




September 23, 2005

Mr. Tom Beard, Chairman
Far West Texas Water Planning Group
C/o Rio Grande Council of Governments
1100 N. Stanton Street, Suite 610
El Paso, Texas 79902

Re: Comments on Initially Prepared 2006 Regional Water Plan for Region E

Dear Mr. Beard and Planning Group Members:

The National Wildlife Federation, Lone Star Chapter of the Sierra Club, and Environmental Defense appreciate the opportunity to provide written comments on the Initially Prepared Regional Water Plan for Region E. We consider the development of comprehensive water plans to be a high priority for ensuring a healthy and prosperous future for Texas. We recognize and appreciate the contributions that you have made towards that goal. As you know, our organizations have provided, either individually or collectively, periodic input during the process of developing the plan. These written comments will build upon those previous comments in an effort to contribute to making the regional plan a better plan for all residents of Region E and for all Texans.

We do recognize that the draft Plan is subject to revision prior to adoption and is subject to continued revision in the future and provide these comments with such revisions in mind. We also feel that given the incompleteness of the plan – the Executive Summary and Chapter 7 are not complete in the IPP version dated June 1, 2005 - we request that a mechanism be established to accept comments on these sections once they are finalized in draft form. Both of these plan components are critically important to the plan and should be afforded the same opportunity for public review and comment. Our organizations appreciate the amount of effort that has gone into developing the draft Plan for Region E. Your consideration of these comments will be appreciated.

## I. BACKGROUND AND OVERVIEW

Our organizations support a comprehensive approach to water planning in which all implications of water use and development are considered. Senate Bills 1 and 2 (SB1, SB2), and the process they established, have the potential to produce a major, positive change in the way Texans approach water planning. In order to fully realize that potential, water plans must provide sufficient information to ensure that the likely impacts and costs of each reasonable potential water management strategy are described and considered. Only with that information can regional planning groups ensure compliance with the overarching requirement that “strategies shall be selected so that cost effective water management strategies which are consistent with long-term protection of the state’s water resources, agricultural resources, and natural resources are adopted.” 31 TAC § 357.7 (a)(9). Complying with this charge is essential in order to develop

true plans that are likely to be implemented as opposed to a list of potential, but expensive and damaging, projects that likely will produce more controversy than water supply.

This document includes two types of comments. We consider the extent to which the initially prepared plan complies with the requirements established by SB1 and SB2 and by the Texas Water Development Board (TWDB) rules adopted to implement those statutes. In addition, our comments address important aspects of policy that might not be controlled by specific statutes or rules. We do recognize that the financial resources available to the planning group are limited, which may restrict the ability of the group to fully address some issues as much as you would like. These comments are provided in the spirit of an ongoing dialogue intended to make the planning process as effective as possible. We strongly support the state's water planning process and we want the regional water plans and the state plan to be comprehensive templates that can be endorsed by all Texans. Key principles that inform our comments are summarized below, followed by specific comments keyed to different aspects of the initially prepared plan.

## A. Maximize Water Efficiency

We strongly believe that improved efficiency in the use of water must be pursued to the maximum extent reasonable. New provisions included in SB2 and TWDB rules since the first round of planning mandate strengthened consideration of water efficiency. Damaging and expensive new supply sources simply should not be considered unless, and until, all reasonable efforts to improve efficiency have been exhausted. In fact, that approach is now mandated. Consistent with TWDB's rules for water planning, we consider water conservation measures that improve efficiency to be separate and distinct from reuse projects. We do agree that reuse projects merit consideration. However, the implications of those projects are significantly different than for water efficiency measures and must be evaluated separately.

The Texas Water Code, as amended by SB1 and SB2, along with the TWDB guidelines, establish stringent requirements for consideration and incorporation of water conservation and drought management. As you know, Section 16.053 (h)(7)(B), which was added after completion of the first round of regional planning, prohibits TWDB from approving any regional plan that doesn't include water conservation and drought management measures at least as stringent as those required pursuant to Sections 11.1271 and 11.1272 of the Water Code. In other words, the regional plan must incorporate at least the amount of water savings that are mandated by other law.[1] In addition, the Board's guidelines require the consideration of more stringent conservation and drought management measures for all other water user groups with water needs. Consistent with the TWDB rules, our comments treat water conservation and drought management as separate issues from reuse. Section 31 TAC § 357.7 (a)(7)(A) of the TWDB rules sets out detailed requirements for evaluation of water management strategies consisting of "water conservation practices." Section 357.7(a)(7)(B) addresses water management strategies that consist of drought management measures. The separate evaluation of water management strategies that rely on reuse is mandated by 31 TAC § 357.7 (a)(7)(C).

[1] This is a common-sense requirement. We certainly should not be basing planning on an assumption of less water conservation than the law already requires. TWDB guidelines also recognize the water conservation requirements of Section 11.085 for interbasin transfers and require the inclusion of the "highest practicable levels of water conservation and efficiency achievable" for entities for which interbasin transfers are recommended as a water management strategy.

We acknowledge the City and County of El Paso for their past and present efforts to incorporate both reuse and conservation efforts in their water management efforts. However, the initially prepared plan seems to be lacking the required information about future conservation and reuse efforts for those entities or other water user groups. Without that information, it is not possible to comment in any detail about those aspects of the plan.

**B. Limit Nonessential Use during Drought**

Drought management measures aimed at reducing demands during periods of unusually dry conditions are important components of good water management. As noted above, Senate Bill 2 and TWDB rules mandate consideration and inclusion in regional plans of reasonable levels of drought management as water management strategies. It just makes sense to limit some nonessential uses of water during times of serious shortage instead of spending vast sums of money to develop new supply sources simply to meet those nonessential demands. Because drought management measures are not included as water management strategies, the initially prepared plan does not comply with applicable requirements.

**C. Plan to Ensure Environmental Flows**

Although critically important, designing and selecting new water management strategies that minimize adverse impacts on environmental flows is only one aspect of planning to meet environmental flow needs. New rules applicable to this round of planning require a quantitative analysis of environmental impacts of water management strategies[2] in order to ensure a more careful consideration of those additional impacts. However, if existing water rights, when fully used, would cause serious disruption of environmental flows resulting in harm to natural resources, merely minimizing additional harm from new strategies would not produce a water plan that is consistent with long-term protection of natural resources or that would protect the economic activities that rely on those natural resources.

Accordingly, environmental flows should be recognized as a water demand and plans should seek to provide reasonable levels of environmental flows. Environmental flows provide critical economic and ecological services that must be maintained to ensure consistency with long-term protection of water resources and natural resources.

We comment the group for the strong acknowledgement of the importance of those flows to the region and the policy recommendation for a codification of instream flows.

**D. Manage Groundwater Sustainably**

Wherever possible, groundwater resources should be managed on a sustainable basis. Mining groundwater supplies will, in many instances, adversely affect surface water resources and constitute a tremendous disservice to future generations of Texans. Generally speaking, depleting groundwater sources will not be consistent with long-term protection of the state's water resources, natural resources, or agricultural resources.

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[2] The rules require that each potentially feasible water management strategy must be evaluated by including 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." 31 TAC § 357.7 (a)(8)(A)(ii).

We commend the planning group for its recognition of the value of sustainable management of groundwater. We encourage the planning group to adopt a clear definition of "sustainable management" and of the concept of "near sustainable management" that is proposed for some aquifers.

### E. Facilitate Short-Term Transfers

Senate Bill 1 directs consideration of voluntary and emergency transfers of water as a key mechanism for meeting water demands. Those approaches seem to have received little attention in the planning process to date. Water Code Section 16.051 (d) directs that rules governing the development of the state water plan shall give specific consideration to "principles that result in the voluntary redistribution of water resources." Similarly, Section 16.053 (e)(5)(H) directs that regional water plans must include consideration of "voluntary transfers of water within the region using, but not limited to, regional water banks, sales, leases, options, subordination agreements, and financing arrangements…." Thus, there is a clear legislative directive that the regional planning process must include strong consideration of mechanisms for facilitating voluntary transfers of existing water rights within the region, particularly on a short-term basis as a way to meet drought demands.

In addition, emergency transfers are intended as a way to address serious water shortages for municipal purposes. They are a way to address short-term problems without the expense and natural resource damage associated with development of new water supplies. Water Code Section 16.053 (e)(5)(I), as added by S.B. 1, specifically directs that emergency transfers of water, pursuant to Section 11.139 of the Water Code, are to be considered, including by providing information on the portion of each nonmunicipal water right that could be transferred without causing undue damage to the holder of the water right. Thus, the water planning process is intended as a mechanism to facilitate voluntary transfers, particularly as a means to address drought situations, by collecting specific information on rights that might be transferred on such a basis and by encouraging a dialogue between willing sellers and willing buyers on that approach.

Without a detailed description of how the proposed integrated strategy of El Paso County will be implemented, it is impossible to tell if this recommendation to facilitate short-term transfers is heeded by Region E.

## III. PAGE-SPECIFIC COMMENTS

### EXECUTIVE SUMMARY

In many cases, the executive summary is the only portion of the water plan that the public will read. For this reason, it is important that it be available for public comment prior to the finalization of the plan.

### CHAPTER 1, FAR WEST TEXAS REGIONAL DESCRIPTION

**Section 1.2.1,** Page 1-2. It would be helpful to have definitions for the terms "sustainable groundwater management" and "near sustainable groundwater management."

**Section 1.3, Page 1-9.** This section is missing a description of the region's native vegetation, ecology, and agricultural and natural resources. The only discussion found on the region's native vegetation was included in the 'Climate Section', Section 1.3.5, page 1-24, 3rd paragraph. It is important to include these topics in the description portion of the plan, in addition to outline any potential threats these resources may experience in relation to water quantity and/or quality problems (as required by §357.7 (a) (1)(L)). It is also important for the plan to include a reasonably detailed discussion of the various types of habitats present in the region (i.e. spring-fed aquatic and terrestrial, riparian, etc.), and the individual species dependent on them. This information is needed to assess long-term impacts on natural resources and to perform a meaningful quantitative evaluation of potentially feasible water management strategies.

**Section 1.5.3, Page 1-47.** This section needs to provide a description of the evaluation process used to determine which springs in the region are "major." In particular, it is important to provide explanation for the determination that only springs on state and federally owned land would be classified as "major springs." As this section currently reads, the implication is that the only springs of any significance in the region are located on state and federally owned lands.

**Figure 1-13, Page 1-47.** The inclusion of Figure 1-13 – *Location of Documented Springs* – is helpful for an overall perspective on the prevalence of springs in the region. It would also be helpful to include descriptions and estimations of their general nature, i.e. relative flow rates, associated aquatic and wildlife habitats, etc. We acknowledge that this level of information is probably not known for each spring show on Figure 1-13, but a generalized overview of the range of these qualities for the springs identified would still be useful. This is especially important for use in evaluating the proposed water management strategies for impact on springflow in the region and for assessing potential threats to water resources and natural resources.

**Section 1.4.6, Page 1-36.** We commend the group for including this section on environmental and recreational water needs in the discussion of regional water demands. This information provides a valuable perspective on the importance of maintaining environmental flows to the region's environment, economy, and populace.

**CHAPTER 2, POPULATION AND WATER DEMAND**

**Section 2.3, Page 2-13, last paragraph; page 2-21, second paragraph**. The plan needs to state what rate of plumbing fixture replacement was chosen. The discussion notes that the expected savings as a result of the installation of water-efficient devices in compliance with the state plumbing code are included in municipal demand projections. We request that information about the assumed savings from those fixtures, in the form of per capita reductions in water use, be included in the plan. We believe that is valuable information to help the public understand those savings. The inclusion of information about per capita water use rates also would be helpful in identifying potential for additional water efficiency savings.

**Section 2.3.4 Steam-Electric**

This demand appears to be potentially overstated. Water demand for steam electric power generation is projected to increase 353% during the planning period. By contrast, water demand for municipal use is projected to increase only about 80% to support a 116% increase in

population. Water demand for manufacturing water use is only projected to increase about 66%. Given the likelihood that municipal and manufacturing activities are the categories that would drive demand for electrical power, some additional explanation is needed for what seems to be a very disproportionate increase in projected water demand for steam-electric power generation.

We recognize that these projections come from the Board. The planning group may not be able to change them, but it could provide further explanation for this seemingly anomalous projected growth in water demand. We also note that the TWDB projections, as we understand them, include a projected .5% increase per year in per capita energy demand. Given advances in energy efficiency and escalating fuel prices, we question the reasonableness of the assumption of such continued escalation in per person use of electricity.

**Section 2.4, Page 2-31.** This section gives a good overview of the environmental and recreational water needs of the region. We acknowledge and commend the planning group's recognition of the importance of this issue.

**CHAPTER 3, REGIONAL WATER SUPPLY SOURCES**

**Section 3.0, Page 3-1, last bullet.** The plan states that the availability of groundwater is based on "acceptable levels of water level decline." These decline levels should be discussed in the water availability write-up as they may affect future availability of both surface and groundwater resources in the region. This information is also necessary to assess consistency with the long-term protection of the state's water resources, natural resources, or agricultural resources.

Table 3-1, Page 3-3. It would be helpful if the planning group provided some explanation of how the indicated availability amounts were determined for each of the listed aquifers. We were not able to find specific information about the determinations here or in Section 3.3.

**Section 3.1, Page 3-11, second paragraph, last line.** The plan states that "from Presidio downstream through the Big Bend Region, the Rio Grande generally contains sufficient flow to support recreational use at almost any time of the year." It is important to qualify this statement because while it is generally true, the flows often vary seasonally, and recreational use such as rafting suffers if there is low runoff and a reduction in irrigation return flows upstream. This is especially important to note given the June 2003 incident were the river dried up through parts of Big Bend National Park.

**CHAPTER 4, WATER MANAGEMENT STRATEGIES**

**Table 4-2, Page 4-11.** As shown in Table 4-2, savings from conservation and reuse are calculated and incorporated prior to the assessment of projected needs. Both are actual water management strategies and should be subject to the same level of discussion and evaluation as the proposed integrated strategy. See Section 357.7(a)(7)(A) of TWDB's rules. If this level of information is included under separate cover, we request that the pertinent information be incorporated into this section of the plan.

The conservation program information included in Appendix 6A for the City of El Paso is an overview of conservation efforts from 1990 to date. As a result, there isn't a description of the actual conservation measures that will be relied upon to achieve the projected conservation

savings. In addition, it isn't clear which water user groups would implement water conservation strategies. Information also is needed on how the proposed increase in use of reclaimed water will be achieved over the planning period. See Section 357.7(a)(7)(C).

**Drought Management Measures**. As required by 357.7 (a) (7) (B) of TWDB's rules, drought management is a water management strategy that must be evaluated. That provision, along with Section 16.053 (h)(7)(B) also requires that drought management be included as a water management strategy for each entity required to prepare a drought management plan pursuant to Section 11.1272 of the Water Code. Although the planning group may decide, provided it documents the basis for that decision, not to include drought management as a water management strategy beyond those measures specifically required by Section 11.1272, it must include at least the Section 11.1272 level of drought management as a water management strategy. SB2 made inclusion of drought management measures at least at the level required by Section 11.1272 a mandatory prerequisite for approval by TWDB of a regional water plan. See Tex. Water Code Ann. § 16.053 (h) (7)(B). The initially prepared plan does not comply with that requirement. For each entity required to prepare a drought contingency plan pursuant to Section 11.1272, the water plan must include a water management strategy reflecting the drought period savings from that drought plan.

**Section 4.3.3, Page 4-14.** Please clarify in this section the source aquifer for the groundwater in the Dell City area.

**Section 4.3.1, Page 4-14, first paragraph.** Please define "nearly sustainable" as used in the text. The definition could be included here or in Section 1.2.1.

**Section 4.3.4, Page 4-16.** TWDB rules (§ 357.7 (a)(8)(A)(ii)) require a quantitative evaluation of the 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. This section should include a discussion of the potential impacts from withdrawing and/or transferring water from the Capitan Reef aquifer and the Dell City area to El Paso County including any potential impacts to springflow in the region.

## CHAPTER 5, WATER QUALITY IMPACTS AND IMPACTS OF MOVING WATER FROM AGRICULTURAL AREAS

Consideration of impacts of water management strategies on water quality is a key issue, especially in west Texas. Section 357.7 (a)(12) of the Board's rules require that analysis. In particular, we believe discussion is needed about the potential impacts on water quality from the discharge of effluent resulting from the various groundwater sources proposed for use by El Paso County. Similarly, if desalination is likely, some discussion is needed about the disposal of concentrate water from the desalination process and potential water quality and other impacts associated with that disposal.

**Section 5.3, Page 5-15**. Please include an overview of the water quality of reuse water.

**Section 5.5, Page 5-25.** Please explain if the removal of groundwater from the Dell Valley area will impact the water quality of the remaining groundwater in storage.

**Section 5.5, Page 5-25.** Please explain if the removal of groundwater from the Capitan Reef aquifer will impact the water quality of the remaining groundwater in storage.

**Section 5.5, Page 5-25.** Please explain how the reallocation of surface waters from agricultural use to municipal use may affect the water quality of the Rio Grande, i.e. due to a reduction in agricultural return flows to the river and surrounding alluvium, etc.

**Section 5.6, Page 5-27.** Please address the potential impact that moving groundwater from rural agricultural areas may have on local soils and groundcover, through loss of soil moisture content and erosion.

**CHAPTER 6, WATER CONSERVATION AND DROUGHT CONTINGENCY**

**Section 6.4, Page 6-11.** As drafted, the purpose of this section is unclear. The text doesn't appear to contain any actual water conservation recommendations. In fact, the overall initially prepared plan seems to be lacking in discussion of water conservation strategies for the various water user groups identified in Table 4-1 as having water needs. As noted above, there isn't sufficient information provided about the anticipated savings through water conservation to identify which water user groups would be implementing the conservation practices. TWDB rules require that water conservation strategies be <u>considered</u> for each water user group with an identified need for water and that water conservation recommendations be <u>included</u> for user groups required, pursuant to Section 11.272 of the Water Code, to have water conservation plans.

**Section 6.5, Page 6-13.** Please include the website address for these sample plans. We assume that the "Word Perfect"/"PDF" references were originally hyperlinks to the forms.

The documents included here appear to be water conservation plan forms rather than model conservation plans. We believe that a model plan must include examples of the water conservation measures the planning group considers to be appropriate. For example, the model plan should reflect the best features of the various example plans included in Appendix 6A.

**Section 6.6, Page 6-15.** Please include the website address for these sample plans. We assume that the "Word Perfect"/"PDF" references were originally hyperlinks to the forms.

**Appendix 6A.** It appears that most of the example plans included here have not been updated to include the specific, quantified targets for water savings currently required pursuant to Sections 11.1271 (c) and 11.1272 of the Water Code and TCEQ rules. If updated plans are available, we would encourage the inclusion of those updated versions.

**CHAPTER 7, PLAN CONSISTENCY**

It is impossible to review this chapter in its incomplete form. Given that this chapter is critically important for the protection of natural resources in the region, we request that a mechanism be established to accept comments on this chapter once a complete draft is available.

As you know, the Texas Legislature, in recognition of the key importance of this information, specifically provided that TWDB may not approve a regional water plan absent an affirmative finding that the plan is consistent with long-term protection of the state's water resources, agricultural resources, and natural resources. See Texas Water Code Section 16.053 (h)(7)(C).

**CHAPTER 8, RECOMMENDATIONS**

We commend the planning group for the recommendation of three segments for designation as Ecologically Unique. We would encourage the group to provide some discussion on why only segments within state and federal lands were recommended. This could help to avoid any potential false impression that those are the only segments in the region that have special characteristics deserving of protection.

Thank you for your consideration of these comments and please free to contact us if you have any questions. We look forward to a continuing positive dialogue with the planning group during this and future planning cycles.

Sincerely,



| Myron Hess | Mary Kelly | Ken Kramer |
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| National Wildlife Federation | Environmental Defense | Sierra Club, Lone Star Chapter |

cc: Robert Flores, Region E liaison, TWDB
Kevin Ward, TWDB
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