

**Section 10**  
**Adoption of Plan**  
**[31 TAC §357.11-12]**

**10.1 Public Involvement Program**

Public involvement was begun at the start of the Llano Estacado regional water planning process to allow ample opportunity for public input into the process of developing the regional water plan, as well as opportunity to review and comment upon the Initially Prepared Plan.

Since the adoption of the 2006 Plan, the High Plains Underground Water Conservation District No. 1 continues to provide public information about the regional water planning process during the current 5-year planning cycle (2006-2011). The public information activities are described and listed below.

The LERWPG's website ([www.llanoplan.org](http://www.llanoplan.org)) is and continues to be the primary method of distributing information to the public. The site contains the LERWPG mission statement; a list and map of the counties within the region; agendas for all meetings from 2002-2010; minutes of all meetings from 2002-2010; a list of the planning group members, their respective e-mail addresses, and the water user groups they represent; a list of LERWPG committees; the 2006 approved regional water management plan; 2006 suggested water management strategies; other related information, such as websites for other regional water planning groups in Texas; a request form for publications, such as *Soils of the Llano Estacado Region* and *Conservation Tillage Within The LERWPG*; and an online form to provide feedback to the webmaster.

This regularly updated site received a major makeover in December 2009/January 2010. New interactive features include the ability to "bookmark and share" information from the site using social media such as Facebook and Twitter. In addition, members may now sign up for periodic LERWPG newsletters delivered to them via e-mail.

The High Plains Underground Water Conservation District No. 1 website ([www.hpwd.com](http://www.hpwd.com)) is another online source for information relating to the LERWPG. Meeting notices and news releases about the LERWPG are also posted to the HPWD site. This regularly updated site has received more than 277,000 visits since 1997.

LERWPG representatives and High Plains Water District staff have given numerous presentations to civic clubs and professional groups about the regional water planning process

and the updated plan. District staff members have also spent many hours answering public inquiries about the plan since the first 5-year planning cycle.

The public involvement program has included duly noticed public meetings, information on both the LERWPG and HPWD web sites, articles in *The Cross Section* (High Plains Water District monthly newsletter), and presentations at public meetings. In addition, a public hearing on the scope of work was held August 31, 2006 at the High Plains Underground Water Conservation District No. 1 office, 2930 Avenue Q, in Lubbock.

A reporter from the *Lubbock Avalanche-Journal* was assigned to cover the regional water planning group, which has resulted in several news stories appearing in the newspaper.

The following articles about the Llano Estacado Regional Water Management Plan were published in *The Cross Section*, a monthly publication of the High Plains Underground Water Conservation District No. 1, from 2006 to 2010:

<b>Date</b>	<b>Activity</b>
June 2006	RWPG begins third 5-year planning cycle.
August 2006	LERWPG Meeting Notice.
2007	No articles appeared – The first two years of this third round of regional water planning focused on local and region specific water supply-related issues (2006-2008).
February 2008	LERWPG Meeting Notice
May 2009	LERWPG Meeting Notice.
May 2009	LERWPG to receive public comments regarding the City of Lubbock’s proposed amendments to 2006 plan
June 2009	LERWPG establishes comment period on the City of Lubbock proposed amendments
August 2009	LERWPG to consider City of Lubbock proposed amendments.
September 2009	LERWPG Meeting Notice
September 2009	2006 plan amended to include City of Lubbock amendments.
November 2009	LERWPG Meeting Notice

Either LERWPG members or High Plains Underground Water Conservation District No. 1 employees gave the following interviews and presentations about the Llano Estacado Regional Water Management Plan from 2006 to 2010:

<b>Date</b>	<b>Location</b>	<b>Association or Organization</b>
2006	Hereford	Hereford Rotary Club
2006	Lubbock	Texas Cotton Ginners Show
2006	Wolfforth	Wolfforth Lions Club
2006	Lubbock	League of Women Voters
2006	Lubbock	ICASALS Conference
2006	Lubbock	Southwest Rotary Club
2006	Lubbock	Chamber of Comm., Agri. Committee Monthly Meeting
2006	Lubbock	Chamber of Comm., Water Cons. Council Mo. Meeting
2006	Lubbock	Texas DoT Regional Director's Meeting
2006	Lubbock	Chris Winn, Fox Talk 950
2006	Lubbock	Jim Stewart, KRFE-AM
2006	Lubbock	Emily Leonard, KLBK-TV
2006	Lubbock	MBA Class at Texas Tech University
2006	Lubbock	Texas Section AWWA Meeting
2006	Amarillo	Amarillo Farm and Ranch Show
2006	Lubbock	Air and Waste Management Meeting
2007	Lubbock	High Plains Public Radio Network
2007	Lubbock	Home and Garden Show
2007	Lubbock	Chamber of Comm., Agri. Committee Monthly Meeting
2007	Lubbock	Chamber of Comm., Water Cons, Council Mo. Meeting
2007	Lubbock	Texas Tech University Student Publications
2007	Lubbock	St. John's United Methodist Church
2007	Lubbock	Texas Cotton Ginner's Show
2007	Amarillo	Panhandle Grain and Feed Association Convention
2007	Levelland	Levelland Evening Lion's Club
2007	Lubbock	Jim Stewart, KRFE-AM
2007	Canyon	Randall County Advisory Committee Meeting
2007	Lubbock	Southwest Rotary Club
2007	Muleshoe	Muleshoe Rotary Club
2007	Littlefield	Littlefield Rotary Club
2007	Lubbock	Texas Farm Bureau Ag Lead Class
2007	Amarillo	Amarillo Farm and Ranch Show
2008	Lubbock	Chamber of Comm., Agri. Committee Monthly Meeting
2008	Lubbock	Chamber of Comm., Water Cons, Council Mo. Meeting
2008	Lubbock	Impact of Water in Environment, Lubbock Arboretum
2008	Lubbock	HPWD Co. Advisory Committee Meeting, Texas Tech
2008	Lockney	Lockney rotary Club
2008	Lubbock	Second Baptist Church Study Group

2008	Lubbock	Texas Cotton Ginners Show
2008	Floydada	Daughters of American Revolution
2008	Lubbock	Eddie Griffis, Ag Talk Show
2008	Slaton	Slaton Lion's Club
2008	Muleshoe	Muleshoe Rotary Club
2008	Lubbock	KOHM-FM, James Stewart
2008	Lubbock	Farmhouse Fraternity Conclave
2008	Lubbock	Farm Bureau Tour Group
2008	Lubbock	Texas Ag Industries Meeting (Regional Meeting)
2008	Lubbock	West Texas Ag Chemical Conference (Regional Meeting)
2008	Lubbock	House Ag and Livestock Committee Meeting
2008	Lubbock	Banker's Conference
2008	Amarillo	Amarillo Farm and Ranch Show
2009	Lubbock	Lubbock Master Gardeners
2009	Lubbock	Chamber of Comm., Agri. Committee Monthly Meeting
2009	Lubbock	Chamber of Comm., Water Cons, Council Mo. Meeting
2009	Lubbock	Eddie Griffis, Ag Talk Show
2009	Lubbock	Jim Stewart, KRFE-AM
2009	Dimmitt	Castro County Corn Conference
2009	Lubbock	South Plains Ag, Wind, & Wildlife Conference
2009	Lubbock	Lubbock Lion's Club
2009	Lubbock	Texas Cotton Ginner's Show
2009	Canyon	American West History Class at West Texas A&M
2009	Lubbock	Amando Gonzales/Randy Sanders Interview KEJS-FM
2009	Littlefield	Littlefield Lion's Club
2009	Canyon	CRP Information Meeting
2009	Amarillo	Amarillo Farm and Ranch Show

## **10.2 Data Gathering and Coordination with Water Supply and Water Conservation Entities**

During March through August of 2009, the High Plains Underground Water Conservation District No. 1, Mesa Underground Water Conservation District, Sandy Land Underground Water Conservation District, South Plains Underground Water Conservation District, Garza County Underground and Fresh Water Conservation District, Llano Estacado Underground Water Conservation District, White River Municipal Water District, Canadian River Municipal Water Authority, Brazos River Authority, and Red River Authority were contacted and requested to provide up-to-date information about their respective programs and plans. Each entity responded with updated information, which was used to update the respective entity's information in Sections 1, 3, and 4 of the Regional Water Plan.

## **10.3 Informational Mailouts to Water User Groups and Supply Entities**

During March of 2009, the LERWPG wrote a letter to Mayors, City Managers and/or Administrators, Municipal Water Utility Directors, County Judges, and wholesale Water Providers, in which it was announced and explained that: (1) the Llano Estacado Regional Water Planning Group (LERWPG) had begun the process to develop the 2011 Llano Estacado Regional Water Plan, as required by 31 Texas Administrative Code 355 and 357; (2) provided information about the process; and, (3) presented the schedule to complete this work. In addition, it was explained that the 2011 Plan is to take into account changed conditions within the region, such as the emergence of the ethanol industry and the rapid increase in the number of dairies in several counties of the region. The Mayors, City Managers and/or Administrators, Municipal Water Utility Directors, and County Judges were requested to provide information of any changed conditions that needed to be considered in the development of the 2011 Regional Water Plan. It was further explained that a requirement of the Regional Water Planning Process is for the LERWPG to take into consideration water supply plans of local public water suppliers (cities and water supply districts). In its letter, the LERWPG requested each public water supplier to communicate to the HPUWCD and the Technical Consultant any existing water supply plans, and in addition to communicate any changes needed to the plan that was included in the 2006 Regional Water Plan for their respective water utilities. A copy of the 2006 Plan, in which their individual plans are found, was attached to the letter. One municipality responded to the inquiry,

with information that it was in the process of applying to the TWDB for a loan to implement parts of its water supply plan.

**10.4 Llano Estacado Regional Water Planning Group Meetings**

The Llano Estacado Regional Water Planning Group conducted regular meetings on the dates listed below. Notices of all public meetings were duly posted at the Lubbock County Courthouse, the administrative office of the High Plains Underground Water Conservation District No. 1, and on the LERWPG and HPWD websites.

Date	Meeting
June 20, 2006	Joint Meeting with Region A
July 7, 2006	Regional Water Planning Group Committees
September 20, 2007	Regular Meeting
February 21, 2008	Regular Meeting
May 1, 2008	Regular Meeting
October 23, 2008	Regular Meeting
April 23, 2009	Regular Meeting
June 18, 2009	Public Hearing Regarding City of Lubbock Amendments to 2006 Regional Water Plan
August 27, 2009	Regular Meeting
October 15, 2009	Regular Meeting
December 10, 2009	Regular Meeting
February 18, 2010	Regular Meeting
April 15, 2010	Public Hearing on Initially Prepared Plan

## **10.5 Coordination with Other Regions and Counties of Region O**

Notices of all public meetings were sent to the chairs of the regional water planning groups in the state and all who requested them. In addition, Region O cooperated with Region A in the development and filing of an application to the TWDB for supplemental funding to identify and evaluate water management strategies to increase quantities and reliability of supplies from CRMWA during periods of drought. Region A revised yields of Lake Meredith and has provided revised information to Region O, which has been used in water supply analyses for CRMWA member cities of Region O.

## **10.6 Texas Water Development Board Comments for Llano Estacado Region (Region O) Regional Water Planning Group Initially Prepared Plan, TWDB Contract No. 904830874 and LERWPG Responses**

---

### **ATTACHMENT A**

## **TWDB Comments on Initially Prepared 2011 Region O Regional Water Plan**

**LEVEL 1-- Comments and questions must be satisfactorily addressed in order to meet statutory, agency rule, and/or contract requirements.**

### **Section 1**

1. Pages 1-66 through 1-69, Section 1.8; pages 5-1 through 5-3, Section 5.1: Please clarify in the plan whether any existing threats of limited water quantity with respect to irrigated agriculture were considered (page 1-66) and whether such a threat would be addressed or affected by the recommended water management strategies (page 5-1). [Title 31 Texas Administrative Code (TAC) §357.7 (a)(1)(L) and (a)(8)(C)]

**Response: Sub-Section 5.3 has been added to Section 5.0 “Impacts of Water Management Strategies on Key Parameters of Water Quality [31 TAC §357.7(a)(12)] and Impacts of Moving Water from Rural and Agricultural Areas [31 TAC §357.7(a)(8)(G)],” which provides a summary of the water demand, water supply, water needs projections, and socioeconomic impact analyses relating to the projected effects of declining water supplies upon the irrigated agriculture water using sector of the Llano Estacado Water Planning Region (Region O).**

### **Section 3**

2. Page 3-5, Section 3.3.C: Please confirm in the plan that the surface water availability is based on firm yield as determined using the Texas Commission on Environmental Quality Water Availability Model Run 3, or revise accordingly.

**Response: All surface water availability in the Regional Water Plan is based upon firm yield as determined using the Texas Commission on Environmental Quality Water Availability Model Run 3, and a statement to this effect has been added in the text of Section 3.3.C of the Regional Water Plan.**

#### Section 4

3. If applicable, please describe third party impacts from voluntary redistributions of water and moving water including from rural and agricultural areas. [31 TAC §357.7(a)(8)(G)]

**Response: Third party impacts are addressed in Section 5 on page 5-4, as follows: Recommended water management strategies for municipal uses would result in the voluntary transfer of approximately 4,150 acft/yr ( 0.13 percent to 0.28 percent of available regional annual supplies) of water from rural and agricultural areas to municipal areas through the acquisition of additional sites for well fields in approximately 12 to 15 widely dispersed locations near to the municipalities that acquire them. The impacts of these transfers are not considered to be significant to the local areas, however, to the extent that such transfers reduce water supplies available to irrigated agriculture and/or livestock or dairies, the economic impacts would result in lower levels of farm production and farm incomes, and would reduce business of agricultural input suppliers and agricultural marketing establishments; i.e.; the adverse results would extend throughout the local economy including third party agricultural service, finance, and marketing sectors of the local region.**

4. Please explain how the region considered emergency transfers of non-municipal use surface water without causing unreasonable damage to the property of the non-municipal water rights holder pursuant to Texas Water Code §11.139. [31 TAC §357.5(i)]

**Response: Inasmuch as there are no known sources of “non-municipal use surface water” in the Llano Estacado Water Planning Region, the Regional Water Planning Group did not consider emergency transfers of non-municipal use surface water.**

5. Pages 4-2, 4-111, 4-146 through 4-147, and ES-13: The number of municipal water user groups cited as showing needs is not consistent. (e.g. 29 municipalities on pages ES-13 and 4-111; 31 cities on pages 4-146 and 4-147; and, 23 municipalities on page 4-2). Please reconcile the numbers in the plan.

**Response: The number of municipal water user groups has been corrected on pages 4-2, 4-146, 4-147, and ES-13. The correct number is 29 cities and one (1) water supply district. The number 45 on page 4-111 is the number**

**of municipal WUGS having per capita water use less than the regional average of 172 gpcd, and is correct.**

6. Page 4-149, paragraph 2: Please revise cost estimates or justify why a 30-year debt service period rather than the TWDB-recommended 20-year debt service period was used for evaluating water management strategies other than reservoirs. [*Contract Exhibit “C” Section 4.1.2*]

**Response: Revisions were made, and revised tables numbered Table 4.4-15 through Table 4.4-38 (Pages 4-150 through 4-173) were placed in the text. These revisions did not change the project implementation or construction cost estimates, however, at the 20-year debt service period, the unit costs of water increased in comparison to the 30-year debt service period.**

7. Page 4-185, Section 4.4.3.3, second paragraph: The plan indicates that that “Only natural unappropriated flows were subjected to the Consensus Criteria for Environmental Flow Needs (CCEFNN) requirements”. Since the CCEFNN are calculated using naturalized flows, please clarify whether the CCEFNN criteria was established using naturalized flows and was applied, as appropriate, to any increase in yield.

**Response: The CCEFNN criteria were calculated using naturalized flows and were applied appropriately to unappropriated natural flows.**

8. Page 4-212, Table 4.4-51; ES-18, Table ES-2: Two different versions (Options A and B) of The Lubbock North Fork Diversion water management strategy are presented as recommended water management strategies. Because all recommended water management strategies must take into account all other recommended water management strategies, please include only one recommended version of the North Fork Diversion strategy. Other versions may be included as alternatives in the plan. Note that if the Option B North Fork Diversion is retained as a recommended water management strategy, it would appear to require the removal of two of the other recommended water management strategies. [*31 TAC §357.7(a)(7)(H)*]

**Response: The Lubbock North Fork Diversion water management strategy (Option B) of Table ES-2, page ES-18 of the IPP was intended as an explanatory footnote, and was not one of the recommended water management strategies for Lubbock. The Lubbock North Fork Diversion (Option B) has been removed from Table ES-2, and the wording of the footnote has been revised, accordingly.**

9. Page 4-214, Section 4.4.3.5.2, last paragraph: The plan states “(3) Natural, unappropriated flows are subject to instream flow requirements equivalent to Consensus Criteria for Environmental Flow Needs (CCEFNN)”. Since the CCEFNN are calculated using naturalized flows, please clarify whether the CCEFNN criteria

was established using naturalized flows and was applied, as appropriate, to any increase in yield.

**Response: The CCEF N criteria were calculated using naturalized flows and were applied to the entire Post Reservoir water right, which is existing. CCEF N were applied to the entire existing permit due to imprecise language in special conditions of the permit regarding environmental flow requirements.**

### Section 6

10. The sample municipal water conservation plan for the City of Lubbock is dated 2005 and does not contain 5 and 10 year practicable goals as according to Texas Water Code, Chapter 11.1271 or measurable water loss goals. Please include a sample municipal conservation plan that includes 5 and 10-year goals and measurable water loss goals. [31 TAC §357.7(c)]

**Response: The City of Lubbock Retail and Wholesale 2010 Water Conservation Plan and Drought and Emergency Contingency Plan was included as Appendix D. The 2010 Plan contains both 5 and 10 year water conservation goals.**

11. Page 6-9, Section 6.3; pages ES-16, ES-18; Table ES-2: Please clarify how drought management as a water management strategy was considered in the plan. [31 TAC §357.5(d)(1)&(2)]

**Response: Drought Management is not a recommended water management strategy to meet projected water needs in Region O, in part because it cannot be demonstrated to be an economically feasible strategy. It is important to note that in Region O, municipal, irrigation, and livestock water supply delivery systems are well fields and wells that produce from the region's aquifers (mostly the Ogallala). The capability of these systems is based upon system capacity and aquifer characteristics, and does not fluctuate with weather conditions. However, the LERWPG recognizes the individual cities "Demand Management and Drought Contingency Plans" that are on file with the TCEQ.**

12. (Attachment B) Comments on the online planning database (i.e. DB12) are herein being provided in spreadsheet format. These Level 1 comments are based on a direct comparison of the online planning database against the Initially Prepared Regional Water Plan document as submitted. The table only includes numbers that do not reconcile between the plan (left side of spreadsheet) and online database (right side of spreadsheet). An electronic version of this spreadsheet will be provided upon request.

**Response: Review and changes are in progress.**

13. (*Attachment C*) Based on the information provided to date by the regional water planning groups, TWDB has also attached a summary, in spreadsheet format, of potential interregional conflicts, apparent water source over allocations, and apparent unmet water needs that were identified during the review of the online planning database and Initially Prepared Regional Water Plan. [*Additional TWDB comments regarding the general conformance of the online planning database (DB12) format and content to the Guidelines for Regional Water Planning Data Deliverables (Contract Exhibit D) are being provided by TWDB staff under separate cover as 'Exception Reports'*]

**Response: Review and changes are in progress.**

---

**LEVEL 2--Comments and suggestions that might be considered to clarify or enhance the plan.**

Section 1

1. Pages 1-102; page 1-105, Table 1-30: The total water loss presented in text of 847.30 acft is inconsistent with table (848.30 acft). Please reconcile numbers in plan.

**Response: The correct value is 847.31 acft, and was entered in the text of the Regional Plan.**

Section 4

2. Pages 4-302 through 4-410, Page 4-313: Several of the Tables in Chapter 4 do not include dollar sign units (e.g Tables 4.5-3, 4.5-22, and 4.5-74). Please consider including units in all plan tables.

**Response: Dollar signs were entered in all Tables of Chapter 4, as appropriate. It is noted that all rows of the Tables of Chapter 4 of the IPP referenced here and the revised IPP (Version being considered for adoption) are labeled with the correct and appropriate units; i.e.; acre-feet and dollars.**

## **10.7 Public Comments and LERWPG Responses**

*April 15, 2010 at Public Hearing on Initially Prepare 2011 Region O Regional Water Plan*

***Oral Comments of Kevin Riley, Springlake, Texas***

“My name is Kevin Riley and I am a fourth-generation farmer from Castro County. I would like my kids to be able to be the fifth generation, if they so desire. My grandfather was among the first to use irrigation tubes instead of cutting I’s in the ditches like they used to. He and dad laid

miles of concrete and plastic line because it saved water. I'm also the third generation to buy new center pivots to more efficiently apply the water to our crops. Grandfather despised wasting the tailwater in the ditches and I was taught the importance of conservation of our water.

“With this in mind, I'd like to offer the following points:

1. Each regional water planning group is charged with determining the amount of surface water and groundwater currently available within our region. My concern is with the accuracy of this mapping of the saturated thickness of the Ogallala. The U.S. Geological Survey was involved in a project in the North Platte River Valley of Nebraska where they used a heli-borne electromagnetic device that showed large variations in the saturated thickness of the aquifer that was previously unknown. Some more and some less. If we are to be regulated based on a percentage of the water available, I think it is vitally important that we deal with as close to a known as possible—and not an educated guess.
2. My second point is that Castro County is more similar to the amount of water available and crops grown in two counties north, such as Dallas and Hartley Counties than to areas south and east of Castro. With these similarities in mind and with the precedent that has been set, I would respectfully request that a similar target saturated thickness of 40 percent being left in 50 years be made available for Castro County. I think this is an attainable goal if we eliminate double cropping and we use the technologies that are coming in the near future. You mention drought tolerance and some of those that are being developed by conventional breeding. I was watching your presentation a while ago and I believe, within the next 3-7 years, that the drought tolerant with the genetic engineering will offer significant (water) savings.
3. My third and final point is please ensure that the restrictions will be fairly applied and that the areas with the most water are not used as a reserve for the whole area. Thank you.”

**Response: The Llano Estacado Regional Water Planning Group (LERWPG) very much appreciates the comments, and hereby includes them in the 2011 Regional Water Plan. However, the LERWPG does not have responsibility for regulation of the quantities of water available for use within the region.**

*Oral Comments of Mack Steffey, Hart, Texas.*

“I'm Mack Steffey and I farm between Dimmitt and Hart in Castro County. I've grown corn for 37 years there and we use about 20-26 inches of irrigation. We feel like it is a viable crop. It has to be there for our cattle feeding industry and we want to protect it. The recent invasion of dairies have come there, they double crop, and are using considerably more than 22-24 inches of water—probably double that. We are not trying to run the dairy industry off—but if these laws are in place to limit us to where we can grow corn—some of those operations do wheat silage, corn silage, and alfalfa in the frost-free period time—so I'd like to keep that in mind that we need enough water to grow corn in our county. Thank you.”

**Response: The Llano Estacado Regional Water Planning Group (LERWPG) very much appreciates the comments, and hereby includes them in the 2011 Regional**

**Water Plan. However, the LERWPG does not have responsibility nor authority for determination as to what purposes or uses water can be put.**

**Letter from Silverton**

MAYOR  
LANE B. GARVIN

City of Silverton

P. O. BOX 250  
SILVERTON, TEXAS 79257  
CITY SECRETARY  
JERRY PATTON  
PHONE (806) 823-2125

June 10, 2010

Mr. Herbert W. Grubb  
HDR Engineering, Inc.  
4401 West Gates Blvd.  
Austin, Texas 78745

Re: Llano Estacado Regional Water Plan: City of Silverton, Briscoe County

Dear Mr. Grubb:

As per our phone conversation this date, I have reviewed the new 2010 Llano Estacado Regional Water Plan and find it liken as it does not show the City of Silverton as having a water problem. The plan shows the City as having no need for new water sources.

The City of Silverton does in fact have a big water problem as Lake Mackenzie is getting lower and has not shown that it is going to get any better in the future. We also have a water quality issue, with high arsenic in our well water. Please see attached Alert letter from TCEQ dates January 14,2005.

The City of Silverton hereby request that the new 2010 Llano Estacado Regional Water Plan includes a water plan for the City that would include a well field, pipe and pumps that would insure the City of Silverton a dependable arsenic free water supply in the years to come.

Respectfully submitted:  
Jerry Patton  
City Administrator  
City of Silverton

**Response: A Local Groundwater Water Management Strategy was added for Silverton to meet projected needs.**

**Letter from Texas Parks and Wildlife Department**

June 3, 2010

Mr. H.P. Brown, Jr., Chairman  
Llano Estacado Regional Water Planning Group  
P.O. Box 2426  
Lubbock, TX 79408-2426

Re: 2010 Llano Estacado Region O Initially Prepared Plan

Dear Mr. Brown:

Thank you for the opportunity to review and comment on the 2010 Initially Prepared Regional Water Plan (IPP) for Llano Estacado Region O. Texas Parks and Wildlife (TPW) acknowledges the time, money and effort required to produce the regional water plan as mandated by Senate Bill 1 of the 75<sup>th</sup> Legislature. A number of positive steps have been taken since the first planning cycle to advance the issue of environmental protection. For example, the regional water planning groups are required by TAC §357.7(a)(8)(A), to perform a “quantitative reporting of environmental factors including effects on environmental water needs, wildlife habitat, cultural resources, and effect of upstream development on bays, estuaries, and arms of the Gulf of Mexico” when evaluating water management strategies (WMS). Quantification of environmental impacts is a critical step in planning for our state’s future water needs while also protecting environmental resources.

TPW staff has reviewed the IPP with a focus on the following questions:

- Does the plan include a quantitative reporting of environmental factors including the effects on environmental water needs, and habitat?
- Does the plan include a description of natural resources and threats to natural resources due to water quantity or quality problems?
- Does the plan discuss how these threats will be addressed?
- Does the plan describe how it is consistent with long-term protection of natural resources?
- Does the plan include water conservation as a water management strategy? Reuse?
- Does the plan recommend any stream segments be nominated as ecologically unique?
- If the plan includes strategies identified in the 2006 regional water plan, does it address concerns raised by TPW at that time?

In general, the Llano Estacado Region O IPP includes more of a narrative rather than quantitative reporting of the impacts of the proposed water supply strategies. This is in large part due to the nature of the proposed strategies which rely primarily on water conservation and reuse. Potential reductions in streamflow for surface water strategies are identified, but the connection between instream flows and downstream habitat and biota is lacking. The report does a good job in documenting the county occurrences of threatened, endangered and rare species, as well as other species. In addition, the sections on playa lake structure, function, biota, and management are useful. While Appendix B of the IPP includes a good review of existing and historical springs and seeps, potential impacts to spring flows and spring ecosystems should be identified where continued groundwater depletion and additional groundwater development are identified as water management strategies.

Agricultural and municipal water conservation are the principle strategies in the IPP for meeting future water needs. The planning group has proposed municipal water conservation strategies that can potentially reduce per capita water use in the region from an average of 180 gallons per person per day in 2010 to 154 gallons per person per day in 2060. TPW supports the planning group's consideration of brush control/management as an additional means of conserving water if done in a manner that can also benefit wildlife habitat. The Region O IPP also includes reuse of treated municipal effluent for meeting future water needs.

TPW notes that the plan does not recommend nomination of any stream segments as ecologically unique. TPW has identified several stream segments in the region that meet at least one of the criteria for classification as ecologically unique should the regional planning group decide to pursue nomination of an ecologically significant stream in the future. These segments include portions of the Prairie Dog Town Fork Red River, the North Prong Little Red River, and the South Prong Little Red River.

In general the 2010 Region O IPP is a well-written document. TPW appreciates the fact that many of our earlier comments have been addressed in the plan. However concerns remain regarding the proposed Post Reservoir and other surface water strategies and their potential impacts to downstream instream uses including aquatic and riparian habitats and water quality. Since surface flows are so rare in Region O, environmental stream flows are of considerable importance.

Thank you for your consideration of these comments. TPW looks forward to continuing to work with the planning group to develop water supply strategies that not only meet the future water supply needs of the region but also preserve the ecological health of the region's aquatic resources. Please contact Cindy Loeffler at (512) 389-8715 if you have any questions or comments.

Sincerely,  
Ross Melinchuk  
Deputy Executive Director, Natural Resources

RM:CL:ms

**Response: The Llano Estacado Regional Water Planning Group appreciates the comments by The Texas Parks and wildlife Department.**

## **10.8 Final Plan Adoption**

To be added.