

**MINUTES OF THE MARCH 24, 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 March 24, 2015 at 5:00 p.m. in the Conference Room of the Hampton Inn, 2010 South Dumas Avenue, Dumas, Texas 79029. The following persons were present:

Members Present:

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

Staff Present during part or all of the meeting:

Steve Walthour, General Manager;
Kristen Lane, Executive Assistant;
Dale Hallmark, Assistant General Manager/Hydrologist;
Kirk Welch, Assistant General Manager/Outreach;
Pauletta Rhoades, Finance and Administration Coordinator;
Casey Tice, Compliance Coordinator;
Paul Sigle, Agricultural Engineer; and,
Laura West, Production Monitoring Coordinator.

Others present during part or all of the meeting:

Emmett Autrey;
Sabrina Leven;
Ray Teeter;
Ashley Handy;
Scott Clawson;
David Ford;
Scott Buckles;
Brad Ubbers;
Arbie Taylor;
Paul Stavlo;
Mike McLain;
John Duke;
Casey Kimbrell;
Mike Funk;
Darren Stallwitz;
Jay Goodwin;
Tom Moore;
Marty Jones;
Brantley Jones;
Taylor Brown;
David Reinart;
Kyle Daeley; and,
F. Keith Good, Attorney.

President Zimmer declared a quorum present and called the meeting to order at 5:04 p.m.

Harold Grall gave the invocation and President Zimmer led the pledge.

Zac Yoder moved to approve the Consent Agenda, which includes: the review and approval of the Minutes of the February 10, 2015 Board of Directors Meeting; the review and approval of un-audited District expenditures for February 1, 2015 through February 28, 2015, including the General Manager's expense and activity report; and the review and approval of payment of professional services and out-of-pocket expenses to Lemon, Shearer, Phillips & Good, P.C. in the amount of \$22,553.21 for February 1, 2015, through February 28, 2015. Gene Born seconded the motion and it was unanimously approved by the Board.

The Schedule of Well Permits set forth below was presented to the Board for its review.

Well Number	Section	Block	Survey	First Name	Last Name	Company Name
DA8737	34	47.5	H&TC	JESS	WILLARD	M & J WILLARD LTD
DA8754	3	48	H&TC			RITA BLANCA ELECTRIC COOP
DA8790	74	1	ME HAYS	LOREN	BECKER	
DA8791	74	1	ME HAYS	LOREN	BECKER	
DA8792	74	1	CSS	LOREN	BECKER	
DA8793	80	1	ME HAYS	LOREN	BECKER	
DA8799	10	CS	PSL	CHARLES	GRICE	
HA0363	OW Logan	NONE	NONE	LARRY	SCHNIEDERJAN	
HA8745	15	11	CSS	JIM	BARKER	BLF LAND LLC
HA8746	15	15	CSS	JIM	BARKER	BLF LAND LLC
HA8747	15	11	CSS	JIM	BARKER	BLF LAND LLC
HA8748	14	11	CSS	JIM	BARKER	BLF LAND LLC
HA8749	27	11	CSS	JIM	BARKER	BLF LAND LLC
HA8750	27	11	CSS	JIM	BARKER	BLF LAND LLC
HA8751	27	11	CSS	JIM	BARKER	BLF LAND LLC
HA8753	JH Lewis	NONE	NONE	WANG	CHANGJUN	GLORY PROPERTY (USA) INVESTMENT LLC
HA8755	26	11	CSS	JIM	BARKER	BLF LAND LLC
HA8756	26	11	CSS	JIM	BARKER	BLF LAND LLC
HA8759	125	48	H&TC	ROGER	SYBESMA	SKYWARD DAIRY
HA8761	15	11	CSS	JIM	BARKER	BLF LAND LLC
HA8763	124	48	H&TC			HARTLEY FARMS LLC
HA8779	25	16	CSS	DOUGLAS	LATHEM	
HA8780	21	16	CSS	DOUGLAS	LATHEM	
HA8795	169	44	H&TC	BOBBY	DANIEL	BOBBY DANIEL FARMS INC
HA8797	54	48	H&TC	PHILIP & TWILA	UNRUH	
HN8766	273	2	GH&H	PAT	PATTERSON	TRAY CATTLE CO
LI8735	1171	43	H&TC	JOHN	DUKE	

LI8736	1171	43	H&TC	JOHN	DUKE	
LI8738	151	10	SPRR	JOSE	NAVARRETE	
MO8775	9	M2	NONE	CHANDLER	PRESTON	
OC8765	52	4T	T&NO	STEVEN	GREEVER	
OC8794	83	13	T&NO	J W	DEWITT JR	
SH8757	6	1	PSL	MARK	MILLER	
SH8762	23	3B	GH&H	THOMAS	FERGUSON	
SH8800	44	3T	T&NO	JUSTIN, STEPHANIE & K	CROWNOVER	NEED IT MORE LP

Mark Howard moved to remove Well Permit SH-7285 and Well Permit SH-7457 from the Schedule of Well Permits to be considered by the Board. Danny Krienke seconded the motion and the motion passed by the unanimous vote of the Board.

Zac Yoder moved to approve Well Permit SH-7285 and Well Permit SH-7457 because the Wells are properly equipped and otherwise comply with District Rules. Harold Grall seconded the motion and the motion passed by the majority vote of the Board with Bob Zimmer abstaining from the vote.

Harold Grall moved to approve the remaining Well Permits on the Schedule presented to the Board because the Wells are properly equipped and otherwise comply with District Rules. Mark Howard seconded the motion and the motion passed by the unanimous vote of the Board.

Justin Crownover arrived to participate in the meeting at 5:12 p.m.

Laura West presented a report to the Board regarding Groundwater Production Reporting for 2014. As of March 16, 2015, the District has received 2,717 2014 Annual Production Reports. The District has processed 2276 reports. The District is further ahead entering the production data this year because of an improved way that District staff is using to process the Production Reports. The goal is to bring the Board a preliminary production total by the April Board Meeting. To date, the District has mailed out 1007 Conservation Reserve letters representing the 2276 Properties.

On February 10, 2015, the Board approved a motion to adopt the ad valorem tax exemptions for a homestead which the County Commissioners Court of each respective County within the boundaries of the District adopted for 2015. Based upon the advice of the District's General Counsel, the General Manager recommended that the Board reconsider the following Residential Homestead Ad Valorem Tax Exemptions throughout the District for 2015:

Ten percent (5%) of the appraised value of the homestead, or Five Thousand Dollars (\$5,000.00), whichever is higher;

Over sixty-five (65) years of age: Fifty Thousand Dollars (\$50,000.00);

Disabled Person (as defined in the Texas Tax Code): Fifty Thousand Dollars (\$50,000.00); and,

Disabled Veterans: The maximum percentages provided under the relevant Sections of the Texas Tax Code.

Gene Born moved to retract the Ad Valorem Homestead Exemptions granted by the Board on February 10, 2015 and to approve the following Homestead Ad Valorem Tax Exemptions for calendar year 2015:

Ten percent (10%) of the appraised value of the homestead, or Ten Thousand Dollars (\$10,000.00), whichever is higher;

Over sixty-five (65) years of age: One Hundred Thousand Dollars (\$100,000.00);

Disabled Person (as defined in the Texas Tax Code): One Hundred Thousand Dollars (\$100,000.00); and,

Disabled Veterans: The maximum percentages provided under the relevant Sections of the Texas Tax Code.

Harold Grall seconded the motion and it was unanimously approved by the Board.

The General Manager presented a report to the Board regarding GMA-1 and Panhandle Regional Water Planning. The General Manager stated that Groundwater Management Area 1 met Wednesday, February 11, 2015 at 10:00 a.m. in the offices of the Panhandle Regional Planning Commission. Keith Good, the District's General Counsel, presented an overview of the considerations required for joint planning regarding the impact on the interest and rights in private property, including ownership and the rights of management area landowners and their lessees and assigns in groundwater as recognized under Texas Water Code §36.002. At the end of the presentation, other GMA-1 representatives from other groundwater conservation districts commented that they may wish to have additional presentations on this issue to the joint planning committee from their respective legal counsel.

Intera provided a brief presentation to GMA-1 regarding their progress relating to the High Plains Aquifer Model that the Joint Planning Committee will use to evaluate groundwater availability to consider desired future conditions. The model provides a more interactive hydrologic analysis of all of the aquifers in the High Plains and specifically the Rita Blanca aquifer, Ogallala aquifer, and Dockum aquifer within the North Plains GCD. Some of the significant changes in the data and the analyses provided in the model are as follows:

- Each model cell has been reduced from approximately one square mile to quarter square mile increments;
- Initially the model set the maximum water level decline to 30 feet above the base of the Ogallala aquifer;
- The model has the ability to more easily apply regional pumping scenarios to analyses aquifer reactions;
- The base of the Ogallala aquifer is reset to a higher elevation in Moore County and parts of Hartley, Dallam and Sherman Counties where the aquifer directly overlies the producing strata in the Dockum aquifer; and
- The base of the Ogallala aquifer was raised where the aquifer rests on top of the Rita Blanca aquifer in northwest Dallam County.

The General Manager met with Intera, and requested the initial model run as follows:

- Using the measured production in 2011 as a starting point show 40% of the aquifer in storage and saturated thickness remaining in 50 years in Dallam, Hartley, Moore and Sherman Counties for the Ogallala aquifer using the 30' above the base of the aquifer as the maximum decline limit;
- Using the measured production in 2011 as a starting point show 50% of the aquifer in storage and saturated thickness remaining in 50 years in Hansford, Hutchinson, Ochiltree, and Lipscomb Counties for the Ogallala aquifer using the 30' above the base of the aquifer as the maximum decline limit;
- For the Rita Blanca aquifer, 50% drawdown in 50 years; and
- For the Dockum aquifer, 50% drawdown in 50 years.

In the previous model, the Dockum was set to achieve an average 30 feet drawdown over the 50-year period. No model was available to separate the Rita Blanca from the Ogallala aquifer during the previous series of joint planning. Once this initial model run is completed, the District and the other members of the joint planning committee will be able to evaluate and adjust the parameters in the model for a second run.

The Panhandle Regional Water Planning Group met Tuesday, February 17, 2015 at 1:30 p.m. in the offices of the Panhandle Regional Planning Commission.

Danny Krienke presented the following draft report for the Panhandle Regional Water Planning Group:

Regional Water Planning Guidelines specified in the Texas Administrative Code call for the regional water planning groups to make recommendations regarding ecologically unique river and stream segments; unique sites for reservoir construction; and regulatory, administrative, or legislative actions that will facilitate the orderly development, management, and conservation of water resources.

Recommendations of the PWPG and the reasons for them are presented in this section in the following order:

Summary of recommendations;

Recommendations for ecologically unique river and stream segments;

Recommendations for unique sites for reservoir construction; and

Policy and legislative recommendations.

Summary of Recommendations

Recommendations for Ecologically Unique River and Stream Segments

The PWPG does not recommend the designation of any streams within the PWPA as ecologically unique.

Recommendations for Unique Sites for Reservoir Construction

There are no new proposed reservoirs in the PWPA. The PWPG does not recommend the designation of any unique sites for reservoir construction.

Unique Stream Segments

Under regional planning guidelines, each planning region may recommend specific river or stream segments to be considered by the Legislature for designation as ecologically unique. The Legislative designation of a river or stream segment would only mean that the State could not finance the construction of a reservoir that would impact the segment. The intent is to provide a means of protecting the segments from activities that may threaten their environmental integrity.

TPWD provided guidance for such designations and the following criteria shall be used when recommending a unique river or stream segment:

- *Biological Function:* Segments which display significant overall habitat value including both quantity and quality considering the degree of biodiversity, age, and uniqueness observed and including terrestrial, wetland, aquatic, or estuarine habitats;
- *Hydrologic Function:* Segments which are fringed by habitats that perform valuable hydrologic functions relating to water quality, flood attenuation, flow stabilization, or groundwater recharge and discharge;
- *Riparian Conservation Areas:* Segments which are fringed by significant areas in public ownership including state and federal refuges, wildlife management areas, preserves, parks, mitigation areas, or other areas held by governmental organizations for conservation purposes under a governmentally approved conservation plan;
- *High Water Quality/Exceptional Aquatic Life/High Aesthetic Value:* Segments and spring resources that are significant due to unique or critical habitats and exceptional aquatic life uses dependent on or associated with high water quality; or
- *Threatened or Endangered Species/Unique Communities:* Sites along segments where water development projects would have significant detrimental effects on state or federally listed threatened and endangered species, and sites along segments that are significant due to the presence of unique, exemplary, or unusually extensive natural communities.

TPWD has compiled a listing of potential ecologically significant stream segments located in PWPA. These stream segments were selected by TPWD because of the above-listed criteria.

As part of the planning process, fourteen segments were evaluated by the PWPG for potential recommendation as unique stream segments. After careful consideration of the unknown consequences of recommendation, the PWPG

makes no recommendations for river and stream segments of unique ecological value. The following stream segments were presented to the planning group for consideration by TPWD:

- Canadian River (TCEQ Segment 0101)
 - From the Oklahoma State line in Hemphill County upstream to Sanford Dam in Hutchinson County
- Canadian River (TCEQ Segment 0103)
 - From a point immediately upstream of the confluence of Camp Creek in Potter County to the New Mexico State line in Oldham County
- Coldwater Creek
 - From the Dallam/Sherman County line upstream to the Texas/Oklahoma State line
- Graham Creek
 - From the confluence with Sweetwater Creek east of Mobeetie in Wheeler County upstream to SH 152 in northeast Gray County
- Lelia Lake Creek
 - From the confluence with the Salt Fork of the Red River in Donley County upstream to US 287 in Donley County
- McClellan Creek
 - From the confluence with the North Fork of the Red River in east Gray County upstream to its headwaters in the southwestern part of Gray County
- Prairie Dog Town Fork Red River (TCEQ Segment 0229)
 - From the Armstrong/Briscoe County line upstream to Lake Tanglewood in Randall County
- Prairie Dog Town Fork Red River (TCEQ Segment 0207)
 - From the Childress/Hardeman County line upstream to the Hall/Briscoe County line
- Rita Blanca Creek
 - From the headwaters of Lake Rita Blanca in Hartley County upstream to US 87 in Dallam County
- Saddlers Creek
 - From the confluence with the Salt Fork of the Red River eight miles northwest of Clarendon in Donley County upstream to its headwaters located about two miles southeast of Evans in north Donley County
- Sweetwater Creek
 - From the Oklahoma State line in Wheeler County upstream to its headwaters in northwest Wheeler County
- Tierra Blanca Creek
 - From the confluence with Prairie Dog Town Fork of the Red River upstream to Buffalo Lake in Randall County

West Fork of Rita Blanca Creek

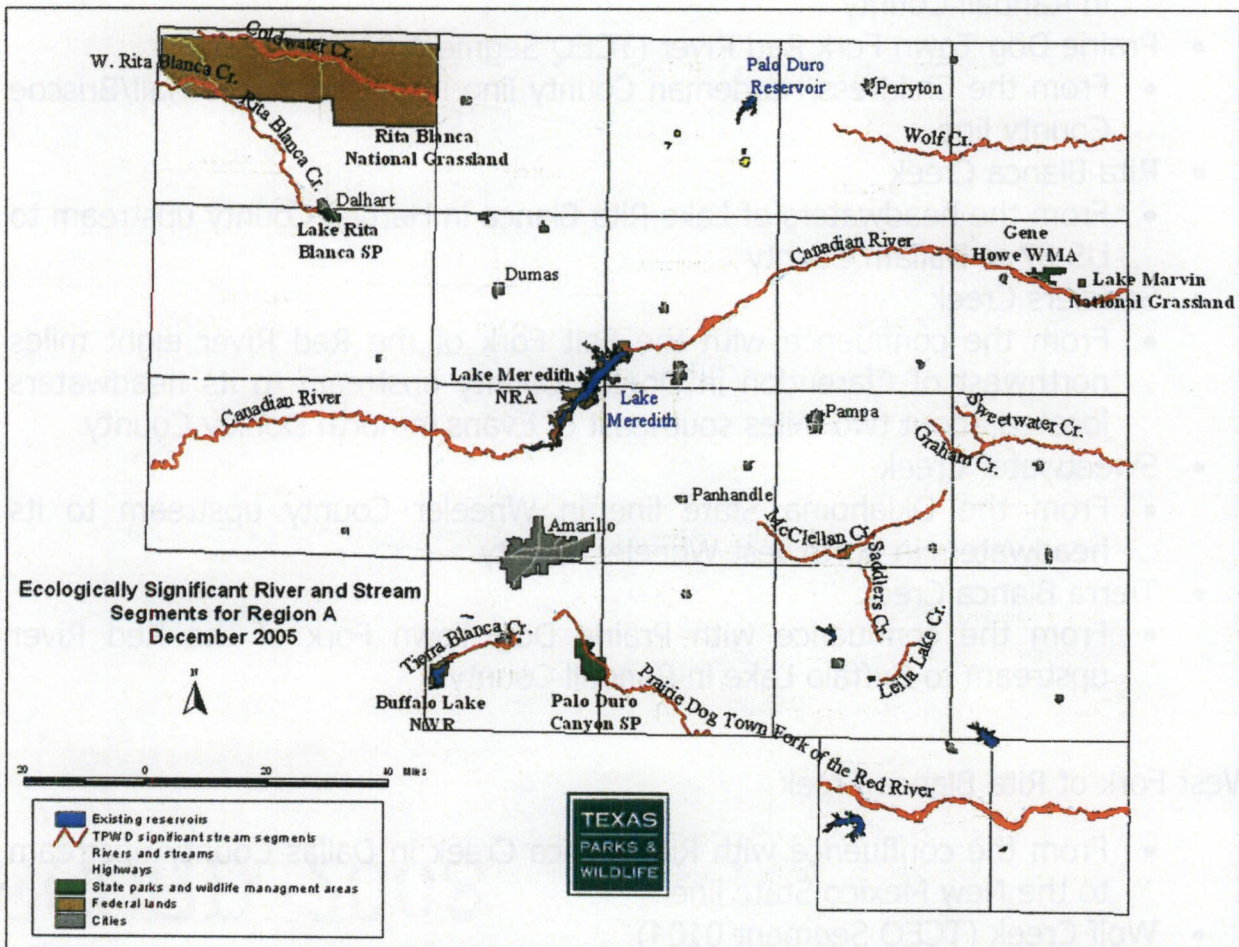
- From the confluence with Rita Blanca Creek in Dallas County upstream to the New Mexico State line
- Wolf Creek (TCEQ Segment 0104)
- From the Oklahoma State line in Lipscomb County to a point 1.2 miles upstream of FM 3045 in Ochiltree County

Sites of Unique Value for the Construction of Reservoirs

Planning groups may recommend sites of unique value for construction of reservoirs by including descriptions of the sites, reasons for the unique designation, and expected beneficiaries of the water supply to be developed at the site. The following criteria shall be used to determine if a site is unique for reservoir construction:

- (1) site-specific reservoir development is recommended as a specific water management strategy or in an alternative long-term scenario in an adopted plan; or
- (2) the location, hydrologic, geologic, topographic, water availability, water quality, environmental, cultural, and current development characteristics, or other pertinent factors make the site uniquely suited for:
- (3) reservoir development to provide water supply for the current planning period; or
- (4) where it might reasonably be needed to meet needs beyond the 50-year planning period.

Local river and stream segments were evaluated by the PWPG for potential recommendation as unique reservoir sites. No sites were recommended by the planning group as sites of unique value for the construction of reservoirs.



Ecologically Significant River and Stream Segments in Region A

Legislative Recommendations

As the PWPG has gone through the preparation of the regional water supply plan, several items have been identified which the PWPG recommends be considered before the next planning cycle. Title 31 of the Texas Administrative Code (TAC) §357.43 states that the regional water plans will include regulatory, administrative, legislative or "Any other recommendations that the regional water planning group believes are needed and desirable to achieve the stated goals of the state and regional water planning, including to facilitate the orderly development, management, and conservation of water resources and prepare for and respond to drought conditions." The rules also encourage the PWPG to consider recommendations that would facilitate more voluntary transfers in the PWPA.

Over previous planning cycles, the PWPG has developed a detailed list of regulatory and legislative recommendations. Some of these recommendations have been implemented. Others are currently being considered. In light of the continual changes in water management and development, the PWPG identified recommendations for the 2016 Panhandle Water Plan. Following is a list of the recommendations:

Regulatory Issues

- a) *Continue to evaluate the rules governing reuse to encourage the use of wastewater effluent.* The current regulatory environment provides a number of barriers to encourage the reuse of wastewater effluent. TCEQ should re-evaluate the current rules and change the rules to provide and quantify incentives for municipalities, industries and agriculture to reuse wastewater effluent.
- b) *Assessments and evaluation of the Ogallala aquifer in the PWPA need to consider the minimal recharge rates comparable to other major aquifers in the State of Texas.* The Ogallala aquifer is a mined and finite resource that has minimal recharge as identified in recharge study conducted for the PWPA (BEG, 2009). [SK1]

Legislative Issues

- a) *Consider requiring development of the State Water Plan every 10 years instead of every five years, with sponsorship of special studies between planning cycles.* This would allow full updates of the State Water Plan following updated population census. It also may better align the regional water plans with the schedule specified for the GMA process, which is critical to defining the amount of groundwater supplies that are available for regional planning purposes.
- b) *Continue state-sponsored water availability modeling for minor aquifers.* This information is particularly important in the evaluation of the minor aquifers in the Panhandle. There was extremely limited information available regarding supplies which are anticipated to be available from the minor aquifers in the region. [SK2]
- c) *Expand funding for implementation of water supply strategies.* Many water supply strategies, particularly those associated with brush control, water conservation and irrigated agriculture, have limited means of implementation other than public outreach and education. The PWPG

recommends that the state and federal governments sponsor programs to implement these strategies. [SK3]

- d) *Manage groundwater resources through local groundwater conservation districts.* There remain certain areas of the PWPA that are not within the boundaries of a groundwater district. In order to create an equitable situation with regard to groundwater management, these areas should be included in a local district contained within the regional planning area.
- e) *Create a water conservation reserve program for irrigated acreage management.* A water conservation reserve program should be created to make it economically feasible for farmers to convert irrigated acreage to dryland.
- f) *Encourage the federal government to continue to support Conservation Reserve Program (CRP) participation.* As properties currently in CRP are coming out, property owners may convert and reestablish the properties to irrigated agriculture and utilizing higher volumes of groundwater. From 2008 to 2010, there are an estimated 1.2 million acres in the High Plains that will no longer be enrolled in the CRP.
- g) *Develop or improve grant and loan programs for utilities to replace/repair aging infrastructure.* Development of a program similar to the TWDB Wastewater Revolving Loan Program to address aging water infrastructure and metering programs. [SK4]
- h) *Provide funding for continuation of the High Plains-PET.* This support should be administered through the network team annually, through groundwater conservation districts within the network area. The State should provide funding to allow continuation and/or cost sharing of operating costs of the High Plains-PET network and its integration into a statewide network.
- i) *Evaluate policy barriers to use playa lakes for conservation purposes.* The State should evaluate the current legislative barriers to using playa lakes. The barriers should be removed or reduced to allow using the playas for aquifer recharge or other beneficial water supply purposes.
- j) *Maintain the functionality and viability of the Water Conservation Advisory Council.* The group currently operates on a volunteer basis with no state or federal funding.
- k) *Adopt recognized definitions for gallons per capita per day (GPCD) proposed by the Water Conservation Advisory Council.* Recognized standard definitions for GPCD will allow better communication across the state on water conservation.
- l) *Provide funding for administration of the regional water planning process.* Current funding only allows reimbursement of direct expenses for administrative activities. The public process requires considerable coordination and staff assistance to comply. As a result, several planning areas are struggling to identify and maintain a political subdivision administrator.

Recommendations for Future State Water Plans

- a) *TWDB should establish and continue to promote clear guidelines for eligibility for funding and needs assessment for very small cities and unincorporated areas.* Statements to the effect that those "entities which fall under the planning limits retain eligibility for state funding assistance for water-related projects without having specific individual needs identified in the appropriate Regional Water Plan" would greatly enhance the ability of these small systems to provide their users with a safe and adequate supply of water.
- b) *TWDB should continue to improve the monitoring and quantification of small communities, county-other, manufacturing, and livestock operator water use to provide better information for planning purposes.*
- c) *TCEQ should be made at least an ex-officio member of the RWPGs and be required to attend RWPG meetings to provide input on known water quality/quantity problems.*
- d) *Allow Waivers of Plan Amendments for Entities with Small Strategies.* PWPG recommends that the TWDB allow waivers for consistency issues for plan amendments that involve projects resulting in small amounts of additional supply. [SK5]
- e) *Clarification of relationship between drought contingency planning and regional water supply planning.* It is not clear what role drought contingency planning has in the regional planning process.
- f) *TWDB should allow groundwater supplies in the regional water plans to exceed the Modeled Available Groundwater (MAG) if the RWPG obtains written permission from a groundwater conservation district to allow a strategy that uses more groundwater than the MAG.*
 - a. This approach assumes that the strategy is consistent with the management plan of the GCD, but allows for minor shortages to be covered without excessive administrative actions.
 - b. Allows a GCD to apply local knowledge to account for variations in permitting approaches and usage patterns, while honoring the Desired Future Conditions (DFCs) of the aquifer.
 - c. Approach could also be used in areas with no GCDs if the RWPG demonstrates compliance with the DFCs.
- g) *Include an economic impact analysis for the result of implementing water management strategies.* The current planning rules provide for an economic analysis of not meeting water demands. However, there is no provision for economic analysis of implementing a water management strategy. The analysis should include impacts on water suppliers, users and major economic sectors. [SK6]
- h) *Salinity and brush control projects for the Canadian River and/or Red River Basin.* Although there have been salinity and brush control projects recently implemented in the Canadian and Red River Basins, future State Water Plans should continue to plan for future salinity and brush control

projects and their funding to continue to improve water quality and quantity in the basins.

- i) *Include projects for future groundwater quality in the region.* Salinity, nitrates, arsenic, and other contaminants have become concerns for municipal water supplies in the region. [SK7]
- j) *Interbasin/Intrabasin water transfers.* Future state water plans should provide for a detailed assessment of the potential for transporting water into or out of the PWPA. [SK 8]
- k) *Brush control.* TWDB guidance is needed on how to account for brush control projects in the context of a source of "new surface water" for municipal, industrial, agricultural, and other uses. The Canadian River watershed has more than 50% cover of mixed brush species that are amenable to control for rangeland improvement and water enhancement purposes.
- l) *Analysis of means to improve groundwater recharge.*
- m) *Updated analysis of surface water supply inflows and availability.* The regional surface water supply has steadily decreased over a ten year period to the extent that regional lakes are at all-time lows. [SK9] It is recommended that TCEQ extend the current Water Availability Models for the Canadian and Red River Basins to capture the current drought in the PWPA.
- n) *Prioritization of projects in the State and Regional Water Plans should only consider projects with capital costs.* Projects without capital costs would likely seek funding from the State.

Paul Sigle presented the following report regarding the District's EPIC program:

EPIC

Paul is coordinating the annual report for EPIC. As of March 16, 2015, he has one individual report outstanding and is expecting the report by the end of the week. After receiving the final report, he will coordinate with the agent to create one report for the whole project. Paul expects to have the report completed by the next Board Meeting.

The General Manager and Danny Krienke presented the following reports on the District's agriculture Water Conservation Demonstration Programs:

Conservation Innovation Grant

District staff is working on the final report for the grant and is expecting to complete the report by the end of March. The report will consist of the five years of the 200-12 and Texas Tech demonstration project. Texas Tech final report for their portion of the project was presented to the Board.

The General Manager met with the District's Legislative consultants and preliminarily developed a potential program for engaging agriculture irrigation producers to adopt innovative water conservation approaches to mitigate

regional irrigation water supply shortages. Additionally, the general manager met with the NRCS State Conservationist to determine the reason why the District and other cooperators did not get past the first phase of the 2014 RCPP application process. The state conservationist suggests that the District might file a conservation project at both the regional and state levels so that the projects can be considered in both categories. The project proposal is as follows:

Proposal

Crop irrigation and other agriculture within the District is an important economic driver for the Texas Panhandle. However, groundwater supplies from the Ogallala and other aquifers in the Texas Panhandle are diminishing. The North Plains Groundwater Conservation District has a history of performing and collaborating on irrigated agriculture conservation demonstration programs. The general manager proposes to bring the demonstrations to adoption by engaging producers to use and evaluate the water saving tools in their operations.

The USDA and the Texas Water Development Board have a long history of providing cost-share funding for agriculture conservation equipment and agricultural conservation programs such as demonstrations to assist producers to be more efficient with their groundwater use as well as conserve groundwater. One of the goals of these programs is to achieve widespread adoption of the technologies and practices to achieve universal water conservation. Simply providing producers the conservation tools and demonstrating new water saving technologies and methods are helpful. The early adopters will begin experimenting with the water conservation tools almost immediately. However, most of the community that the conservation education targets are aware but generally apply a wait and see approach until financial or physical conditions become significant enough to force change. Moving from producer awareness to producer adoption requires sufficiently engaging a producer to the point he or she will evaluate the use of the tools in their operations.

Irrigation Agriculture Water Supply Shortages

According to the 2012 State Water Plan, four of the eight counties within the District are anticipated to experience substantial annual irrigation water supply shortages starting at 452,144 acre-feet deficit in 2010 to 381,180 acre-feet deficit by 2060. In 2013, 1,183,050 crop acres were irrigated with 1.8 million acre-feet of groundwater from the Ogallala aquifer, Rita Blanca aquifer and Dockum aquifer in the District. In 2013, the Texas Legislature authorized transferring \$2 billion from the state's "Rainy Day Fund" to create a new loan program, later approved by Texas voters, to fund projects in the State Water Plan. This original investment in the State Water Implementation Fund for Texas (SWIFT) is designed to fund close to \$27 billion in water supply projects over the next 50 years to ensure that Texas communities have adequate supplies of water during drought. Though a portion of the funding is designated for rural communities including agriculture, the District has found that the funds available through SWIFT do not readily apply to agriculture water conservation described in the Region A Water Plan as the primary mitigation tool to address irrigation shortages.

Project Method

The District proposed a four-step approach to assist in the adoption of the water saving practices as follows:

- **Agriculture Producer Training:** Incentivize agriculture irrigation producers to receive training on the various water conservation methods and how to use the technologies and methods through demonstration field visits, hands-on class room experiences, and utilizing electronic media;
- **Water Conservation Strategies Technologies and Support:** Implement water conservation strategies by providing the technologies and methods at a significantly or reduced cost for trial-basis including expert technical support for the individual producer trials;
- **Producer Water Conservation Strategies Engagement:** Require the producer to provide information that shows the producer is using the water conservation tools; and
- **Producer Recognition:** Recognize or reward those producers that finish the program and implement the tools and methods To fully engage the agricultural producers that irrigate over a million acres in the District, the District is developing an irrigation water conservation education program that makes available the above mentioned and other water saving technologies and methods for those trained producers to use on a trial basis at no cost to the producer, to work with those producers to ensure that the technologies are used to achieve water conservation and to reward those producers that successfully complete the program and implement the water saving technologies and methods through regional and statewide recognition by creating a "Master Irrigator" brand that allows a producer to market based on improved water quality, reduced water consumption, and recognizing the producer as a good steward of the land.

Project objectives

The program will train producers and then finance those producers with equipment and consultation to fully evaluate through engagement the technologies available based on selected agricultural irrigation strategies that promote water conservation savings approved in the 2012 State Water Plan, strategies that address NRCS priorities, and strategies that address area stakeholder priorities such as:

- Understanding the risks and rewards of changing crop varieties.
- Adopting the application of flow meters allowing the producer to better monitor irrigation water quantity supplied to the crop as well as assisted in monitoring well and system health.
- Adoption of later planting dates can reduce the number of irrigation events.

- Adoption of eliminating pre-irrigation during normal conditions allows farmers to save water up front taking advantage of rainfall and existing soil conditions.
- Show the differences in irrigation equipment efficiency improvements by employing Low Elevation Spray Application (LESA); Low Energy Precision Application (LEPA); and or Subsurface Drip Irrigation (SDI).
- Adopting irrigation scheduling tools such as soil moisture probes, remote telemetry, satellite imagery, variable rate irrigation, and predictive model tools assist the farmer in determining when and when not to irrigate.
- Adopting soil health measures that retain and store more water by implementing crop residue management and conservation tillage practices such as replacing conventional till with strip till or no till practices as well as better managing herbicide applications.
- Adopting soil health and plant health measures that can improve soils through herbicide and pesticide management when reducing irrigation.
- Adopting the use of variable frequency drives (VFD) assists the producer to vary the irrigation application rate to deliver the right quantity of water to the plant as well as save energy and reduces a farmer's carbon footprint.

Adoption of the above listed agricultural conservation strategies and practices are transferable to other irrigation areas to address water demand. Successful implementation of this program means mitigating agriculture water demand and shortages over the Ogallala as well as other aquifers in Regional Water Planning Area A.

Project Duration

The program will engage agriculture irrigation producers over a three-year period from September 30, 2015 to September 29, 2018.

Project Collaborators

North Plains Groundwater Conservation District; Crop Production Services; Texas Water Development Board and other cooperators/sponsors that choose to participate.

Project geographic area/location

The project area covers approximately 7335 square miles within the eight county area of the North Plains Groundwater Conservation District.

Project deliverables/products

The District will track the participants in the program, their water conservation strategies, adoption rates and evaluate what water conservation strategies that are most applicable to the region. Some of the performance goals include:

- Reduced irrigation supply shortage in Region A Water Planning Area;
- Decrease water consumption per bushel or other agriculture unit of production; and
- Evaluate the on-farm and regional effect of water conservation strategies recommended in the 2012 State Water Plan.

Funding

Funding for this program would be requested by the North Plains Groundwater Conservation District to engage agricultural producers in adopting strategic irrigation and crop management technologies and practices which will result not only in water savings across the region but also in best practices that are applicable elsewhere. The District would request at least \$1.5 million for funding for the three-year period through the NRCS and to address producer training, individual consultation, and technology costs of the program as described under program methods and project objectives. The District will use NRCS and TWDB funding to leverage additional funds and support from governmental and private sources to increase agriculture irrigation producer training, conservation strategies implementation, producer engagement, and branding. The District anticipates the NRCS and TWDB project funds to be used as shown in the funding request budget below.

Description	Annual Budget	Three Year Budget
Agriculture Irrigation Producer Training	\$20,000	\$60,000
Water Conservation Strategies technologies and support.	\$450,000	\$1,350,000
Producer Water Conservation Strategies Engagement	\$20,000	\$60,000
Producer Recognition (Branding)	\$10,000	\$30,000
Total Budget Request	\$500,000	\$1,500,000

The General Manager met with the developer of the Master Marketer program presented by Texas A&M Extension. The Board may wish to retain Steve Amosson to assist in the development of this program and in the economic analysis of the District’s other demonstrations. The General Manager requested that the Board approve continued development of the program concept and to seek potential partners.

Danny Krienke presented the Agricultural Committee Report to the Board regarding Agricultural Water Conservation.

Mr. Krienke presented correspondence dated March 19, 2015 from Darren Richardson from the Lubbock NRCS office regarding a proposed Water Conservation EQIP Program.

Groundwater District Managers:

In the past, Texas has received Environmental Quality Incentive Program (EQIP) funds targeted for the Ogallala aquifer. We have utilized these funds to assist producers in increasing irrigation efficiencies and to update irrigation delivery systems. The attached bulletin informs the State that for FY15, the EQIP Ogallala funds must be refocused to specific areas where **"local organizations or entities are taking steps to conserve the quality and quantity of water..."** and instructs the State to submit a proposal for funding which includes **"Identification of any existing or potential partner or partners collaborating to achieve the objectives of the initiative..."**. In Texas, GCDs are the obvious choice in both situations.

This past year, we had several meetings discussing the possibility of program dollars strictly for irrigation system upgrades being reduced and that there would need to be a change to our approach to keep assistance dollars available to local producers. A coalition of GCDs worked to submit a Regional Conservation Partnership Program (RCPP) proposal for funding in which local GCDs would partner with NRCS to achieve the very goals stated in the Ogallala guidance for 2015. Unfortunately the proposal was not selected last year, but I still believe it has a lot of merit.

In order for Texas to be considered for Ogallala **EQIP** funding this year, I would like to ask if the GCDs would be willing to support an Ogallala proposal very similar to the one submitted for RCPP last year that is summarized in scenario 2 below. I do not need specific commitment at this time, only to know if GCDs would be willing to partner with NRCS and support the rough concepts below:

TX Ogallala EQIP Initiative rough outline:

Financial Assistance would be requested for two basic scenarios:

1. **Applications for irrigation system upgrades (pivot, drip, etc.) where the irrigated acres are being reduced by a minimum of 20%.**
2. **Applications for the adoption of a water conserving cropping system (described below)**
 - NRCS would work with an applicant and local Ground Water Conservation District to establish a historical or baseline irrigation pumping amount for their farm or irrigation system. These historical or baseline irrigation pumping amounts will vary across the Texas Ogallala Aquifer area depending on the available ground water, possibly from a low of 10-12 inches in the southern Panhandle to a high of 30-36 inches in the northern Panhandle.
 - The applicant would select to reduce their historical or baseline irrigation pumping amount by a certain amount or percent. (Verification/documentation to be carried out in conjunction with GCD personnel)
 - Based on the applicant's irrigation water management plan to reduce their historical irrigation pumping amounts, NRCS would make incentive payments for the adoption of a less water intensive cropping system. The applicant could reduce their historical pumping by numerous methods and/or technologies:
 - Overall reduction in irrigated acres, convert some acres to dryland

- *Reduce pumping to a level to match a planned lower crop yield*
- *Conservation , strip tillage , no—till or some other type of residue management*
- *Irrigation strategies to reduce overall pumping by utilizing soil moisture probes, irrigation system monitoring, etc.*
- *Change to a less water intensive crop rotation such as incorporating grain sorghum or wheat*

(Note that the guidance/proposal for the additional Ogallala EQIP funds has no bearing on the irrigation assistance that is still being offered through the "Local" EQIP funds allocated to the local offices.)

This is just a rough proposal at this time, but I wanted to gauge GCDs' interest and keep you informed that we have not abandoned the process we started with the meetings from last year.

I look forward to any reply or input from your District.

Sincerely,

*Darren
Darren Richardson
Natural Resources Conservation Service
ASTC (FO) Lubbock Zone-1
4609 W. Loop 289
Lubbock Texas 79414
(806) 791 0581 office
(806) 407-7621 cell*

The following is the attachment to Darren Richardson's correspondence, dated March 19, 2015:

USDA United States Department of Agriculture
Natural Resources Conservation Service

National Bulletins
Title 300 - Land Treatment Programs

NB 300-15-20 LTP — Ogallala Aquifer Initiative Guidance

National Bulletin: 300-15-20

Date: March 3, 2015

Subject: LTP — Ogallala Aquifer Initiative Guidance

Action Required By: March 31, 2015

Purpose. To provide State Conservationists (STCs) of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming with guidance for establishing focus areas within the Ogallala Aquifer Initiative (OAI) funded through the Environmental Quality Incentives Program (EQIP), during fiscal year (FY) 2015.

Expiration Date. September 30, 2015

Background. The OAI has been an effective conservation tool for supporting good water management across the entire Ogallala Aquifer. However, the broadly targeted approach used through OAI is unlikely to lead to significant reportable outcomes in the near term. The OAI board of directors has indicated that there are locations where more narrowly targeted efforts could demonstrate effective conservation measures for the aquifer. The best opportunities appear to be in locations where local organizations or entities are taking steps to conserve the quality and quantity of water in defined areas of the aquifer. The OAI may be more effective as a means to support these entities by targeting technical and financial assistance only in locations with existing water conservation plans or strategies, rather than providing broad coverage as it has in the past.

Explanation. For FY 2015, the OAI will refocus its efforts to target geographic areas (focus areas) within the Ogallala Aquifer to support local plans and strategies to address groundwater management. State Conservationists are invited to submit proposals for OAI focus areas that meet this need.

Schedule and Submission

Proposals are due March 31, 2015. Please send proposals by email to Montie Hawks, OAI coordinator, at montie.hawks@wdc.usda.gov. Please submit separate proposals for each focus area.

Focus areas and funding for OAI will be decided by April 10, 2015.

Proposal Contents

Proposed focus areas should be located in the previously used target area for OAI as described in attachment 1. Any proposal for a focus area that incorporates lands outside of this target area must include information describing the aquifer-related water quantity or quality concerns that occur in those lands. If the focus area crosses a State border, STCs should designate a lead State for the focus area. Each proposal should include a brief narrative describing, at a minimum, the following:

1. A description of how working in this focus area continues the momentum of the existing OAT
2. Each individual focus area to be considered (map)
3. Conservation objectives (outcomes) to be achieved, including time frame (limited to Farm Bill)
4. Amount of OAT EQIP funds needed to reach goals
5. Identification of any existing or potential partner or partners collaborating to achieve the objectives of the initiative (should be an organization like a natural resource district(NRD), soil and water conservation district(SWCD), groundwater management district(GMD), local enhanced management area(LEMA), municipality, etc.); identify external partners that have agreed to participate in the initiative and describe their proposed involvement
6. Identify core and supporting practices needed to address resource concerns

Partner Engagement

STCs should share the opportunity to select OAI focus areas with partners to solicit input and leverage funding and resources.

Contact. If you have any questions regarding OAI, contact Montie Hawks, coordinator, at (202) 7207245 or montie.hawks@wdc.usda.gov.

/s/

ASTOR BOOZER
Regional Conservationist, West
Acting Regional Conservationist, Central

Attachment

After extensive discussion of the foregoing matters by the General Manager and the Board, President Zimmer stated that there are three potential projects which should be identified under Director Krienke's presentation to be considered by the Board. The first project to be considered is in regard to North Plains GCD assisting with applications for the adoption of a water conservation cropping system. The second project to be considered is whether or not the District will assist groundwater producers in the District with applications to NRCS with variable frequency drive pre-submittals and post-submittals. The third project to be considered is to determine whether or not the District desires to fund the "master irrigator" program.

Justin Crownover moved that the District assist with producer applications for the Ogallala EQIP funding by NRCS for calendar year 2015. Danny Krienke seconded the motion and it was unanimously approved by the Board.

Harold Grall moved for the District to assist producers to participate in the NRCS Variable Frequency Drive Program. Mark Howard seconded the motion and it was unanimously approved by the Board.

Justin Crownover moved for the District to approve continued development of the "master irrigator" concept and to explore funding with potential partners

including the NRCS and the Texas Water Development Board and to retain Steve Amosson to assist in the development of the program. Harold Grall seconded the motion and it was unanimously approved by the Board.

Dale Hallmark presented a report to the Board regarding the District's Meter Reimbursement Program. Mr. Hallmark stated that currently the District has registered 147 properties in the Meter Reimbursement Program which represent approximately 500 meters to be purchased.

The estimated cost share for half of the metering equipment is currently estimated at \$300,000 for the current program applications. The entire two-year budget is \$600,000. The project started taking applications in November of 2014; however, any irrigation well owner that bought and installed a meter on an irrigation well since June 26, 2014, is eligible for reimbursement if the owner agrees to provide information requested in the program.

The District has refunded \$55,572.45 and will likely refund up to an additional \$50,000 in March. The District has 30 days after March 31, 2015 to file a quarterly report with the TWDB. It is anticipated that the District will receive a reimbursement for those expenses within 90 days after filing the report.

During March the District also re-applied to the TWDB for additional funds of approximately \$1.1 million to keep the program going for the next 4 years. The District should be advised in late June if the District is awarded additional funds for this program and precisely how much the funds will be.

The Board will have an opportunity to review that contract for additional funds at a later Board meeting.

Staff will review the program and do another round of public outreach targeting individuals for reimbursement who are eligible.

Before the General Manager can reimburse funds above this amount the Board will need to amend the Budget. This reimbursement is a pass-through and should be a financial wash for the District. The General Manager will bring a proposed Budget amendment to the Board at a later date when appropriate.

Leon New presented the results for the final year of the 200-12 Demonstration Program to the Board. Mr. New presented the written report on the 200-12 Reduced Irrigation on Corn Demonstration Project – 2014 ("Report"). Mr. New specifically covered in the Report: Appendix A (Summary of the 2014 Demonstration Results); Appendix B (Corn Hybrid and Planting Information for the 2015 "200-12" Project; Appendix C (Net Return per Acre for Each "200-12" and "control" Demonstration Field; Appendix D (Corn Yield vs. Net Return Per Acre); and Appendix E (Net Return per Inch of Irrigation for Each "200-12" and "control" Field).

At 6:45 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 and Texas Government Code Section §551.072 to obtain legal advice from its attorney regarding compliance and Legislative issues; and to discuss a potential real estate acquisition by the District. Harold Grall seconded the motion and it was unanimously approved by the Board.

Executive Session: At 6:45 p.m., the Board went into Executive Session to seek legal advice from its attorney and to discuss a potential real estate acquisition by the District. At 7:34 p.m., Director Danny Krienke moved that the Board reconvene into regular session. Harold Grall seconded the motion and it was unanimously approved by the Board.

The Board reconvened into regular session at 7:35 p.m.

President Zimmer opened the floor for discussion and action on pending District compliance matters.

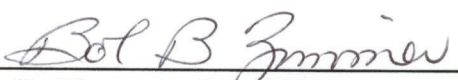
Harold Grall moved to accept the proposed Settlement Agreement with BLF Land, LLC (Larsen Farms). Gene Born seconded the motion and it was unanimously approved by the Board.

Zac Yoder moved to accept the proposed Settlement Agreement with 3-T Well Corporation. Mark Howard seconded the motion and it was unanimously approved by the Board.

Gene Born moved to approve a proposed acquisition contract on 607 First Place, Dumas, Texas. Danny Krienke seconded the motion and it was unanimously approved by the Board.

By consensus, the Board set its next regular Board Meeting immediately following the Rulemaking Hearing scheduled for 9:00 a.m. on April 14, 2015.

Harold Grall moved to adjourn the meeting. Gene Born seconded the motion and it was unanimously approved by the Board. President Zimmer adjourned the meeting at 7:44 p.m.



Bob B. Zimmer, President



Daniel L. Krienke, Secretary

**CERTIFIED AGENDA OF
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT
BOARD OF DIRECTORS' EXECUTIVE SESSION**

Under penalty of perjury, the undersigned presiding officer certifies the following facts are true and correct and the following topics, and none other, were deliberated, discussed or reviewed in an Executive Session of the North Plains Groundwater Conservation District Directors which was convened on March 24, 2015:

Persons Present:

Bob Zimmer, President
Danny Krienke, Secretary
Gene Born, Director
Justin Crownover, Director
Zac Yoder, Director
Mark Howard, Director
Casey Tice, Compliance Coordinator
Steve Walthour, General Manager; and
F. Keith Good, Attorney for the District.

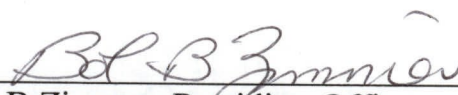
Beginning Time: 6:45 p.m.

Ending Time: 7:34 p.m.

Topics Deliberated and Applicable Exception to the Texas Open Meetings Act:

Deliberation by the Board regarding the purchase, exchange, lease, or value of real property because deliberation in an open meeting would have a detrimental effect on the position of the District in negotiations with a third person.

**Exempt from the Open Meetings Act pursuant to Texas
Government Code Section 551.072.**



Bob B Zimmer, Presiding Officer