & Field Supplies, Repair, Maintenance and Fuel	115,000.00	10,000.00	125,000.00	Increased in 2014-2015 to purchase Water Level Measurement Equip. under supplies to reduce 2015-2016 expenses
Capital Outlay	160,000.00	210,000.00	370,000.00	Increased in 2014-2015 to move items to capital outlay from elsewhere in the budget, purchase three vehicles to reduce 2015-2016 budget and 2016-2017 budget
Aquifer Science	380,000.00	-90,000.00	290,000.00	2014-2015 decreased budget to cover capital expenses under capital outlay. 2015-2016 reduced based on EOY projections.
Conservation Demo Project	130,000.00	60,000.00	190,000.00	2014-2015 Increased based on EOY estimates money moved from North Plains WCC. 2015-2016 set based on EOY estimates and completion of TTU contract in 2014
North Plains WCC	942,500.00	-260,000.00	682,500.00	2014-2015 Decreased budget to cover other expenses to balance budget in 2015-2016.
Total overall 2014- 2015 budget change		0.00		No change in overall budget

The General Manager and the Finance Committee recommended that the Board approve the above amendments to the District's 2014-2015 Budget.

Gene Born moved that the Board approve the recommended amendments to the District's 2014-2015 Budget which will result in no increase in the District's total budget.

Harold Grall seconded the motion and it was approved by the majority vote of the Board. Director Danny Krienke was absent from the room at the time of the vote.

Action Agenda 3o - Receive Report and Consider Action as Necessary Regarding the 84<sup>th</sup> Legislative Session.

Steve Walthour presented the following report to the Board:

On June 1, 2015, the 84<sup>th</sup> Texas Legislature wrapped up business. Legislation that passed and was signed by Governor, Greg Abbot, which will affect operations of the District include:

- North Plains Groundwater Conservation District Elections dates;
- General groundwater conservation district elections dates;
- Public notice for meetings;
- Public information act compliance;
- Legal protection for directors;
- District accounting and audit procedures; and
- Desired Future Conditions and the administrative procedures for filing a contest to DFCs.

# Action Agenda 3m - Receive Report and Consider Compliance Matters Before the District.

The General Manager reported that ten (10) final reminder notices for unresolved late filed 2014 production reports were sent out on June 18, 2015 with a due date of July 10, 2015. One (1) outstanding late filing fee has not been resolved as of July 15, 2015. A letter was sent to producer, Gerald Swecker, stating that a show cause hearing would be recommended to the Board, if the fee is not paid prior to the July 21 Board meeting.

District staff sent fifty-four (54) notices and invoices for exceeding the production limit to producers on May 20, 2015 with a due date to contact the District by June 1, 2015 to make arrangements to resolve or re-establish the GPU (Groundwater Production Unit); or pay the fee and install flow meters on all wells on the overproduced GPU by August 1, 2015. Twenty nine (29) overproduced GPUs have been resolved by paying the fee, re-establishing the GPU or recalculating production utilizing a more reliable metering method. Reminder letters for the remaining (25) overproduced GPUs were sent on July 15, 2015 to pay the fee or re-establish the GPU by August 1, 2015, or a recommendation for a show cause hearing would be made at the August Board meeting.

Danny Krienke moved that the Board issue a Show Cause Order to Gerald Swecker and set a hearing date for the Board's regular meeting date in September. Justin Crownover seconded the motion and it was unanimously approved by the Board.

# 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 for 9:00 a.m. on August 11, 2015 at the Water Conservation Center.

# Discussion Agenda 4c - General Manager's Report.

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

Mr. Walthour also informed the Board that he has been asked to serve on a panel by Gary Westbrook, the General Manager of the Post Oak Savannah Groundwater Conservation District, regarding a Petition for Inquiry filed by Curtis Chubb of Milam County, Texas with the Texas Commission on Environmental Quality. The Petition for Inquiry alleges that: the rules adopted by the Post Oak Savannah Groundwater Conservation District are not designed to achieve the desired future conditions adopted by GMA 12 during the joint planning process; the groundwater in the management area is not adequately protected by the rules adopted by the Post Oak Savannah Groundwater District; and that the groundwater in the management area is not adequately protected because of the Post Oak Savannah Groundwater District's failure to enforce compliance with its rules. It was the Board's consensus that it was in the best interest of the District for Mr. Walthour to serve on the panel.

Discussion Agenda 4a -

Director Reports Regarding Meetings and/or Seminars Attended, Weather Conditions and Economic Development in Each Director's Precinct.

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

Discussion Agenda 4b - Committee Reports.

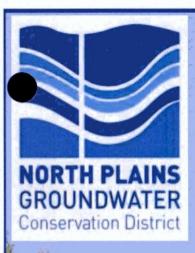
None.

Agenda 6 - Adjournment.

There being no further business to come before the meeting, President Zimmer adjourned the meeting at 3:35 p.m.

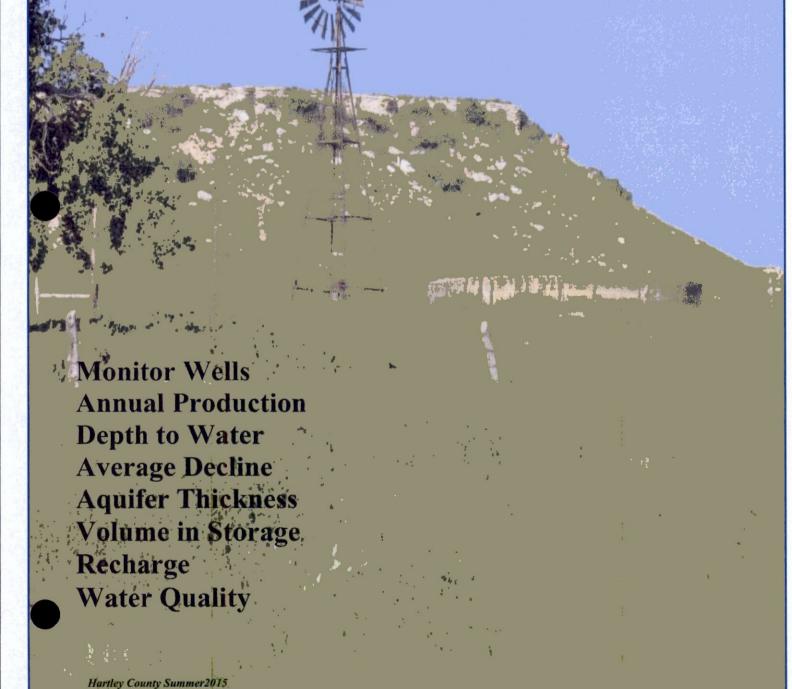
Bob B. Zimmer, President

Daniel L. Krienke, Secretary



# Hydrology & Groundwater Resources 2014-2015

**Published July 2015** 



# North Plains Groundwater Conservation District 603 East First Street (Mail: P.O. Box 795) Dumas Texas 79029

# Office Ph. 806-935-6401, Fax 806-935-6633 Publication Year 2015

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<u>Pisclaimer:</u> This document is intended as a general information report about the <u>general or regional</u> hydrology and groundwater resources within the North Plains Groundwater Conservation District. The hydrological properties of any specific property may vary significantly from those indicated by, or what may be inferred from information in this document. The document and the information contained within is provided "as is" and the District makes no claims or warranties as to the document's or the information's suitability for any specific use.

### I. Introduction

The North Plains Groundwater Conservation District manages groundwater in all or part of eight counties in the Northern Texas Panhandle and is governed by a seven member elected Board of Directors. The Board established the District's mission, "maintaining our way of life through conservation, protection, and preservation of our groundwater resources". To achieve this mission the District develops and is guided by a long-range management plan and creates and enforces rules.

To further advance its management strategy the District provides or sponsors educational programs, is involved in practical conservation demonstrations, promotes new conservation management methods and technologies, and cooperates with private, corporate and government entities to promote the conservation, protection and preservation of the critically important groundwater resources. The District operates information collection programs and undertakes scientific investigations and offers well testing and water quality analysis services as part of its on-going effort to monitor aquifer conditions.

Information collected by the District and other agencies is summarized in this "Hydrology and Groundwater Resources" report. District's staff have prepared maps showing the District boundaries, estimated depth to water, estimated average annual water level declines, estimated saturated aquifer thickness and maps showing District monitor well locations. This report summarizes the number of active and inactive wells, the number of new wells drilled, measured annual groundwater production, and general water quality.

# II. Definitions

Cretaceous- A geological time period corresponding to 65-144 million years ago.

**DFC-** (Desired Future Condition) a goal set by the District Board of Directors specifying the condition that an Aquifer will be in at a specific time in the future.

**GAM-** (Groundwater Availability Model) predictive numerical computer models of Aquifers that the Texas Water Development Board maintains and operates.

**Heterogeneous-** Consisting of dissimilar elements or parts; not homogeneous.

Jurassic- A geological time period corresponding to 144-208 million years ago.

Inter-formational Flow- A flow of water from one formation into another formation.

Intra-formational Flow A flow of water from one part of a formation into another part of the same formation.

MAG- (Modeled Available Groundwater) groundwater volume results of a GAM based on specified DFC's.

**Permian-** A geological time period corresponding to 245-286 million years ago.

Pliocene- A geological time period corresponding to 2.5 to 5.3 million years before the present.

**Recharge-** The process whereby water is added to an aquifer either through natural or artificial means. Recharge normally refers to rainfall infiltrating an aquifer through a recharge zone.

Red-Bed- a geological strata consisting primarily of red to orange clays and silts in place below the base of the Ogallala Aquifer.

Saturated Thickness - The distance from the top of an aquifer to the base of the aquifer where the pore spaces are completely filled with water.

**Triassic-** A geological time period corresponding to 208-245 million years ago.

**Unconformably (Unconformity)** - the surface between successive strata representing a missing interval in the geologic time record.

#### III. District Boundaries

The North Plains Groundwater Conservation District is located in the Texas Panhandle north of the city of Amarillo and North of the Canadian River. The District currently manages approximately 7,324 square miles which includes all of Dallam, Hansford, Lipscomb, Ochiltree and Sherman counties, and parts of Hartley, Moore and Hutchinson counties.

The original (1954/1955) area of the District included part of Hartley, Moore and Hutchinson counties and all of Sherman, Hansford and Ochiltree counties. Other areas have annexed into the District over time (Map 1).

Original NPGCD and Annexed Areas 1954-2012 2012 2012 2004 2004 2012 1955 1955 1973 1993 1955 1955 Hartley County Non-District Are:

Map 1: District Boundaries Including Areas that Annexed into the District Over Time.

Table 1: County Area and Percent of each county located within the NPGCD.

County	County Area (Sq. Mi.)	Area in District (Sq. Mi.)	Percent of County in the District
Dallam	1494	1494	100 %
Hansford	907	907	100 %
Hartley	1489	1267	85 %
Hutchinson	911	266	29 %
Lipscomb	934	934	100 %
Moore	914	633	69 %
Ochiltree	907	907	100 %
Sherman	916	916	100 %
Totals	8472 Sq. Mi.	7324 Sq. Mi.	

# IV. General Geology and Hydrology

### **Ogallala Aquifer**

The Ogallala aquifer extends from the northern United States into the Texas Panhandle and West Texas and is the primary source of water within the District. The aquifer consists of sands, gravel, silts, and clay sediments that were deposited as part of ancient river systems from about three million to about six million years ago during the Neogene geologic time period. An ancient land surface separates the Ogallala formation from much older strata below of the Permian, Triassic, Jurassic, and Cretaceous geologic periods which range in age from 65 million years to 286 million years. This ancient land surface is called an unconformity and represents between six million years to 65 million years of missing geologic strata in the area.

South of the District, the Canadian River has partially or totally eroded through the Ogallala formation along much of its length and separates the North Plains from the South Plains. Waterbearing units of Cretaceous and Jurassic ages combine to form the Rita Blanca (a minor aquifer) in the western part of Dallam and Hartley counties. Underlying these aquifers and much of the Ogallala are Triassic (Dockum aquifer) sediments and Red Bed strata. Within the District area the Dockum is a minor, confined to semi-confined, aquifer and the water bearing strata is generally referred to locally as the Santa Rosa. For the purpose of this document, the Ogallala Aquifer will be considered to consist of the Ogallala formation and any underlying, potable water-bearing geologic units hydraulically connected with it.

### Red Bed (Base of the Aquifer)

Throughout much of the District, the Ogallala aquifer is underlain by "Red Bed" strata. These strata consist of a reddish to orange clay and sand mix deposits. The reddish color is caused by oxides of iron containing minerals. In some areas the red bed may be absent and in other areas may be several hundred feet thick.

# V. Aquifer Saturated Material

Saturated thickness or saturated aquifer maps depict the vertical distance from the top of an aquifer to the base of the aquifer. The saturated thickness of the Ogallala Aquifer (where present) in the District ranges from 10 feet to over 300 feet with an estimated District average (Table 2) of 159 feet. The Ogallala Aquifer is locally absent in some areas of the District. The depth from land surface to the base of the aquifer can range from the land surface to as much as 1,000 feet below the surface. The depth to static water level from land surface can range from the water being at the land surface to in excess of 500 feet deep. The usable quantity of groundwater within the District is estimated to be in excess of 130 million acre-feet.

**Table 2:** Estimated Average Aguifer Thickness by County (District Area only).

Dallam	Hartley	Sherman	Moore	Hansford	Hutchinson	Ochiltree	Lipscomb
132 ft.	150 ft.	155 ft.	151 ft.	168 ft.	144 ft.	175 ft.	195 ft.

Estimated District-wide Average Aquifer Thickness is 159 feet.

## VI. Aquifer Recharge, Inflows and Outflows

Surface water and precipitation provide minimal annual recharge to the Ogallala aquifer compared to aquifer withdrawals. District-wide average recharge estimates vary slightly but tend to be below one third of an inch per year. Other inflows and outflows, from and to streams and lateral inflows and outflows tend to be equal and therefore cancel each other. However, some areas of the District may experience locally significant recharge.

The recharge information below (Tables 3 and 4) is from the Texas Water Development Board's (TWDB) Groundwater Availability Model Run 12-003 Revised. The GAM run was requested by the District for use in the 2012 District Management Plan.

**Table 3:** Summarized recharge, inflows and out flows to the Ogallala aquifer (including the Rita Blanca aquifer). All values are in acre-feet per year rounded to the nearest acrefoot.

Management Plan requirement	Aquifer or confining unit	Results
Estimated annual amount of recharge from precipitation to the district	Ogallala Aquifer	88,988
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Ogallala Aquifer	31,294
Estimated annual volume of flow into the district within each aquifer in the district	Ogallala Aquifer	43,548
Estimated annual volume of flow out of the district within each aquifer in the district	Ogallala Aquifer	42,012
Estimated net annual volume of flow between each aquifer in the district*	From Ogallala Aquifer into the Dockum Aquifer	Not Applicable

<sup>\*</sup>The Groundwater Availability Model for the Dockum Aquifer estimates the flow from the Ogallala Aquifer to the Dockum Aquifer averages 6,895 acre-feet per year; however, the model report for the Dockum Aquifer indicates the model was not designed to precisely model this parameter.

**TABLE 4:** Summarized inflows and outflows to the Dockum aquifer. All values are in acre-feet per year rounded to the nearest acre-foot.

Management Plan requirement	Aquifer	Results
Estimated annual amount of recharge from precipitation to the district	Dockum Aquifer	56
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Dockum Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Dockum Aquifer	4,209
Estimated annual volume of flow out of the district within each aquifer in the district	Dockum Aquifer	2,313
Estimated net annual volume of flow between each aquifer in the district*	From Ogallala Aquifer into the Dockum Aquifer	Not Applicable

ilability Model for the Dockum Aquifer estimates the flow from the Ogallala Aquifer to the Dockum Aquifer averages 6,895 acre-feet per year; however, the model report for the Dockum Aquifer indicates the model was not designed to precisely model this parameter.

### VII. Annual Groundwater Production and Modeled Available Groundwater

The District requires all owners of non-exempt water wells to report groundwater production annually. Table's 5-7 show groundwater reported to the District from 2007 through 2014. In 2014 groundwater production in the four western counties was down from the previous year approximately 26,000 acre-feet while the four eastern counties showed an increase of 28,000 acre-feet.

**Table 5:** Groundwater production reported to the District, 2007-2014.

County	2007	2008	2009	2010	2011	2012	2013	2014
Dallam	268,667	313,451	317,441	302,561	374,733	371,965	399,272	393,624
Hansford	106,887	142,694	152,686	129,984	234,903	218,793	201,914	211,634
Hartley	312,449	364,560	387,305	401,506	519,684	458,696	458,998	442,058
Hutchinson	34,973	52,846	53,869	42,023	73,747	72,230	69,716	73,992
Lipscomb	32,710	30,832	30,242	33,826	52,003	55,572	42,519	48,791
Moore	148,159	191,409	200,220	178,336	271,684	234,688	228,297	209,907
Ochiltree	53,658	75,527	65,840	62,269	114,392	109,213	98,280	106,278
Sherman	220,530	275,128	285,571	261,608	407,265	348,012	346,685	361,336
Total	1,178,033	1,446,447	1,493,174	1,412,113	2,048,411	1,869,169	1,845,681	1,847,620

**Table 6:** Groundwater production from the District's four western counties in acre-feet, 2007-2014

County	2007	2008	2009	2010	2011	2012	2013	2014
Dallam	268,667	313,451	317,441	302,561	374,733	371,965	399,272	393,624
Hartley	312,449	364,560	387,305	401,506	519,684	458,696	458,998	442,058
Moore	148,159	191,409	200,220	178,336	271,684	234,688	228,297	209,907
Sherman	220,530	275,128	285,571	261,608	407,265	348,012	346,685	361,336
Total	949,805	1,144,548	1,190,537	1,144,011	1,573,366	1,413,361	1,433,252	1,406,925

**Table 7:** Groundwater production from the District's four eastern counties in acre-feet, 2007-2014.

2014.								
County	2007	2008	2009	2010	2011	2012	2013	2014
Hansford	106,887	142,694	152,686	129,984	234,903	218,793	201,914	211,634
Hutchinson	34,973	52,846	53,869	42,023	73,747	72,230	69,716	73,992
Lipscomb	32,710	30,832	30,242	33,826	52,003	55,572	42,519	48,791
Ochiltree	53,658	75,527	65,840	62,269	114,392	109,213	98,280	106,278
Total	228,228	301,899	302,637	268,102	475,045	455,808	412,429	440,694

#### Modeled Available Groundwater

Texas law requires groundwater conservation districts to adopt desired future conditions (DFC) of their aquifers, create a 50-year management plan and adopt rules to achieve those DFC's. In adopting DFC's, creating management plans and adopting rules Texas law also requires districts to and use estimates of modeled available groundwater (MAG) from the Texas Water Development Board (TWDB). The MAG's are also used to monitor the progress in attaining the District's DFC's.

The tables below show the average production from 2010-2014 and the District's combined current MAG amounts for the Ogallala, Rita Blanca and Dockum aquifers.

**Table 8:** Average annual groundwater production from 2010-2014 compared to the current estimated MAG (Modeled Available Groundwater) from the Ogallala, Rita Blanca and Dockum aquifers.

	District Production Average							
County	Average Annual Production 2010-2014	Estimated MAG Average 2010- 2014	Annual Average DFC Available Reserve	MAG Percent Above or Below Production				
Dallam	368,431	398,214	29,783	7%				
Hansford	199,446	280,125	80,679	29%				
Hartley	456,188	417,103	-39,085	-9%				
Hutchinson	66,342	60,721	-5,620	-9%				
Lipscomb	46,542	289,167	242,625	84%				
Moore	224,582	197,027	-27,556	-14%				
Ochiltree	98,086	264,865	166,779	63%				
Sherman	344,981	318,919	-26,062	-8%				
Total	1,804,599	2,212,555	407,956	18%				

**Table 9:** 2014 groundwater production compared to the current estimated MAG (Modeled Available Groundwater) from the Ogallala, Rita Blanca and Dockum aquifers

	2014 District Production Comparison							
2014 Production	2014 Estimated MAG	2014 DFC Available Reserve	MAG Percent Above or Below Production					
393,624	383,754	-9,871	-3%					
211,634	275,661	64,028	23%					
442,058	402,260	-39,798	-10%					
73,992	60,137	-13,855	-23%					
48,791	287,824	239,032	83%					
209,907	190,262	-19,645	-10%					
106,278	260,268	153,990	59%					
361,336	313,973	-47,363	-15%					
1,847,620	2,174,138	326,519	15%					

**Table 10:** 2010-2014 average groundwater production compared to the current estimated MAG (Modeled Available Groundwater) from the District's west management area.

	West - Production Average								
County	Average Annual Production 2010-2014	Estimated MAG Average 2010- 2014	Annual Average DFC Available Reserve	MAG Percent Above or Below Production					
Dallam	368,431	398,214	29,783	7%					
Hartley	456,188	417,103	-39,085	-9%					
Moore	224,582	197,027	-27,556	-14%					
Sherman	344,981	318,919	-26,062	-8%					
Total	1,394,183	1,331,390	-62,793	-5%					

**Table 11:** 2014 groundwater production compared to the current estimated MAG (Modeled Available Groundwater) from the District's west management area.

2014 West Production Comparison							
2014 Production	2014 Estimated MAG	2014 DFC Available Reserve	MAG Percent Above or Below Production				
393,624	383,754	-9,871	-3%				
442,058	402,260	-39,798	-10%				
209,907	190,262	-19,645	-10%				
361,336	313,973	-47,363	-15%				
1,406,925	1,290,249	-116,676	-9%				

**Table 12:** 2010-2014 average groundwater production compared to the current estimated MAG (Modeled Available Groundwater) from the District's east management area.

East - Production Average							
County	Average Annual Production 2010-2014	Estimated MAG Average 2010- 2014	Annual Average DFC Available Reserve	MAG Percent Above or Below Production			
Hansford	199,446	280,125	80,679	29%			
Hutchinson	66,342	60,721	-5,620	-9%			
Lipscomb	46,542	289,167	242,625	84%			
Ochiltree	98,086	264,865	166,779	63%			
Total	410,416	894,878	484,463	54%			

**Table 13:** 2014 groundwater production compared to the current estimated MAG (Modeled Available Groundwater) from the District's east management area.

2014 East Production Comparison						
2014 Production	2014 Estimated MAG	2014 DFC Available Reserve	MAG Percent Above or Below Production			
211,634	271,198	59,564	22%			
73,992	59,552	-14,440	-24%			
48,791	286,480	237,689	83%			
106,278	255,670	149,392	58%			
440,694	872,901	432,206	50%			

VIII. Depth to Water and Average Declines in the Water Table Changes in the water table, calculated from observation well measurements vary from rises in the water level to declines that locally exceed 8-12 feet per year. Each county in the District have areas experiencing little or no decline as well as areas of greater declines. Declines are caused predominately by pumping and are influenced primarily by surface recharge of the aquifer and lateral flows into and out of the aquifer.

Recharge, the refilling of an aquifer, is affected by rainfall, runoff, evaporation and plant uptake, depth to water, soil porosity and the geologic substrata present. Another aquifer characteristic that affects the speed an aquifer refills and consequently how much water a well can produce is intra-formational flow. Intra-formational flow is the flow of water from one part of an aquifer into another part of the same aquifer.

**Table 14:** Average Annual Declines in Water Levels by County

County	Average Annual Feet of Decline
Dallam	2.29
Hansford	2.03
Hartley	2.58
Hutchinson	2.41
Lipscomb	0.45
Moore	2.88
Ochiltree	1.02
Sherman	2.19

Average annual declines in water values created by using reproduction and an estimated percent. The entire area of each coalculations except for Moore and in which only the area that falls vused.

Average county declines and monitor wells differ because Distypically located near areas of i tends to over represent decline

\*Table 15: Average Depth to Water and Comparisons of Average Declines in <u>Select</u> District Water Level Monitor Wells.

County	Avg. Depth to Water (Feet)	2014 Avg. Well Decline (Feet)	2013 Avg. Well Decline (Feet)	Current 5-Year Avg. Well Decline (Feet)	Previous 5-Year Avg. Well Decline (Feet)	Current 10-Year Avg. Well Decline (Feet)	Previous 10-Year Avg. Well Decline (Feet)
Dallam	271	3.9	3.9	4.0	3.1	3.5	3.7
Hansford	298	2.5	2.4	2.3	1.9	2.2	1.4
Hartley	355	4.5	4.5	4.4	4.1	4.6	3.1
Hutchinson	348	2.0	2.0	2.1	1.9	2.1	1.7
Lipscomb	162	1.1	1.1	1.0	0.8	1.0	0.3
Moore	347	2.7	2.6	2.5	2.2	2.4	1.6
Ochiltree	335	1.7	1.7	1.6	1.2	1.5	0.8
Sherman	298	3.2	3.0	2.9	2.4	2.7	1.8
District-wide	345	3.1	3.0	3.0	2.5	2.9	2.1

<sup>\*</sup>The information in Table 7 was derived from an analysis of monitor well hydrographs created from the data in the District's water level database. The analysis data from some few monitor wells, indicating both rises and declines, are not sufficiently consistent to insure accuracy and reliability in their use. Such data may be excluded during the calculations of declines, depth to water or saturated aquifer formation.

### IX Active Production Wells within the District

District records indicate that there are over 19,000 permits of all types issued since the District began in 1955. Currently there are 14,106 large producing wells active which includes wells varying in production between 18 GPM to over 1,000 GPM. In 2015, the District issued 274 permits of all types between January and July.

Table 16: District Well Summary and Permits issued in 2014.

County	Active Production Wells	Wells Classified as Unused	Small Registered Wells	2014 Permits Issued	2015 Permits Issued to Date
Dallam	3251	128	612	186	59
Hansford	1486	413	190	49	18
Hartley	2857	86	263	144	68
Hutchinson	566	139	104	29	13
Lipscomb	694	64	288	56	18
Moore	1832	301	377	75	34
Ochiltree	1110	223	377	53	17
Sherman	2310	259	236	126	47
Total	14106	1613	2447	718	274

### X. District Monitor Wells



Typical District Monitor Well

The District monitors declines in groundwater by maintaining a network of monitor wells. Currently the District uses 437 water-level monitor wells (Table 17). Monitor wells are measured annually beginning in January, February and the measurements are completed by mid-March. The information gathered is analyzed, used to create maps and plays a vital role in making reasonable long-term management decisions based on current and accurate scientific data.

The District drills or installs water level monitoring equipment in up to ten wells annually (Table 18). The wells are non-production wells dedicated solely to data collection which provides information with a greater degree of accuracy, reliability and consistency than do the other types of wells the District may monitor. They are also available, if necessary, for conducting aquifer tests that cannot be conducted using other types of wells.

Table 17: Number of Monitor Wells by County.

County	Number of Observation Wells			
Dallam	70			
Hartley	67			
Sherman	61			
Moore	53			
Hansford	67			
Hutchinson	25			
Ochiltree	49			
Lipscomb	45			
Total	437			

A District Monitor Well under Construction

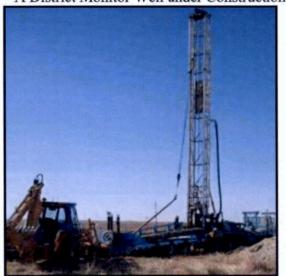


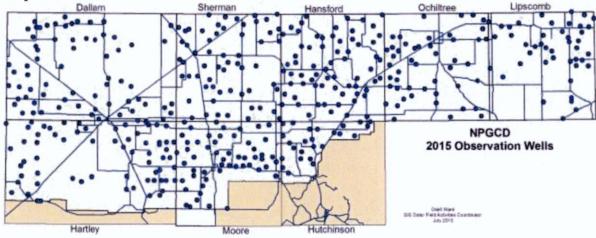
Table 18: List of District drilled or owned wells added to the monitor well program since 2006.

Number	County	County Number	State Number	Well Name	Date Drilled / Added	Recording Equipment?
1	Dallam	DA-2855	257307	AMA 5	2006	Yes
2	Dallam	DA-3196	234810	GRASS 3	2009	No
3	Dallam	DA-3197	236304	GRASS 5	2009	Yes
4	Dallam	DA-3208	239502	GRASS 10	2009	No
5	Dallam	DA-3209	239703	GRASS 11	2009	Yes
6	Dallam	DA-3231	235901	GRASS 8	2009	Yes
7	Dallam	DA-3587	233604	GRASS 1	2010	No
8	Dallam	DA-3588	241305	GRASS 2	2010	Yes
9	Dallam	DA-3589	235404	GRASS 4	2010	Yes
10	Dallam	DA-3590	236903	GRASS 6	2010	No
11	Dallam	DA-3591	235803	GRASS 7	2010	No
12	Dallam	DA-3688	260303	WAR	2010	Yes
13	Dallam	DA-6913	246102	Will 3	2013	Yes
14	Dallam	DA-6914	255105	Will 2	2013	Yes
15	Dallam	DA-6916	247403	Will 1	2013	Yes
16	Hartley	HA-2275	808602	AMA 12	2006	Yes
17	Hartley	HA-2276	816901	AMA 18	2006	Yes
18	Hartley	HA-2278	257603	AMA 13	2006	Yes
19	Hartley	HA-2470	714502	COV	2008	Yes
20	Hartley	HA-2480	715403	FOR	2008	Yes
21	Hartley	HA-2583	707404	SCHN 1	2009	Yes

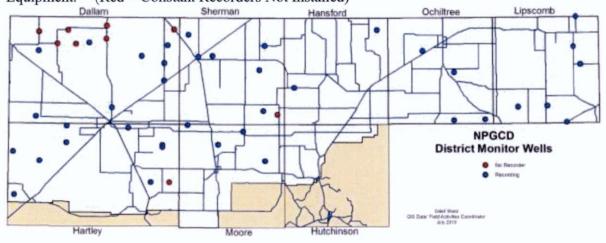
22	Hartley	HA-2584	707103	SCHN 2	2009	Yes
23	Hartley	HA-3855	261804	HAA	2011	Yes
24	Hartley	HA-5065	259403	BAU 1	2012	Yes
25	Hartley	HA-5066	703101	BAU 2	2012	Yes
26	Hartley	HA-7540	703703	OPP	2014	Yes
27	Hansford	HN-1917	352203	JAR	2008	Yes
28	Hansford	HN-3686	339603	STA	2010	Yes
29	Lipscomb	LI-0567	439903	BOR 1	2007	Yes
30	Lipscomb	LI-0582	463502	RAD 1	2008	Yes
31	Lipscomb	LI-0613	454902	RAD 2	2008	Yes
32	Lipscomb	LI-0656	440103	BOR 2	2009	Yes
33	Lipscomb	LI-3687	448401	WEI	2010	Yes
34	Lipscomb	LI-6911	453801	HAL	2013	Yes
35	Moore	MO-2319	601117	GILL	2008	Yes
36	Moore	MO-2350	264407	STRI 2	2008	Yes
37	Moore	MO-2351	603710	STRI 1	2008	Yes
38	Moore	MO-2389	358709	SUN	2009	Yes
39	Ochiltree	OC-1291	443701	PSH	2008	Yes
40	Ochiltree	OC-1312	460402	GOO	2007	Yes
41	Ochiltree	OC-4196	441302	KRI	2011	Yes
42	Ochiltree	OC-4465	459402	COO	2011	Yes
43	Ochiltree	OC-6912	458201	PHI	2014	No
44	Sherman	SH-2366	359301	CAR 1	2008	Yes
45	Sherman	SH-2369	359105	CAR 2	2008	Yes
46	Sherman	SH-3719	341103	DON	2010	Yes
47	Sherman	SH-4136	248213	SPUR 1	2011	Yes
48	Sherman	SH-5120	335702	BRID 1	2012	Yes
49	Sherman	SH-5121	342903	BRID 2	2012	Yes
50	Sherman	SH-7556	255903	ZIM	2014	Yes
51	Sherman	SH-2134	350102	SPR 2	2002	No
52	Sherman	SH-1231	240405	MILL	1969	Yes

### XI. 2015 Monitor Well Locations

Map 2: 2015 Location of District Water-Level Monitor Wells



**Map 3:** 2015 Location of District-owned Monitor Wells, with and without Data-Recording Equipment. (Red = Constant Recorders Not Installed)



## XII. Water Quality

The District's goal is to ensure, as much as reasonably achievable, that future water supplies are not only sufficient in quantity but of good quality as well. The District monitors groundwater quality by analyzing samples from selected wells within the District and performing water quality analyses upon request.

District Natural Resource Specialist performing a water quality analysis.



The District may analyze water samples for the following parameters as necessary:
Total Hardness,
Chloride,
Conductivity,
Fluoride,
Iron,
Nitrate,
pH,
Sodium,
Sulfate.

Total Dissolved Solids, Presence/Absence of Coliform Bacteria.

Groundwater quality within the District is predominately excellent (see Table 10 for water quality analyses) although it is considered "hard" water and may contain considerable amounts of calcium and magnesium carbonate (hardness). The District also performs tests for coliform bacteria. In the rare instance that an analysis indicates the presence of bacteria, the contamination source is most often located within a few yards of the sampled well. Normally a well can easily be decontaminated by eliminating the contamination source, chlorinating the well, pipes and water storage units and then purging the well.

Table 19: Mineral Analyses from Wells within the District.

Parameter	Units	2013 Number of Analyses	2013 Average Analysis Result	2014 Number of Analyses	2014 Average Analysis Result	2015 Number of Analyses	2015 Average Analysis Result		
Sulfate	mg/l	32	30.6	56	55	6	24.3		
Nitrate	mg/l	32	10.9	52	9.6	6	7		
Total Iron	mg/l	32	0.16	56	0.05	6	0.069		
Chlorides	mg/l	32	21.46	56	37	6	19.1		
Fluoride	mg/l	32	1.9	56	1.7	6	0.96		
Total Hardness	mg/l	32	207	55	222	6	204		

\*Note 2015 Test results do not include analyses performed after July 2015 nor the District's routine samples from monitor wells. The routine monitor wells are to be sampled after this document's issue date.

Table 19 shows average mineral composition from groundwater quality analyses from wells within the District. The wells sampled in 2013, 2014 and 2015 are not from the same wells. The District typically samples various wells each year and the same wells are sampled (if possible)

five years later. No statistically significant change in general groundwater quality can be noted comparing analyses from 2013, 2014 and 2015 since they are not from the same wells. 2013 and 2014 shows higher than average Nitrate level due to requests for sampling from a few wells that had local Nitrate issues which skewed the average. Typical wells in the District have a Nitrate level below 8 mg/L

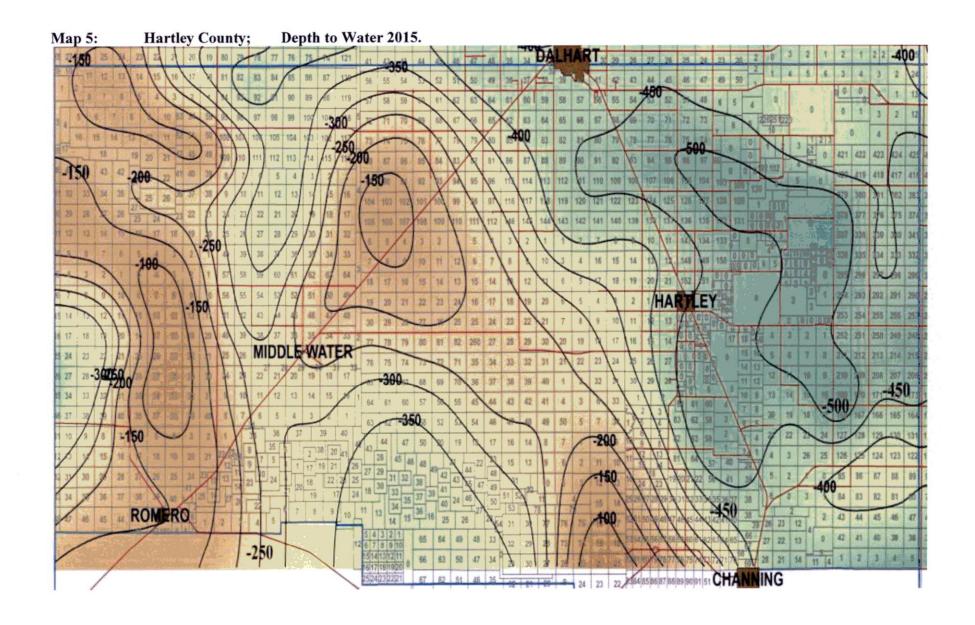
District residents can request a water quality analysis by contacting the District any time there is a change in the look, smell or taste of the groundwater or any question about the quality of the groundwater. In most instances, water analyses are free for District residents.

# XIII. 2015 Depth to Water from Land Surface

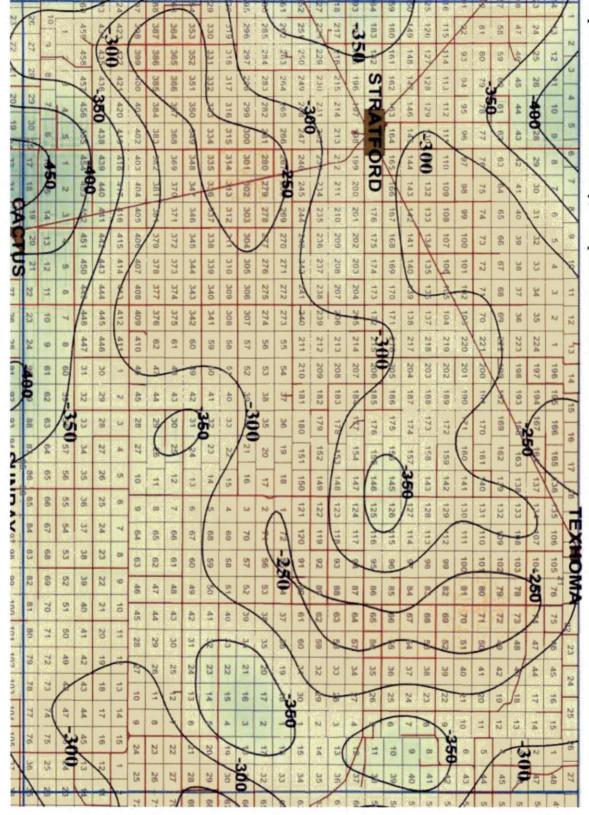
The Depth to Water from land surface maps are created from a statistical analysis of current and historical water level measurements. The most recent water measurements that were used were measured in January, February, and the first two weeks in March of 2015. Those water level measurements represent the depth to water at the end of the 2014 pumping season and the beginning of the 2015 pumping season. Consequently it would be valid to title them either 2014 or 2015 Depth to Water maps. The following maps are titled Depth to Water 2015 for that reason.

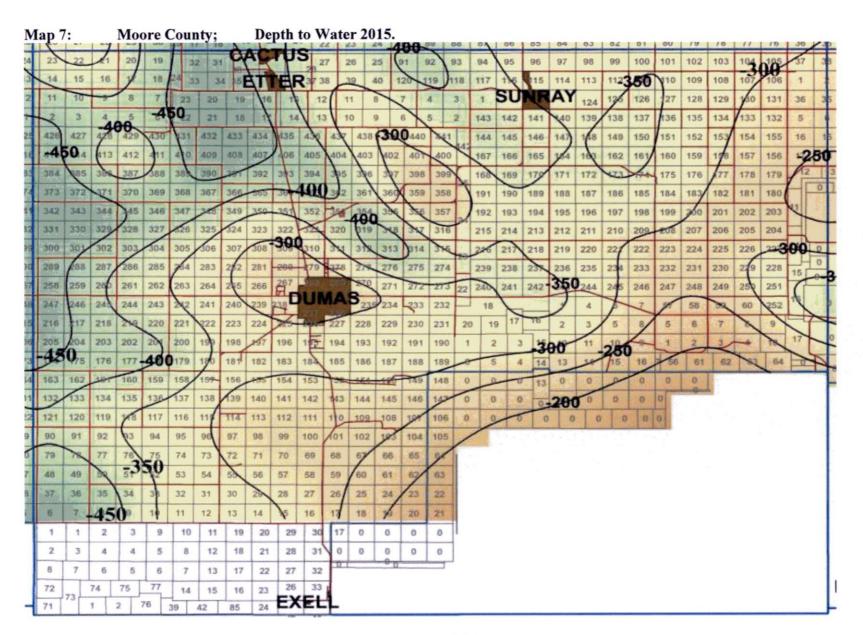
Accuracy: Accuracy is estimated to be equal to the contour interval (+/- 50 feet).

Map 4: Dallam County; Depth to Water 2015. -200 -250 PERICO CONLEN 293 294 -350s

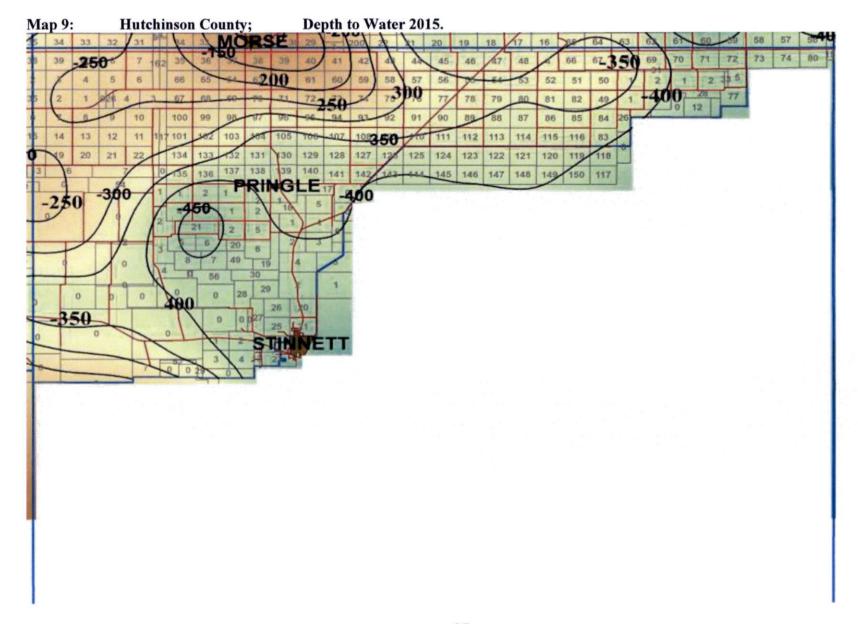


Map 6: Sherman County; Depth to Water 2015.

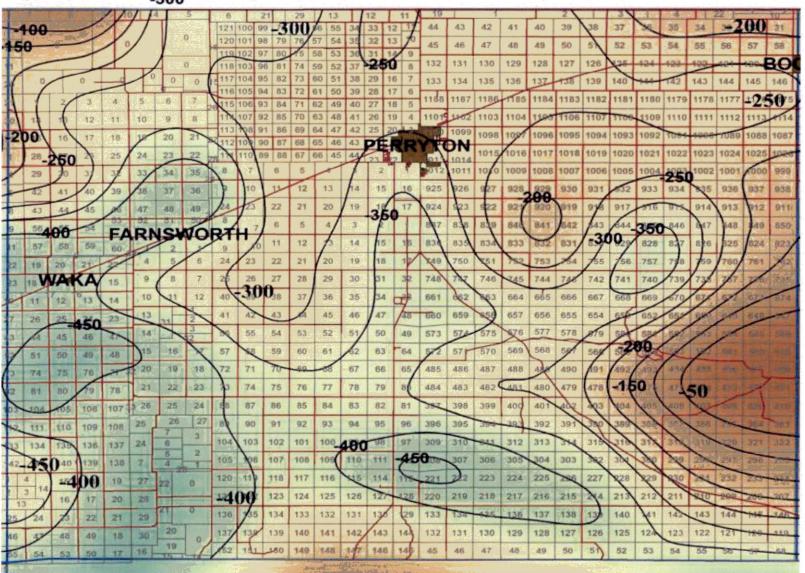


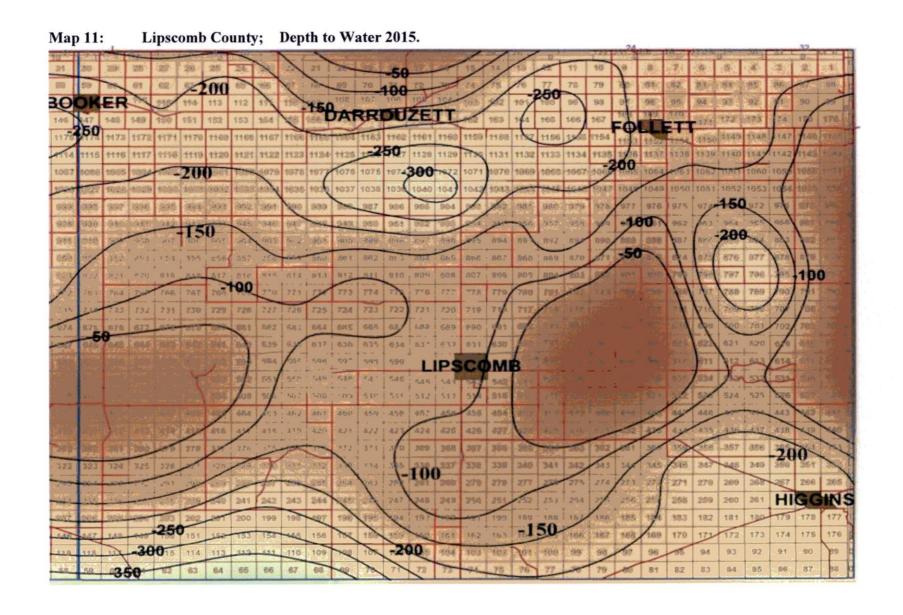


**Map 8:** Hansford County; Depth to Water 2015. HITCHLAND 15 -100 193 240 194 239 242 287 -200 196 237 101 140 149 -100 245 #3504 282 295 -200 1-300 228 253 275 302 14 100 300 402 207 226 12 8, 350 108 GRUVER 223 258 271 -200 SPEARMAN -150 121 126 215 218 189 216 217 123 124 153 154 -150 -100 



Map 10: Ochiltree County; Depth to Water 2015.



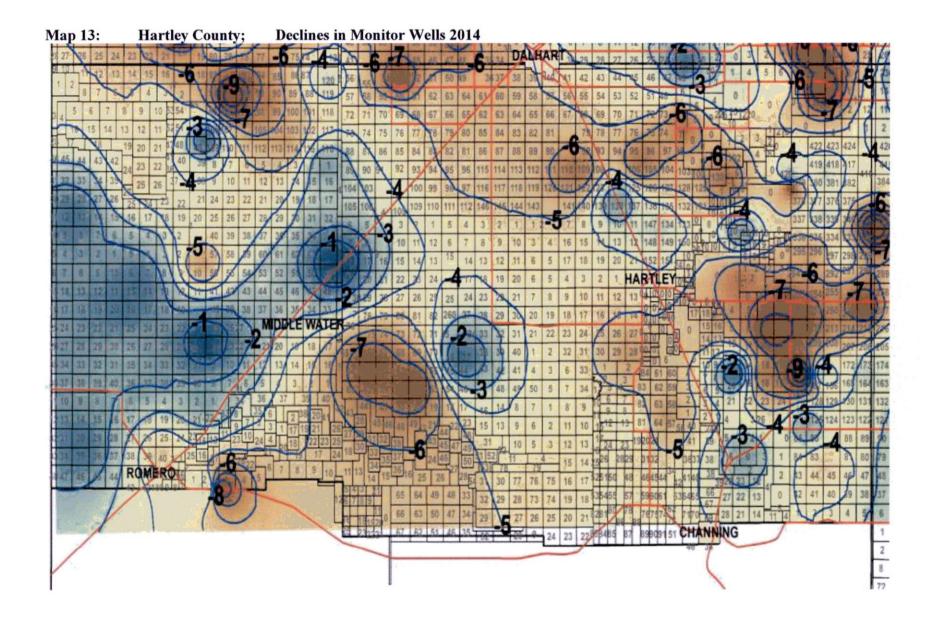


#### XIV. 2014 Declines (in Monitor Wells) by County

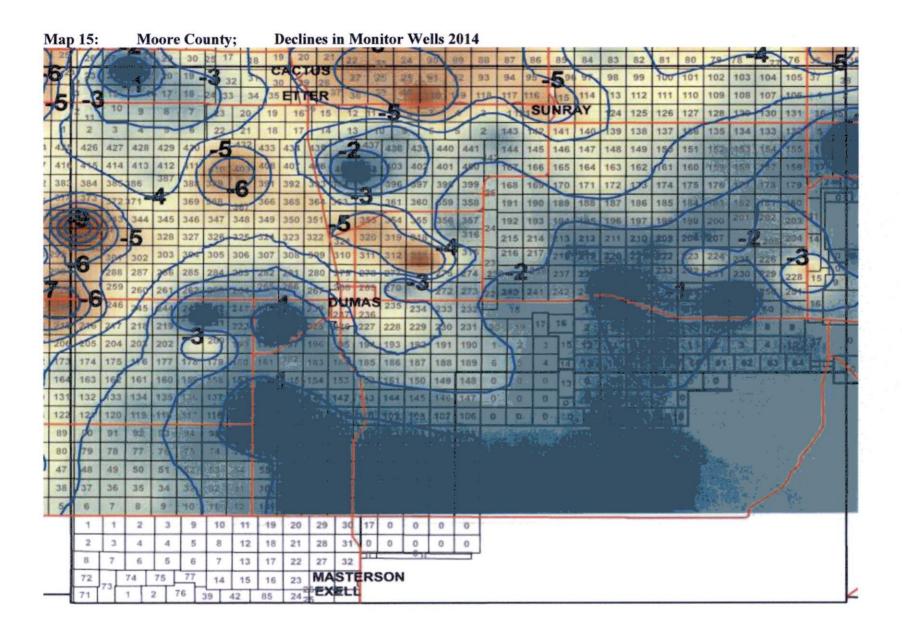
The Decline in Monitor Wells Maps are created from a statistical analysis of current and historical water level measurements. The most recent water measurements that were used for their creation were measured in January, February, and the first two weeks in March of 2015. The Declines represent declines from the 2014 pumping season. The following maps are title "Declines in Monitor Wells 2014".

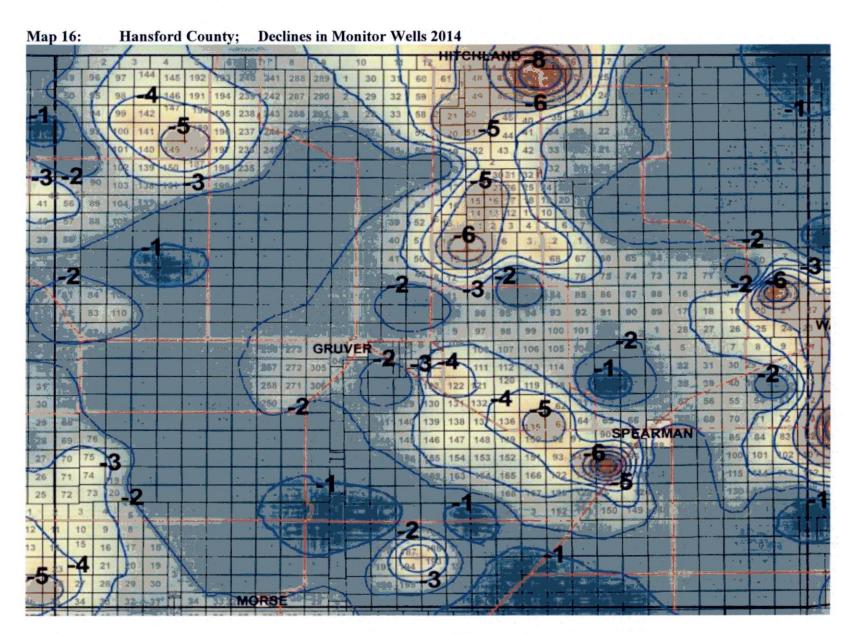
These declines are calculated using water level measurements taken from District Monitor Wells which are primarily located in high pumping areas. Consequently these wells tend to show higher declines than a true County Average Decline.

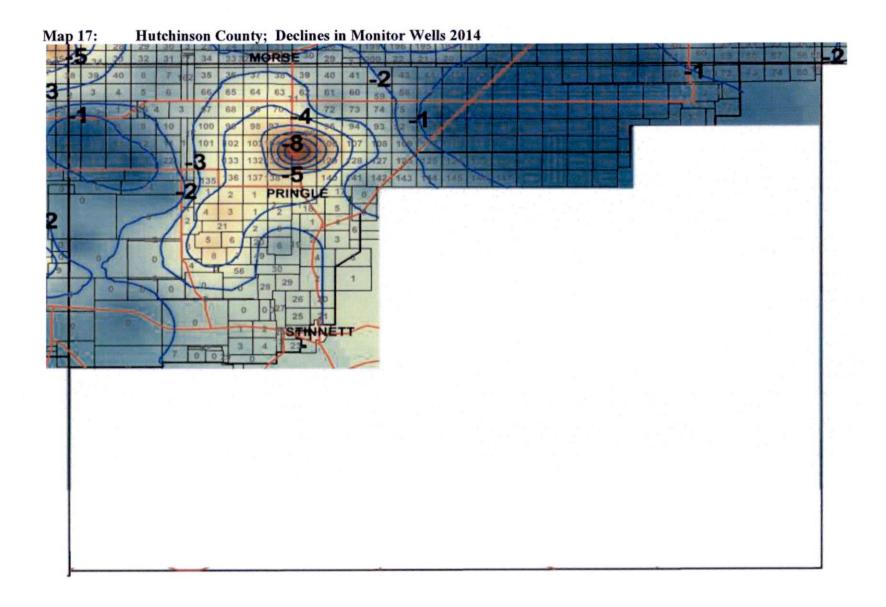
Dallam County; Map 12: **Declines in Monitor Wells 2014** 

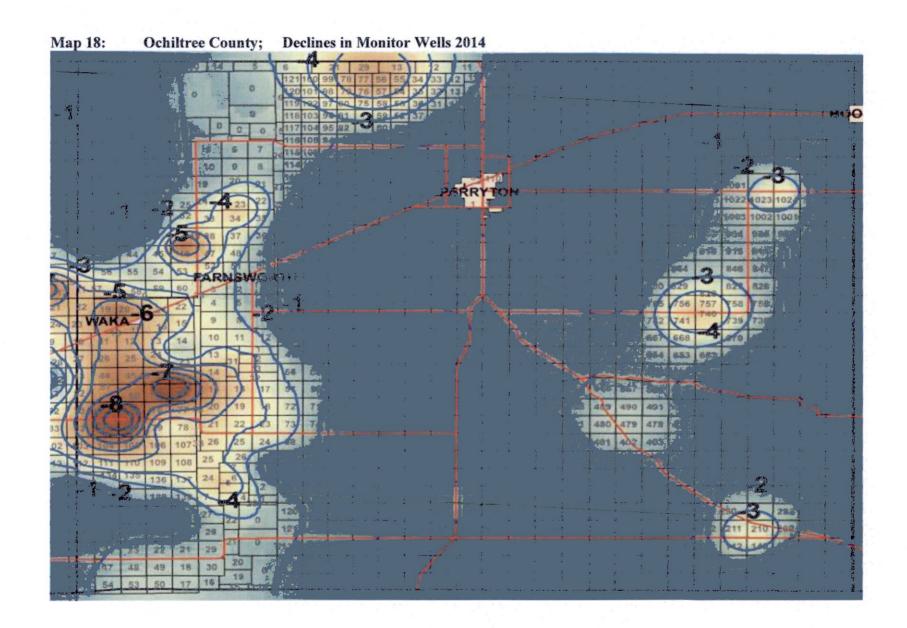


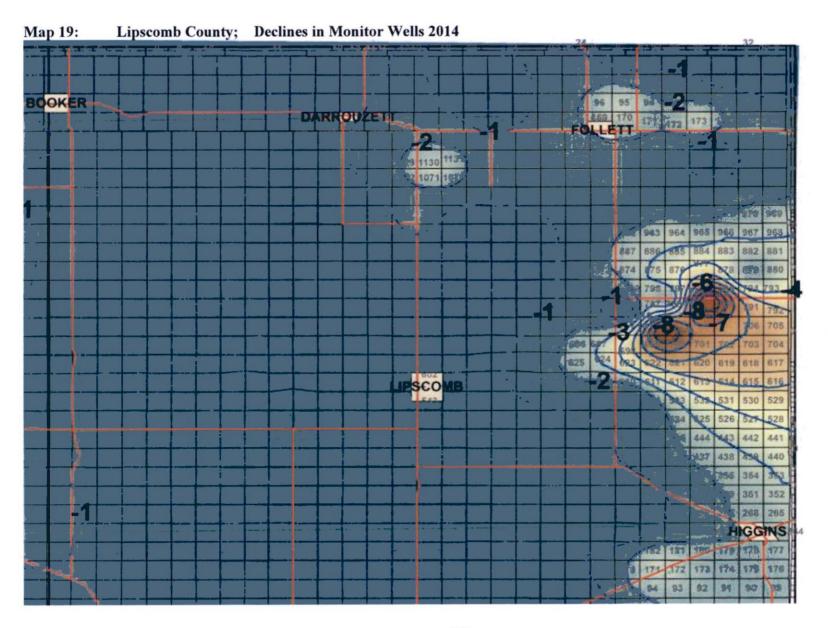
Map 14: **Sherman County**; **Declines in Monitor Wells 2014** 140 131 142 129 143 128 45 126 STRATFORD 241 240 275 274 











# XV. 2015 Estimated (Average) Saturated Thickness of the Ogallala Aquifer by County

The estimated aquifer saturated thickness maps are created using geographical information mapping software and are composed primarily of two layers, base of the aquifer elevation and water level elevation. The water level elevation layer was created from a statistical analysis of the current and historical water level measurements. The most recent water measurements that were used were measured in January, February, and the first two weeks in March of 2015. The latest water level elevations represent the water level elevations at the end of the 2014 pumping season and the beginning of the 2015 pumping season.

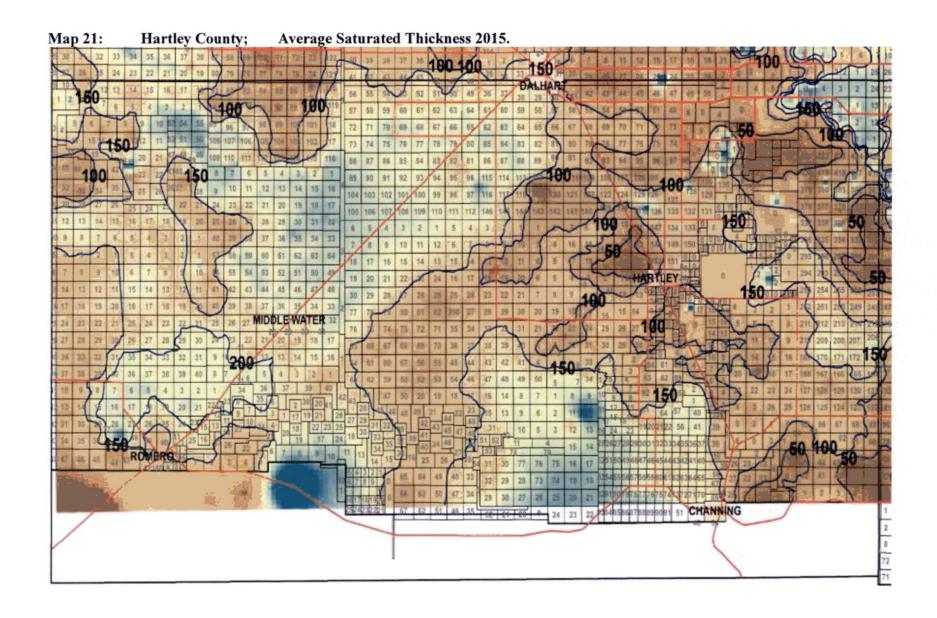
Estimated Saturated Thickness Maps are created every other year.

The next set of estimated aquifer saturated thickness maps are scheduled to be created in late summer or early fall 2017.

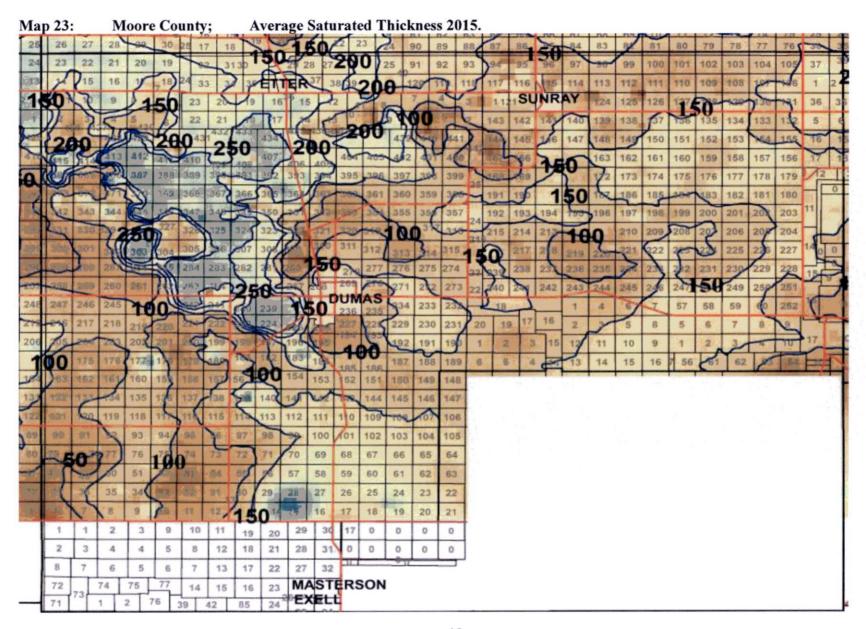
Accuracy:

Accuracy is estimated to be equal to the contour interval (+/- 50 feet). In some areas data may have been included from the Rita Blanca or the Dockum Aquifers due to the uncertainty in delineating their boundaries. Inclusion of such data may increase the value of the saturated thickness above what may actually be encountered in the field.

Map 20: Dallam County; Average Saturated Thickness 2015. AT PERICO 44 CONLEN

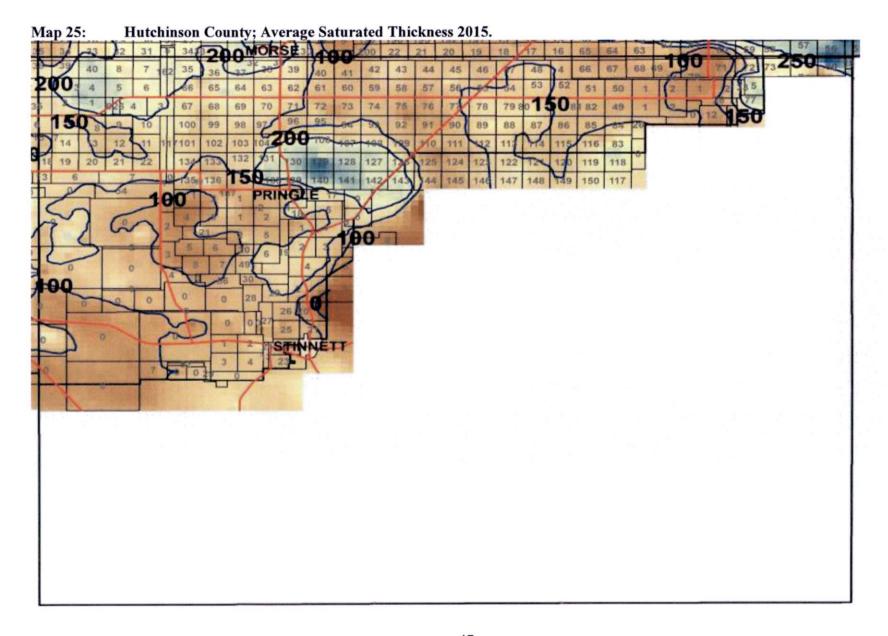


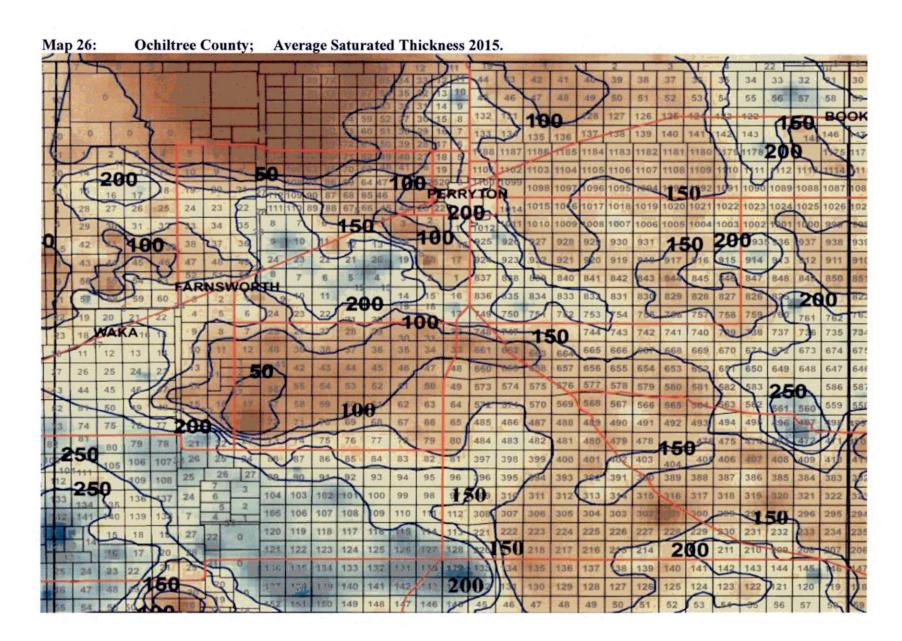
Sherman County; Average Saturated Thickness 2015. Map 22: 100 EXE 145 126 STRATFORD 204 208 32 29 150 121 120 291 298 <del>150</del> 

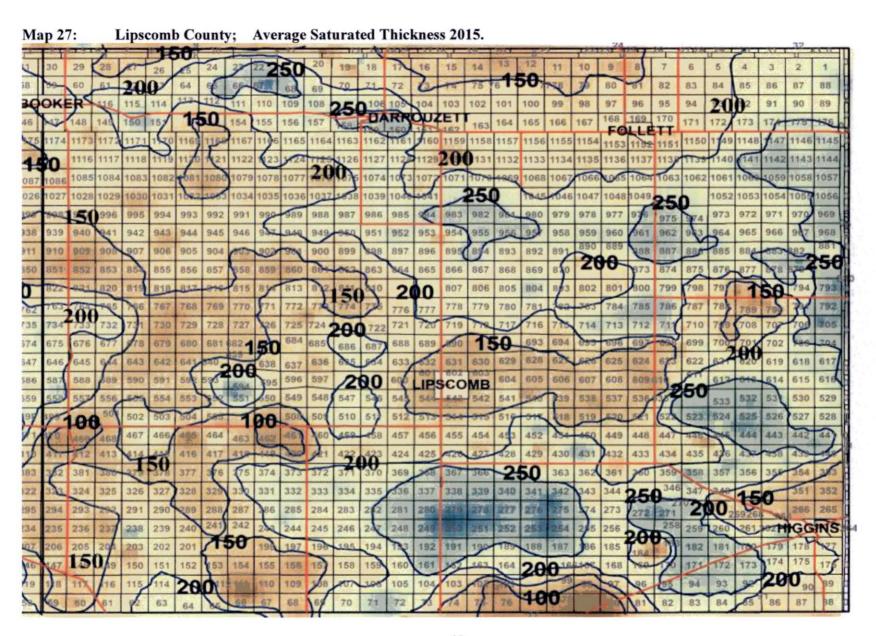


Map 24: Hansford County; Average Saturated Thickness 2015. 304 GRUVER 81 112 129 SPEARMAN 

- 46 -



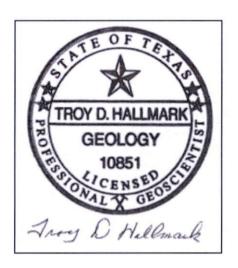




## XVI. Contributors to Hydrology and Water Resources 2014-2015

#### North Plains Groundwater District Staff:

Steve Walthour, District General Manager Dale Hallmark, Assistant General Manager, Hydrologist Kirk Welch, Assistant General Manager, Public Information, Education and Outreach Pauletta Rhoades, Finance Administration Coordinator Patsy Long, Administrative Assistant Paul Sigle, Agricultural Engineer Casey Tice, Compliance Coordinator Kristen Lane, Administration and Permitting Mike Pitts, Monitor Well Program Coordinator Odell Ward, GIS, Natural Resources, Field Operations Laura West, Production and Reporting Lynsey McAnally, Public Information, Education and Outreach Curtis Schwertner, Agricultural Assistant Karen Mannis, Natural Resource Specialist Jerry Green, Natural Resource Specialist, Water Quality Shari Stanford, Natural Resource Specialist, Meter Program



### Prepared by Dale Hallmark, P.G.

Dale Hallmark, Assistant General Manager, Hydrologist

Email: dhallmark@northplainsgcd.org

North Plains Groundwater Conservation District 603 East First Street (Mail: P.O. Box 795) Dumas Texas 79029 Office 806-935-6401, Fax 806-935-6633 The graphic of the Professional Geoscientist Seal and signature was authorized by Troy D. Hallmark, P.G. 10851 on July 31, 2015. The seal is solely valid while this "Hydrology and Water Resources 2014-2015", document is maintained together in its entirety and has not been altered in any manner from the original document maintained in the North Plains Groundwater Conservation District Office in Dumas, Texas.

Total	6-Jun	3-Jun	30-May	23-May	22-May	19-May	17-May	14-May	6-May	27-Apr	23-Apr	18-Apr	10-Apr	2-Apr	26-Mar	25-Mar	23-Feb	31-Jan	21-Jan	4-Dec	8-Nov	7-Nov	12-0ct	10-0ct	Date	2014-'15	AgriLife
8.74			0.20	0.85	0.68	1.06	0.33	0.40	1.42	2.10							0.52	0.21	0.37				0.35	0.25	Rain		Wheat
7.51		1.01									1.31	1.29	1.11	1.08		0.77				0.37	0.57				100%	Irrigation	Water
6.18	0.77										1.07	0.98	0.84	0.81	0.77					0.37	0.57				75%	Plot	inches
4.27											0.68	0.68	0.60	0.60	0.77					0.37		0.57			50%	Inches	
	8.74 7.51 6.18	0.77 8.74 7.51 6.18	1.01 0.77 8.74 7.51 6.18	7 0.20 1.01 0.77 8.74 7.51 6.18	0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	1.08 0.81 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.77 1.08 0.81 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.77 0.77 1.08 0.81 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.52 0.77 1.08 1.11 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.21 0.52 0.77 1.08 0.81 1.11 1.11 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.37 0.21 0.52 0.77 1.08 0.81 1.11 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.37 0.37 0.37 0.21 0.52 0.77 1.08 0.81 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.57 0.57 0.37 0.37 0.21 0.52 0.77 0.77 1.08 0.81 1.11 0.84 1.29 0.98 1.42 1.31 1.07 2.10 1.42 1.31 1.07 2.10 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.57 0.57 0.37 0.37 0.21 0.52 0.77 0.77 1.08 0.81 1.11 0.84 1.129 0.98 1.42 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.35  0.57 0.37 0.37 0.37 0.52 0.77 1.08 0.81 1.11 0.84 1.129 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	0.25 0.35  0.57 0.37 0.37 0.52 0.52 0.77 1.08 0.81 1.11 1.11 0.84 1.29 0.98 1.31 1.07 2.10 1.42 0.40 0.33 1.06 0.68 0.85 0.20 1.01 0.77 8.74 7.51 6.18	Rain         100%         75%           0.25         0.57         0.57           0.37         0.37         0.37           0.37         0.37         0.37           0.52         0.77         0.77           1.08         0.81         1.11         0.84           1.29         0.98         1.07           2.10         1.31         1.07           2.10         1.07         0.77           0.68         0.85         0.85           0.20         1.01         0.77           8.74         7.51         6.18	Irrigation   Plot

not

included

# North Plains Water District Guidelines for Response to RFP for Installation of Subsurface Drip Irrigation @ WCC

Property is south half of Section 47, Moore County ½ Mile East of Moore County Gin, 6045 W. Road E

#### RFP Response Includes

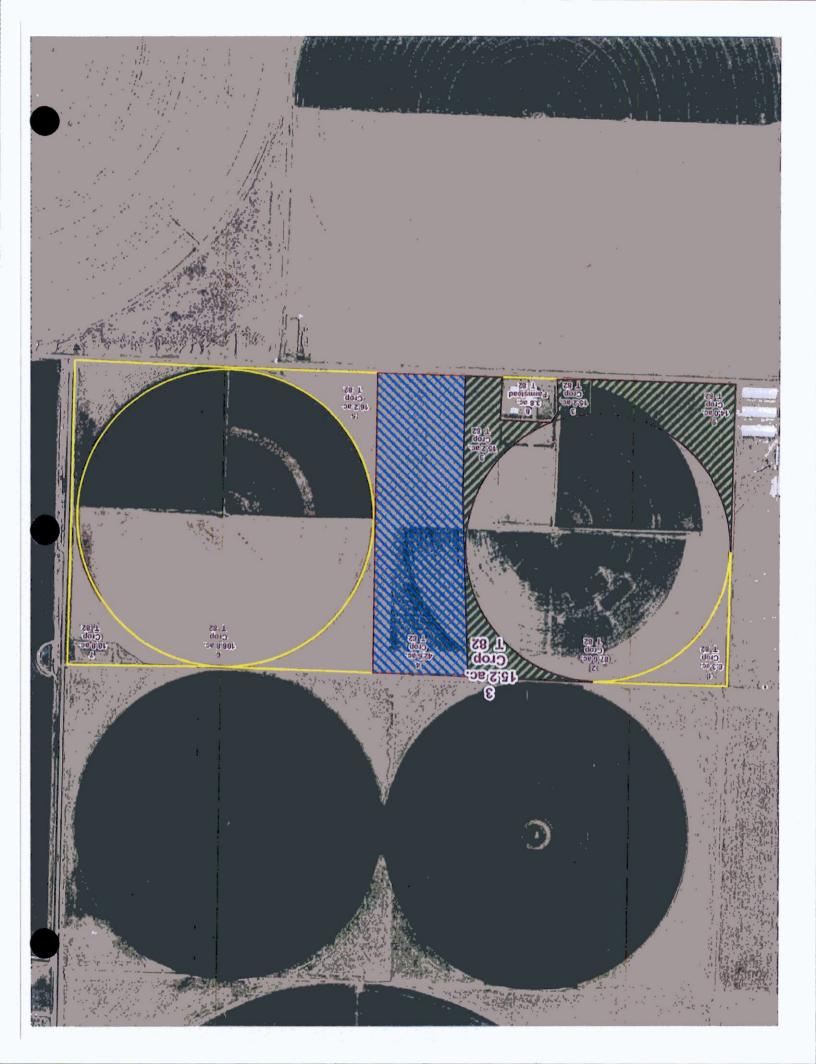
- 1. Design, Installation and full operating function of SDI within the 42.6 acres between two center pivots identified in blue cross-hatched area in Appendix A.
- Response includes preparation of plans and NRCS approval for cost share funding according to NRCS Code 441 plus all other NRCS compliance requirements.
- 3. Design submitted to be prepared by a registered professional engineer (P.E.) in Texas
- 4. Use only 13 mil or greater dripline
- 5. All dripline installation spacing is 30 inches
- 6. Provide alternative for 60 inch dripline spacing field demonstrations in two zones
- 7. Design Irrigation capacity is 4.0 gpm per acre
- 8. Soil is Sherm Silty clay Loam
- 9. Crops will be planted into flat soil surface
- 10. Two Irrigation Wells collectively Provide 1050 gpm
- 11. Two center pivots Irrigate 198 Acres
- 12. Electricity is available as shown @ 8, T82 Farmstead, in Appendix A
- 13. NPWD will provide water sample analysis from two wells for NRCS approval (you request)
- 14. All pipeline and driplines to be fully flushed following installation
- 15. Other as requested for NRCS cost share funding approval
- 16. Provide @ least one reference and contact information where you have installed SDI
- 17. Leon New will respond to all questions

Schedule to inspect property by calling the District office at 806 935 6401 or Leon New at 806 662 1590.

Full Response Proposals are due by 5:00 pm August 21 delivered to Steve Walthour the North Plains Groundwater Conservation District offices located at 603 East 1<sup>st</sup> Street, Dumas, Texas 79029;

Electronically to: swalthour@northplainsgcd.org.

Guidelines Developed by Leon New, P.E <u>lnew@suddenlink.net</u> 806 662 1590



# Micro Irrigation Design Requirements

# Design Requirements for Zone 1 Micro Systems

- 1. Contour map showing:
  - A. Mainlines-----Sizes, lengths, type and pressure rating of pipe
  - B. Sub-mainlines----Sizes, lengths, type and pressure rating of pipe
  - C. Manifolds, Headers or Flush Lines----Sizes, lengths, type and pressure rating of pipe
  - D. Valves (gate, regulating air, pressure relief, etc.)
  - E. Irrigation Well(s) with capacity (gpm)
  - F. Filter Station
  - G. Zones or Blocks (label with # of tapes and type of tape)
  - H. Site specific contour map with contour interval and scale if separate map
  - I. Scale and dimensions and map orientation
- 2. A Microirrigation Water Quality Test is required.
- 3. Minimum 3 gpm/acre (System)
- 4. Minimum Two Zone (Control Valve) Operation
- 5. The system must include a flowmeter (and a chemigation safety valve).1/
- 6. Air/vacuum relief valves must be installed on both sides of the zone control valves.1/
- 7. Must design for manufacturer's recommended minimum flow velocity for tapes (1.5 feet/second).
- 8. When flushing, the maximum flow velocity in pipelines downstream of control valves is 7 feet/second.1/
- 9. Each flush valve must have a pressure gauge or Schrader valve installed.
- 10. Minimum tape wall thickness is 12 mil.
- 11. The tape must be buried a minimum of 10 inches deep.
  - a) From average ground surface for alternate row spacing or flat planted systems.
  - b) From average top of planted bed for bed positioned locations.
- 12. The control and filter station components must be located over a steel reinforced concrete slab.
- 13. Filter Station supports must be made of durable (Steel, Fiberglass, High Density Polyethylene) materials.
  - a) PCV pipe and wooden blocks are not acceptable supports.
- 14. All electrical components must be off the ground or slab and grounded with a grounding rod.
- 15. All electrical components must meet the National Electric Code (NEC) for location and type of installation
- 16. Air/vacuum relief valves must be installed at all high points and summits of 2 feet and higher.
- 17. Flush manifolds with 2 feet or more elevation change must have an air/vacuum relief valve at the high point.
- 18. Air/vacuum and pressure relief valves shall be installed at the end of the pipeline upstream of the filter station.
- 19....Other

# Summary of "New"

# Micro Irrigation System Requirements

Irrigation System, Microirrigation Code 441 (February 2009)

## Practice Standard

- 1. The system must include a flowmeter (and a chemigation safety valve).1/
- 2. A Microirrigation Water Quality Test is required.
- 3. Air/vacuum relief valves must be installed on both sides of the zone control valves.1/
- 4. Must design for manufacturer's recommended minimum flow velocity for tapes (1.5 feet/second).
- 5. When flushing, the maximum flow velocity in pipelines downstream of control valves is 7 feet/second.1/
- 6. Each flush valve must have a pressure gauge or Schrader valve installed.

## Practice General Specification (Subsurface Drip Irrigation)

- 7. Minimum tape wall thickness is 12 mil.
- 8. The tape must be buried a minimum of 10 inches deep.
  - a) From average ground surface for alternate row spacing or flat planted systems.
  - b) From average top of planted bed for bed positioned locations.
- 9. The control and filter station components must be located over a steel reinforced concrete slab.
- 10. Filter Station supports must be made of durable (Steel, Fiberglass, High Density Polyethylene) materials.
  - a) PCV pipe and wooden blocks are not acceptable supports.
- 11. All electrical components must be off the ground or slab and grounded with a grounding rod.
- 12. All electrical components must meet the National Electric Code (NEC) for location and type of installation
- 13. Air/vacuum relief valves must be installed at all high points and summits of 2 feet and higher.
- 14. Flush manifolds with 2 feet or more elevation change must have an air/vacuum relief valve at the high point.
- 15. Air/vacuum and pressure relief valves shall be installed at the end of the pipeline upstream of the filter station.

#### Notes:

1. This has been in effect in Zone 1 since 2002. It is new in the Standard but not new to Zone 1.

# Documents required for Submission by Designer for NRCS Design Review

- 1. Contour map with system layout (see Number 1 above)
- 2. Microirrigation Data Design Information Sheets (Pages 1 and 2), Revised 03-30-2005

# Each Zone

- 3. Zone Manifold Hydraulic Design
- 4. Zone Tape Hydraulic Design
- 5. Zone Flush Hydraulic Design
- 6. Main/Submain Pipeline Design

### CONSERVATION PROGRAM CONTRACT

Participant: SPAIN FARMS	Program and Contract Number: EQIP 2014 747442157CZ		
County and State: MOORE County, TX	Subaccount: Ogallala Aquifer Initiative FY15		
Watershed: Town of Etter	This agreement is effective on the date signed by the Natural Resources Conservation Service obligating official unless specified otherwise in the applicable Appendix and extends through 12/31/2016		

- The undersigned participants enter into this contract with the Natural Resources Conservation Service (NRCS) to implement and/or maintain specific conservation practices, as set forth in the Conservation Plan Schedule of Operations (NRCS-CPA-1155) on the property as identified on the plan map. In consideration for the implementation and/or maintenance of the practices, the NRCS will make payments to the participant(s) in the amount(s) described in the Schedule of Operations as outlined in the Appendix.
- 2. This agreement is comprised of this Conservation Program Contract form NRCS-CPA-1202. The NRCS-CPA-1202 Appendix and the NRCS-CPA-1155 Plan Schedule of Operations and plan map are hereby fully incorporated into this document and are binding upon the participant(s). The NRCS-CPA-1155 may be modified through execution of a Modification form (NRCS-CPA-1156) by both NRCS and the participant and becomes a part of the contract when both parties have agreed to and signed the Modification.
- 3. The participant(s) agree:
  - A) to implement and maintain conservation practices for the life of this agreement in compliance with the plan or schedule of operations and in accordance with the standards, specifications, and other special program criteria obtained from NRCS;
  - B) to forfeit further payments under this agreement and refund the United States, in amounts determined by NRCS, any payments received hereunder upon NRCS determination that participant(s) have violated the material terms of this agreement or accept such payment adjustments as NRCS may deem appropriate if NRCS decides that the participant's violation does not warrant termination of the agreement; and
  - C) to forfeit all rights to further payments under the agreement and refund to the United States, in amounts determined by NRCS, payments received hereunder if the subject land is transferred to a non-participant during the term of this agreement, unless the third party agrees to assume this agreement, and the NRCS consents to the modification.

### 4. CONTRACT PARTICIPANTS

Name, Address, Telephone	SSN or TAX ID if applicable  *****3460  DUNS (non-individuals)  008701869			
SPAIN FARMS				
11648 STARKEY RD DUMAS, TX 79029 (806) 966-5406				
Signature	Payment Shares 100.00%			
Date				
Signature required for modifications   ✓ Yes □ No	Signature acceptable for payments ✓ Yes □ No			

### CONTRACT OBLIGATIONS

2015	2016						Total
\$5,490	\$35,140						\$40,630
				\$40,630			

## **CONSERVATION PROGRAM CONTRACT**

Participant:	Program and Contract Number:			
SPAIN FARMS	EQIP 2014 747442157CZ			
6. NRCS APPROVING OFFICIALS				
Application Approval	Contract Obligation			
MICHAEL CALDWELL				
USDA electronic signature; manual signature not required.				
	Date:			
Date: 7/9/2015				
4. CONTRACT PARTICIPANTS (continued)				
Name, Address, Telephone	SSN or TAX ID if applicable			
J STANLEY SPAIN	*****3944			
11648 STARKEY RD				
DUMAS, TX 79029				
(806) 966-5406				
Signature	Payment Shares			
	0.00%			
Date				
Signature required for modifications ☐ Yes ✓ No	Signature acceptable for payments ☐ Yes ✓ No			

### PRIVACY ACT STATEMENT

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C 522a). Furnishing this information is voluntary; however failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other state or federal law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

This information collection is exempted from the Paperwork Reduction Act under 16 U.S.C. 3801 note and 16 U.S.C. 3846.

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The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers. If you believe you experienced discrimination when obtaining services from USDA, participating in a USDA program, or participating in a program that receives financial assistance from USDA, you may file a complaint with USDA. Information about how to file a discrimination complaint is available from the Office of the Assistant Secretary for Civil Rights.

USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.)

To file a complaint of discrimination, complete, sign and mail a program discrimination complaint form, available at any USDA office location or online at www.ascr.usda.gov, or write to:

USDA
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, S.W.

Washington, DC 20250-9410

Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer and lender.

# CONSERVATION PROGRAM CONTRACT

Participant: SPAIN FARMS	Program and Contract Number: EQIP 2014 747442157CZ	
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Persons with disabilities who require alternative means for communication of program information (e.g., Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

### U. S. DEPARTMENT OF AGRICULTURE

Natural Resources Conservation Service (NRCS)
On behalf of the
Commodity Credit Corporation (CCC)

## APPENDIX TO FORM NRCS-CPA-1202 CONSERVATION PROGRAM CONTRACT

For

Environmental Quality Incentives Program (EQIP)
Regional Conservation Partnership Program (RCPP)
(which is administered under and subject to EQIP regulations)

## 1 PROGRAM ELIGIBILITY REQUIREMENTS

- A The Participant must complete and file Form AD-1026 Highly Erodible Land Conservation (HELC) and Wetland Conservation (WC) Certification or any successor form, and meet the requirements set forth therein, in accordance with Title XII of the Food Security Act of 1985, as amended. By signing this Conservation Program Contract (Contract), the Participant certifies that the Participant has completed and filed the AD-1026 and meets the payment eligibility requirements set forth in the Highly Erodible Land Conservation-Wetland Conservation (HELC-WC) provisions at 7 CFR part 12. AMA participants are not required to meet the HELC-WC provisions.
- The Participant must meet the requirements of, complete and file Form CCC-941 (Average Adjusted Gross Income (AGI) Certification and Consent to Disclosure of Tax Information) or any successor form. By signing this Contract, the Participant certifies that the Participant has met the requirements of, completed, and filed the applicable form. A person or legal entity shall not be eligible to receive any benefit during a crop, fiscal, or program year, as appropriate, if the person or legal entity does not meet the adjusted gross income (AGI) limitations established by Section 1001D of the Food Security Act of 1985, as amended, and implemented through regulations at 7 CFR part 1400. The amount of any payment or benefit shall be reduced by an amount that is commensurate with the direct and indirect ownership interest in the entity of each person or legal entity who has income in excess of the applicable limitation specified.
- The Participant must complete and file Form CCC-901 Member's Information, or its equivalent, if the Participant represents a business classified as a legal entity or joint operation by the U.S. Department of Agriculture (USDA) under 7CFR part 1400. The Farm Service Agency must be timely notified in writing of any changes to the member's information provided, including changes in membership due to death or otherwise as provided in 7 CFR part 1400.
- The Participant must have control of the land for the duration of this Contract. By signing this Contract, the Participant certifies that the Participant will control the land subject to this Contract for the term of this Contract and shall, upon request, provide evidence to the Commodity Credit Corporation (CCC) demonstrating that such Participant has control of the land for that period. Where applicable, the Natural Resources Conservation Service (NRCS) will consult with the U.S. Department of Interior, Bureau of Indian Affairs (BIA) to determine Tribal land eligibility. The Participant shall not be eligible for Contract payments for any of the following: (1) practices or activities that the participant is required to implement to address non-compliance with the HELC and WC provisions at 7 CFR part 12 (AMA participants are not subject to HELC or WC provisions);

NRCS-CPA-1202-CPC (appendix), Page 1 of 18

- (2) a non-land based structure that is not integral to a land based practice or activity; (3) practices and activities that were applied with financial assistance through any other USDA conservation program; (4) practices or activities that were initiated or implemented prior to contract obligation, unless a waiver was granted by the Chief prior to the practice or activity implementation; practices or activities that do not address an identified natural resource concern or result in conservation benefit; and (5) irrigation practices implemented for the purpose of water conservation or activities on land that does not meet applicable program irrigation history requirements.
- E Land otherwise eligible for the covered conservation programs shall not be eligible if the land is subject to a deed or other restriction prohibiting the application of the conservation plan and associated practices, activities, or where a benefit has or will be obtained from a Federal, or State agency (including political subdivisions and entities thereof) in return for the Participant's agreement not to implement the conservation plan and associated practices and activities on the land during the same time as the land would be enrolled in this Contract. By applying for the program Contract, the Participant certifies as a condition for payment that no such restrictions apply to the subject land.
- The Participant is responsible for obtaining the authorities, permits, easements, or other approvals necessary for the implementation, operation, and maintenance of the conservation practices and activities in accordance with applicable laws and regulations. A Participant must comply with all laws and is responsible for all effects or actions resulting from the Participant's performance under this Contract.
- The Participant will obtain the landowner's signature on the Contract or provide to NRCS written authorization from the landowner that identifies the Participant has authority to install structural or vegetative practices. The landowner's signature on the Contract for purposes of authorizing such practices, does not qualify the landowner for program payments unless all other program participation and payment eligibility requirements are met, as determined by NRCS.
- H The Participant must be an eligible producer as defined in 7 CFR part 1466 for EQIP or 7 CFR part 1465 for AMA.

## 2 OFFERS FROM APPLICANTS

Form NRCS-CPA-1200, Conservation Program Contract Application executed by an eligible producer represents a request to enter into the program under the terms specified in this Contract Appendix.

## 3 AGREEMENT

The Participant agrees to:

 Enroll eligible land into the program for the period of time as specified on Form NRCS-CPA-1202 beginning on the date this Contract is executed by CCC;

- (3) Secure CCC funding for services obtained by the Participant from a certified TSP through contract development or contract modification with CCC before engaging the services of a TSP if CCC payment for TSP services is desired;
- (4) Apply or commence a financially-assisted practice or activity within the first 12 months from the date this Contract is executed by CCC unless a waiver is requested and approved by the NRCS Chief;
- (5) Establish or implement, to NRCS Standards and Specifications, conservation practices or activities described in this Contract as scheduled, to operate and maintain these practices or activities for the intended purpose and life span identified in this Contract, and to comply with the terms and conditions of this Contract and all applicable Federal, State, Tribal, and local laws. In cases where the land is transferred to new ownership or management during the contract period, the Participant must also ensure these responsibilities are transferred to subsequent owners or managers as provided herein;
- (6) Notify CCC within 60 days of the transfer of interest to an eligible transferee who accepts the contract's terms and conditions by completing Form NRCS-CPA-152 Conservation Program Contract Transfer Agreement, or the contract will be terminated;
- (7) Share responsibility for ensuring that Form NRCS-CPA-1155, Conservation Plan or Schedule of Operations, is accurate and complete. CCC has no authority to compensate participants for practices and/or activities that are not in the Contract at the time of obligation;
- (8) Not undertake any action on land under the Participant's control which tends to defeat the purposes of the program or statute authority, as determined by CCC;
- (9) Discontinue work or practice implementation and notify CCC immediately if during the construction of any practice a previously unknown or unidentified endangered species, cultural, archeological, or historical site is encountered;
- (10) Provide receipts, as necessary, as proof of payments, and to maintain proof of payment documentation for three (3) years after the end of the Federal fiscal year in which the practice or activity was completed, and to present this documentation to CCC within 30 days if selected for administrative compliance check;
- (11) Allow access to the land under Contract to the CCC representative or their agent, including NRCS or Technical Service Providers representing NRCS, for monitoring progress on this Contract. NRCS shall provide reasonable notification to the participant prior to entering the land under Contract;

- (13) Develop and implement all practices identified in a comprehensive nutrient management plan (CNMP) in contracts associated with an Animal Feeding Operation (AFO) that include a waste storage or treatment facility; develop and implement all practices identified in a forest management plan (FMP) for all non-industrial private forestland (NIPF) subject to this Contract; and develop and carry-out and implement those conservation practices in the EQIP plan that are consistent with an organic system plan for contracts funded under the EQIP Organic Initiative (16 U.S.C. 3839aa-2(i)); and
- (14) Accept applicable program contract and payment limits as found in 7 CFR part 1400 and program regulations at 7 CFR part 1465 for AMA, and 7 CFR part 1466 for EQIP:
  - AMA payments received by a person or legal entity through all AMA sources (Including NRCS, Risk Management Administration, and Agricultural Marketing Service, or any agent acting on behalf of these agencies), shall not exceed a total of \$50,000 per person or legal entity for any fiscal year;
  - <u>EQIP</u> payments made to a person or legal entity may not receive, directly or indirectly, financial assistance payments under EQIP that, in aggregate, exceed \$450,000 for all contracts entered into under EQIP by the person or legal entity during the period of fiscal years 2014 through 2018. No single EQIP contract with a person or legal entity may exceed a total obligation greater than \$450,000.
  - <u>EQIP-Organic</u> Financial assistance payments funded under the EQIP Organic Initiative at 16 U.S.C. 3839aa-2(i) to a person or legal entity directly or indirectly, may not exceed in aggregate \$20,000 per fiscal year or \$80,000 during any six-year period.
    - (a) The following items are applicable to all of the above listed programs:
      - (i) Payments received in excess of these limits are improper payments and subject to immediate refund.
      - (ii) Annual and contract payment limitations may not be waived.
      - (iii) Split payments to avoid provisions of annual payment limitations are not allowed. When payment requests for satisfactorily completed practices exceed the annual or contract limitation for a person or legal entity, that portion that exceeds the limitation will not be deferred to the next fiscal year. The balance will be de-obligated and no provision for waiver to exceed the limitation is allowed.
      - (iv) Certification of completed practices will not be delayed or postponed to circumvent the annual payment limitations.

Indian tribes are not subject to these payment and contract limitations, but must certify that no Tribal member will receive a benefit in excess of these limitations.

### 4 CONSERVATION PLAN

By signing the Contract, the Participant agrees:

- (A) that the NRCS-CPA-1155, Conservation Plan or Schedule of Operations is hereby incorporated as a part of the Contract; and
- (B) to implement and maintain the practices and activities as identified and scheduled on Form NRCS-CPA-1155 and in compliance with Paragraph 6 of this Appendix—Operation and Maintenance of Conservation Practices.

### 5 PAYMENTS

- A Subject to the availability of funds, CCC will make payment at the rate specified in this Contract after a determination by CCC that an eligible conservation practice or activity has been implemented in compliance with the conservation plan, and in accordance with appropriate NRCS standards and specifications. In order to receive payment, the Participant, upon technical certification of the completed practice or activity, must execute and file with CCC a Form NRCS-CPA-1245, Practice Approval and Payment Application, and if requested, any applicable receipts or invoices, as necessary. Except for reasons beyond the control of the Participant, failure of the Participant to report completion of practices or activities on Form NRCS-CPA-1245 during the contract period of performance will result in forfeiture of all rights to payment under this Contract.
- Payments will be issued based on the payment rate and the amount of the actual practice extent implemented, as documented on Form NRCS-CPA-1245. Form NRCS-CPA-1155, Plan/Schedule of Operations and Form NRCS-CPA-1156, Revision of Plan/Schedule of Operations or Modification of a Contract reflect the applicable payment rate(s) in effect for the fiscal year of Contract obligation. Payment rates reflect costs associated with implementation of the approved conservation practice but do not include potential costs associated with the operation and maintenance of practices, per Paragraph 6 of this Appendix. Costs associated with operation and maintenance of a practice for the intended lifespan are the responsibility of the Participant.
- In order to be reimbursed for technical services approved under this agreement and performed by a certified TSP hired by the Participant, a Participant must execute a request for payment on Form NRCS-CPA-1245. The Participant must also submit to CCC an invoice from the certified TSP for the work performed, as well as any documentation CCC may require in order to ensure that the technical services were carried out in accordance with NRCS requirements. It is the Participant's responsibility to ensure that the technical services obtained from a certified TSP hired by the Participant meet program requirements. CCC will not reimburse the Participant if the technical services provided by the TSP do not meet the program requirements. If CCC terminates this Contract as provided under Paragraph 11 of this Appendix, CCC may seek refund of any TSP payments made to the Participant.

- Payments will only be issued for practices or activities that are completed within the contract period of performance and meet or exceed the practice standards described in the NRCS Standards and Specifications.
- Collection of amounts due from a Participant for improper payment or any other reason will follow procedures of 7 CFR part 1403. NRCS will notify the Participant and provide the reason for the collection and the amount owed. Unpaid debts accrue interest due to the CCC beginning 30 days after the billing date at the current value of funds rate published in the Federal Register by the United States Department of Treasury.
- Any Participant that will receive any share of a payment made for the implementation of this Contract must be a signatory on the Contract and eligible for such payment. Any Participant on the Contract may approve payment applications for the Contract unless signature authority is specifically not granted or assigned on the Contract form NRCS-CPA-1202 or NRCS-CPA-152.
- Any payment that has or will be received through another USDA program or from other sources must be disclosed to the NRCS Approving Official at the time a payment application, NRCS-CPA-1245, is submitted. NRCS may reduce payments to account for the funds received from other sources in accordance with program requirements.
- Historically underserved EQIP participants, as determined by CCC, may receive advance payments up to 50 percent of the amount needed to implement conservation practices for the purpose of purchasing "immediately needed" materials and services. The scheduled practice for which the advance is requested must have an NRCS approved practice design prior to issuance of the advance payment. If funds provided in advance are not expended during the 90-day period beginning on the date of receipt of the funds, the funds shall be returned to the CCC within a reasonable timeframe, as determined by CCC. Advanced payments will be subject to all terms and conditions including those identified in Paragraph 12 of this Appendix—Recovery of Costs.
- If a Participant receiving a Contract payment is indebted to another Federal agency and the outstanding debt has been referred to the Treasury Offset Payment System, the Contract payment due to the Participant will be reduced by Treasury for the amount owed the U. S. Government. Though the Participant will not be notified by NRCS that a payment offset has occurred, NRCS records will reflect full Contract payment to the Participant.
- Contract payments will not be delayed for practices completed while in non-compliance with the HELC-WC provisions or for the purpose of circumventing the payment eligibility requirements as set forth in 7 CFR part 12.

# 6 OPERATION AND MAINTENANCE OF CONSERVATION PRACTICES (Operation and Maintenance Agreement)

The Participant agrees to operate and maintain all conservation practices included within this Contract for the practice lifespan as listed on Form NRCS-CPA-1155, Conservation Plan or Schedule of Operations, and any subsequent practices resulting from revisions on Form NRCS-CPA-1156, Revision of Plan/Schedule of Operations or Modification of a Contract. This requirement also extends to those conservation practices installed before Contract execution, but included in the Contract because their maintenance is necessary to obtain the environmental benefits agreed upon in this Contract and reflected in the ranking process.

- A The term Operation and Maintenance (O&M) as used in the Contract shall collectively include:
  - Operation: The administration, management, and performance of non-maintenance activities necessary to keep a practice safe and functioning as planned;
  - Maintenance: The recurring activities necessary to retain or restore a practice in a safe and functioning condition, including, but not limited to, the management of vegetation, the repair or replacement of failed components or conservation practices, the prevention or treatment of deterioration, and the repair of damages caused by vandalism or negligence, but excluding damage caused by a local, state or nationally recognized natural disaster;
  - Repair: The actions to return a deteriorated, damaged, abandoned, or failed practice and/or component to an acceptable and functional condition; and
  - Replacement: The removal of a practice or component and installation of a similar, functional practice or component.
- B The Participant is responsible for the O&M activities and acknowledges that these activities may require labor, funds, and management in order to ensure the appropriate program purposes are met.
- The Participant O&M responsibilities begin when the practice installation is completed, as determined by NRCS, and shall continue through the end of the practice lifespan.
- The Participant acknowledges that the "practice lifespan" is the time period in which the conservation practices are to be used and maintained for their intended purposes as defined by NRCS technical references and documented on either Forms NRCS-CPA-1155 or NRCS-CPA-1156.
- Specific O&M requirements for conservation practices covered within this Contract are defined in the conservation practice standard and are documented within the conservation plan narrative, Contract provision, and/or job sheet.
- The Participant acknowledges that conservation practices installed before the contract execution, but included in the Contract to obtain the environmental benefits agreed upon within the application ranking process, must be operated NRCS-CPA-1202-CPC (appendix), Page 7 of 18

and maintained as specified in the Contract and within this paragraph.

G The Participant agrees to the O&M requirements as listed within this Paragraph (6) and failure to carry-out the terms and conditions listed may result in CCC termination of this Contract. (Refer to Paragraph 11 of this Appendix—Contract Termination).

#### PROVISIONS RELATING TO TENANTS AND LANDLORDS 7

No payment will be approved for the current year if CCC determines that any of the following conditions exist:

- (1) The landlord or operator has not given the tenants that have an interest in the agricultural operation covered by the Contract, or that have a lease that runs through the Contract term at the time of sign-up, an opportunity to participate in the benefits of the program.
- (2) The landlord or operator has adopted any other scheme or device for the purpose of depriving any tenant of any benefits to which such tenant would otherwise be entitled. If any such conditions occur or are discovered after payments have been made, all or any part of the payments, as determined by CCC, must be refunded according to Paragraph 5F of this Appendix and no further payments shall be made.

#### 8 MISREPRESENTATION AND SCHEME OR DEVICE

- A Participant who is determined to have erroneously represented any fact affecting a determination with respect to this Contract and the regulations applicable to this Contract, adopted any scheme or device which tends to defeat the purposes of this Contract, or made any fraudulent representation with respect to this Contract, will not be entitled to payments or any other benefits made under this Contract. The Participant must refund to CCC all payments received plus interest. In addition, CCC may terminate the Participant's interest in all conservation program contracts.
- B CCC will charge interest on monies it determines to be due and owing to CCC under this Contract. Under debt collection procedures, unpaid bills accrue interest beginning 30 days after the billing date. The interest rate will be determined using the current value of funds rate, published annually in the Federal Register by the United States Department of Treasury.
- C The provisions of this Paragraph of the Appendix shall be applicable in addition to any other criminal and civil fraud statutes.

### CHANGES TO TERMS AND CONDITIONS OF THIS CONTRACT 9

- CCC may unilaterally cancel this Contract when the implemented practice would Α cause adverse impacts to significant cultural and/or environmental resources without mitigation action unless CCC and the Participant modify this Contract to address such impacts.
- Subject to the availability of funds, CCC may adjust the amount of payment for a B single contract item (practice or activity) by not more than five hundred dollars NRCS-CPA-1202-CPC (appendix), Page 8 of 18

(\$500) as the result of an increase in the number of units performed (quantity variation) by the Participant.

- C The Participant and CCC may modify this Contract by mutual agreement when:
  - (1) Both the Participant and CCC agree to this modification;
  - (2) At the request of the Participant, and upon approval of CCC, the modification is consistent with the purposes of the program; and
  - (3) A transfer of this Contract occurs, provided CCC approval is obtained, and an eligible transferee accepts all terms and responsibilities under this Contract including operation and maintenance of those practices already installed or to be installed.
- CCC uses a payment schedule to document estimated costs incurred and income foregone associated with practice implementation to justify the payment rates used in this Contract. Each payment schedule has a range of potential practice payment scenarios that represent the typical costs associated with implementation of a conservation practice under various site and related conditions. The payment rates incorporated into this Contract are based upon a practice payment scenario within the payment schedule that CCC determined best approximates the site conditions for this Contract. The Participant and CCC may modify this Contract by mutual agreement to substitute a different practice payment scenario upon which to base the payment rates used in this Contract provided that CCC determines, in its sole discretion that:
  - (1) Substantive design changes are required prior to practice installation;
  - (2) CCC determines that the proposed substitute scenario is within the existing payment schedule associated with this Contract and better approximates the site conditions as identified by the design changes;
  - (3) There is sufficient difference in implementation requirements between the original payment scenario and the substitute payment scenario to increase or decrease the estimated practice payment by more than 10 percent;
  - (4) Practice specifications are clearly documented in the practice narrative or substitute payment scenario description; and
  - (5) The planned practice has not been implemented.
- All modifications that require CCC approval must be approved in writing by the authorized CCC official and the Participant or an individual granted signature authority through a valid Power of Attorney filed in the local Service Center. Any Participant on the Contract may approve modifications for the Contract on behalf of all participants unless such signature authority is specifically denied on the NRCS-CPA-1202.

### 10 CORRECTIONS

in this Contract. If the Participant does not agree to such corrections, CCC shall terminate the Contract.

## 11 CONTRACT TERMINATION

- A If a Participant fails to carry-out the terms and conditions of this Contract, CCC may terminate this Contract. CCC may require the Participant to refund payments received under this Contract, or if not terminated, require the Participant to accept such adjustments in subsequent payments as are determined to be appropriate by CCC. Refunds shall be subject to the provisions in Paragraph 5F of this Appendix.
- B The CCC may terminate this Contract, in whole or in part, without liability, if CCC determines that continued operation of this Contract will result in the violation of a statute or regulation, or if CCC determines that termination would be in the public interest.
- The Contract terminates upon death of the Participant unless the Participant appointed an Executor or other Estate Representative to act on the Participant's behalf and such Executor or Estate Representative transfers the Contract to an eligible person or legal entity within 60 days of the Participant's death and such transfer is approved by CCC.

## 12 RECOVERY OF COST

- In the event a Participant violates the terms of this Contract, the Participant voluntarily terminates this Contract before any contractual payments have been made, or this Contract is terminated with cause by CCC, the CCC will incur substantial costs in administering this Contract which may not be possible to quantify with certainty. Therefore, in addition to the refund of payments as set forth in Paragraph 11 of this Appendix, the Participant agrees to pay, at the time of termination, liquidated damages in an amount equal to 10 percent of the total financial assistance obligated to the Participant in this Contract, at the time of obligation. This liquidated damages payment is for recovery of administrative costs and technical services and is not a penalty.
- B The Participant may be required by the CCC to refund all or a portion of any assistance earned under the program if the Participant sells or loses control of the land under this Contract and the new owner or transferee is not eligible for the program, or refuses to assume responsibility under the Contract.

### 13 PERIOD OF PERFORMANCE

This Contract is effective when signed by the Participant and executed by an authorized representative of CCC and shall have a term not to exceed 10 years from date of approval by CCC as indicated on the NRCS-CPA-1202 or NRCS CPA-1156. Except as otherwise provided for herein, this Contract may not be terminated or modified unless by mutual agreement between the parties. Within the dates established by CCC, this Contract must be signed by all required Participants. In the event that a statute is enacted during the period of this Contract which would materially change the terms and conditions of this Contract, the CCC may require the Participant to elect between modifying this Contract consistent with the provisions of such statute or Contract termination.

### 14 GENERAL TERMS

- A The regulations in 7 CFR part 1465 for AMA, 7 CFR part 1466 for EQIP and any other applicable regulations are incorporated, by reference, herein. In the event of a conflict between these regulations and the terms of this Appendix, the provisions of the regulations will prevail.
- B This Contract shall be carried out in accordance with all applicable Federal statutes and regulations. Any ambiguities in this Contract and questions as to the validity of any of its specific provisions shall be resolved in favor of CCC so as to give maximum effect to the conservation purposes of this Contract.
- NRCS is administering this Contract on behalf of the CCC. Therefore, where this Contract refers to "CCC", NRCS may act on its behalf for the purposes of administering this Contract. When the term "Participant" is used in this Contract, it shall be construed to mean all Participants signing this Contract. Likewise, when the term "Applicant" is used in this Contract, it means all Applicants signing the program application.
- D Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions (7 CFR part 3017 or 2 CFR part 417 and 2 CFR part 180, as applicable).
  - (1) The Participant certifies to the best of the Participant's knowledge and belief, that the Participant and his or her principals:
    - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency:
    - (b) Have not within the three-year period preceding this agreement had a criminal conviction or civil judgment rendered against them for commission of fraud in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local government) contract, including violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
    - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses set forth above in Paragraph 14D(1)(b) of this certification; and
    - (d) Have not within the three-year period preceding this agreement had one or more public contracts (Federal, State or local) terminated for cause or default.
  - (2) If the Participant is unable to certify to any of the statements set forth in paragraph 14D (1), the Participant shall attach an explanation to this agreement. The Participant must notify CCC immediately if the circumstances supporting certification of any of such statements change or the Participant may incur additional liability or penalties in accordance with applicable law.

- This Contract is a financial assistance agreement, not a procurement contract. As such, it is **not subject to 5 CFR part 1315, Prompt Payment Act** and is governed by the terms set forth herein.
- F The term "Contract" as used in this Appendix means the program documents, including: Conservation Program Contract, Form NRCS-CPA-1202 along with the—
  - Appendix to Form NRCS-CPA-1202, Form NRCS-CPA-1202-CPC (Appendix);
  - Conservation Plan Schedule of Operations, Form NRCS-CPA-1155;
  - Revision of Plan/Schedule of Operations or Modification of a Contract, Form NRCS-CPA-1156; and
  - Transfer Agreement, form NRCS-CPA-152 for the transferee(s).

The Contract shall set forth the terms and conditions for Conservation Program participation and receipt of Conservation Program payments.

- The term "Socially Disadvantaged" means an individual or entity who is a member of a socially disadvantaged group. For an entity, at least 50 percent ownership in the farm business must be held by socially disadvantaged individuals. A socially disadvantaged group is a group whose members have been subject to racial or ethnic prejudice because of their identity as members of a group without regard to their individual qualities. These groups consist of the following:
  - · American Indians or Alaskan Natives
  - Asians
  - Blacks or African Americans
  - · Native Hawaiians or other Pacific Islanders
  - Hispanics.

Note: Gender alone is not a covered group for the purposes of NRCS conservation programs. The term "entities" reflects a broad interpretation to include partnerships, couples, legal entities, etc.

- "Indian Tribe" means any Indian Tribe, band, nation, pueblo, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.) which is recognized as eligible for special programs and services provided by the United States to Indians because of their status as Indians. Note: "Indian tribes recognized as eligible to receive services by the United States Bureau of Indian Affairs" is available through the United States Bureau of Indian Affairs.
- A Limited Resource Farmer or Rancher is a participant:
  - With direct or indirect gross farm sales not more than the current indexed value in each of the previous two years, and
  - Who has a total household income at or below the national poverty level for a family of four, or less than 50 percent of county median household income in each of the previous two years.

A legal entity or joint operation can be a Limited Resource Farmer or Rancher only if all individual members independently qualify. A

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Self-Determination Tool is available to the public and may be completed on-line or printed and completed hardcopy at:

<a href="http://www.lrftool.sc.egov.usda.gov/">http://www.lrftool.sc.egov.usda.gov/</a> Participants who self-certify eligibility as a Limited Resource Farmer or Rancher may be requested to provide records to justify their claim. It is the responsibility of the participant to provide accurate data. False certifications are subject to criminal and civil fraud statutes.

J A Beginning Farmer or Rancher is a participant who:

..... .... ... .. . p .ppo......

- Has not operated a farm or ranch, or who has operated a farm or ranch for not more than 10 consecutive years. This requirement applies to all members of a legal entity, and
- Will materially and substantially participate in the operation of the farm or ranch.

In the case of a contract with an individual, individually or with the immediate family, material and substantial participation requires that the individual provide substantial day-to-day labor and management of the farm or ranch, consistent with the practices in the county or State where the farm is located.

In the case of a contract made with a legal entity, all members must materially and substantially participate in the operation of the farm or ranch. Material and substantial participation requires that the members provide some amount of the management, or labor and management necessary for day-to-day activities, such that if the members did not provide these inputs, operation of the farm or ranch would be seriously impaired.

Participants who self-certify eligibility as a Beginning Farmer or Rancher may be requested to provide records to justify their claim. It is the responsibility of the participant to provide accurate data. False certifications are subject to criminal and civil fraud statutes.

- K The term "Veteran Farmer or Rancher" means a farmer or rancher who:
  - Served in the active United States Army, Navy, Marine Corps, Air Force, and Coast Guard, including the reserve components thereof, and
  - Was discharged or released from the service under conditions other than dishonorable and
  - Has not operated a farm or ranch; or has operated a farm or ranch for not more than 10 consecutive years.

A legal entity or joint operation can be a Veteran Farmer or Rancher only if all individual members independently qualify. Participants who self-certify eligibility as a Veteran Farmer or Rancher may be requested to provide records to justify their claim. It is the responsibility of the Participant to provide accurate data.

The term "Historically Underserved" represents a participant meeting the criteria as set forth in Paragraph 14 (G) (H) (I) or (J) of this Appendix. In the case of a contract made with multiple participants, the Historically Underserved payment rates are applied to the contract only when 100 percent of the participants receiving a payment share are Historically Underserved, unless at least 50 percent of the participant payment shares are designated to Socially Disadvantaged participants, in which case the Historically Underserved payment rates apply to this Contract.

The term "Participant" as used in this Appendix means a person, legal entity, joint operation, or Indian tribe that is a producer who has applied for participation in the program, has been selected as eligible for participation, and who has entered into this Contract as responsible for implementing its terms and conditions. The term "Participant" does not include a landowner who signs this Contract solely to authorize the establishment of structural or vegetative practices as identified herein, and such signature, in and of itself, does not authorize the landowner to receive a payment share under this Contract.

## 15 RIGHTS TO APPEAL AND REQUEST EQUITABLE RELIEF

- A The Participant may appeal an adverse decision under this Contract in accordance with the appeal procedures set forth at 7 CFR part 11, Subpart A, and part 614. Pending the resolution of an appeal, no payments shall be made under this agreement. Before a Participant seeks judicial review, the Participant must exhaust all appeal rights granted within these regulations.
- B The Participant may also request equitable relief as provided at 7 U.S.C. 7996 and 7 CFR part 635 with the requirements of that provision.

## 16 EXAMINATION OF RECORDS

- A The Participant agrees to give the CCC, the Office of the Inspector General, or the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to this Contract. The Participant agrees to retain all records related to this agreement for a period of three (3) years after completion of the terms of this agreement in accordance with the applicable Office of Management and Budget circular.
- B The Participant authorizes CCC to obtain tax data from the Internal Revenue Service (IRS) for Adjusted Gross Income compliance verification purposes and the Participant will take all necessary actions required by the terms and conditions of the IRS disclosure laws so that CCC can obtain such data.

## 17 DRUG-FREE WORKPLACE (2 CFR part 182 and 2 CFR part 421)

By signing this Contract, the Participant certifies that the Participant will comply with the requirements of 2 CFR part 182 and 2 CFR part 421. If it is later determined that the Participant knowingly rendered a false certification, or otherwise violates the requirements of the Drug-Free Workplace Act (Public Law 100-690, Title V, Subtitle D; 41 U.S.C. 701 et seq.; 2 CFR part 182 and 2 CFR part 421,) CCC, in addition to any other remedies available to CCC under this contract or in general to the United States, may take action authorized under the Drug-Free Workplace Act.

# 18 CERTIFICATION REGARDING LOBBYING (7 CFR part 3018) (Applicable if this agreement exceeds \$100,000)

The Participant certifies, to the best of the Participant's knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Participant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any NRCS-CPA-1202-CPC (appendix), Page 14 of 18

- cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions; and
- (3) The Participant shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including sub contracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.
- 19 CERTIFICATION AND ASSURANCES REGARDING COMPLIANCE WITH PROVISIONS APPLICABLE TO FINANCIAL ASSISTANCE (See generally 7 CFR parts 3015, 3016, and 3019, or successor OMB regulations)
  - As a condition of this Contract, the Participant certifies and assures that it is in compliance with and will comply in the course of the agreement with all applicable laws, regulations, Executive Orders and other generally applicable requirements, including those set out in 7 CFR 3015.205(b) applicable to non-profit institutions, which are hereby incorporated into this Contract by reference, and such other regulatory and statutory provisions as are specifically set forth herein.
  - Without limiting the general applicability of Paragraph 19A, the Participant, if it is a non-profit, further agrees to comply with the provisions of 7 CFR part 3019, including the contract provisions required at Appendix A. The following Participants by entering their signature acknowledge receipt of this Form NRCS-CPA-1202-CPC (Appendix) and agree to its terms and conditions thereof. Further, if the undersigned are succeeding to an existing Contract, the undersigned agree and certify that no agreement exists or will be entered into between the undersigned, the previous owner and operator of the property, or mortgage holder that would, maintain or create an interest in the property for any previous Participant on this Contract for that property, or to receive payments under the contracts.
- 20 CERTIFICATION AND ASSURANCES REGARDING COMPLIANCE WITH PROVISIONS APPLICABLE TO REQUIREMENTS FOR FEDERAL FUNDING ACCOUNTABLITY AND TRANSPARENCY ACT IMPLEMENTATION (See 2 CFR Part 25 and 2 CFR Part 170)
  - As a condition of this Contract, the Participant certifies and assures that, if it is an entity, that it is in compliance with and will comply in the course of the agreement with all requirements for entities, with some specific exceptions, to have Dun and Bradstreet Data Universal Numbering System (DUNS) numbers and maintain current registrations in the Central Contractor Registration (CCR) database as set out in Appendix A to 2 CFR Part 25 or any successor Federal contractor registration database.

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	previous Participant on this Contract for that property, or to receive payments under the contracts.

By signing this document you acknowledge and agree that all the information provided is true and accurate on your behalf. Any false certifications made by Participants by signing this Appendix may subject the Participants to criminal and civil fraud statutes. You further acknowledge that you have read and accept all terms and conditions provided.

	Date
	Date

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