

Texas Water Development Board  
Office of Planning  
P.O. Box 13231  
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Attn. Phyllis Thomas  
Re. Comments on draft State Water Plan

Please accept the following comments of Environmental Defense on the draft State Water Plan, *Water for Texas 2002*.

In previous comments regarding the first round of regional and state water planning pursuant to Senate Bill 1, Environmental Defense has tried to offer suggestions to improve the regional planning process so that SB1 water planning can truly live up to its potential. The following comments are offered in that same spirit.

### **Need for a caveat to the State Water Plan**

It is important for Texas legislators and citizens to know with some accuracy the significance of a project's inclusion in the state water plan. It is reasonable to expect that many citizens will perceive inclusion of a particular project as an indication that the project has passed at least some level of independent state review. As members of the Board have indicated in meetings this summer, individual projects have not received such review. To make this fact clear to the public, Environmental Defense recommends that the following or similar statement be prominently placed in the State Water Plan:

*Approval of a regional water plan by the TWDB should not be construed as an endorsement or approval of any specific project within the regional plan. For instance, the TWDB has not reviewed or performed the following types of analysis for water supply projects listed in the state water plan:*

*a comparison of the benefits and costs of specific water supply projects  
a review of the impacts on water quality  
a quantification of the impact on instream flows and/or inflows to bays and estuaries*

### **Need for State Leadership**

It is important to remember that part of the impetus for comprehensive regional water planning was the desire to reduce conflicts associated with new water projects by identifying and addressing potential problems in the planning stage. If the planning process fails to adequately address difficult issues, and those issues are deferred to subsequent permitting and funding decisions, then we have done nothing in state and regional planning to better manage conflicts and provide more efficient planning.

Environmental Defense believes that the initial round of regional and state planning has fallen short of the goal of SB1. This is not because of any lack of effort or dedication by the regional planning groups. In fact, we compliment the members of the regional planning groups for the efforts they have contributed. Instead, many of the shortcomings in the initial round of SB1 water planning have resulted from missed opportunities for leadership and assistance from the TWDB. We hope that the TWDB will reexamine its role in water planning so these shortcomings can be addressed in the second round. Specific opportunities for more state leadership are listed below.

## **1. Scenario analysis**

Almost any type of planning or modeling conducted by business or scientists involves analysis of varying scenarios. This is done because many variables, especially those concerning future conditions, are hard to predict. Performing analysis of several scenarios also gives decision-makers a better appreciation of possible outcomes and a more complete description of the range of policy options before them.

State water planning can benefit greatly from scenario analysis. The need for additional water supplies and the cost of meeting those needs may vary significantly depending on assumptions made or the implementation of state policies.

The following are just a small sampling of scenarios that would be helpful to Texas legislators and citizens in evaluating water supply options:

- What would the impact on water demand and water supply costs be if we assumed that all Texas cities achieved a per capita water use of 150 gals/day?
- What would the impact on water demand and water supply costs be if lawn watering in all years is reduced by 25%?
- What would the impact on water demand and water supply costs be if lawn watering is reduced by 50% in a year of record drought?

## **1. Initial review of individual projects.**

There are dozens of water management strategies listed in the regional water plans. The TWDB has said in various public presentations that not all of these projects are likely to come to fruition and that some projects make more sense than others. But there has been no effort in the draft State Water Plan to help legislators or the public gain any appreciation of which projects are more or less likely to encounter difficulty moving towards completion. This type of review could help the state prioritize projects that may compete for scarce public funds.

It would be relatively easy to rank projects on several scales such as:

- cost per acre ft. of water generated
- impacts on land
- impact on instream flows and/or inflows to bays and estuaries
- need for interbasin transfers
- relationship of groundwater pumping to annual recharge rates

Then scores could be aggregated and projects could be ranked along a continuum or in several categories from low cost/conflict to high cost/conflict.

## **1. Economic analysis needs serious improvement**

Today, the State of Texas has no reasonable estimation of the costs required to meet water needs over the next 50 years. The TWDB has failed to establish a set of generally accepted economic principles for use in water planning. This may be part of the reason for the discrepancy in cost estimates to meet water supply needs from \$4.7 billion in the 1997 State Water Plan to \$17.9 billion in the 2002 draft State Water Plan. Failure to utilize economic principles that are commonly used for all other investment decisions will undermine the confidence of Texas citizens that their funds are being managed judiciously. Also, failure to establish common general principles for economic analysis prevents the State from having the information necessary to compare and rank projects on a sound basis.

Specific areas for improvement that we have mentioned in prior comments to the TWDB are listed below. Of these, only discounting has been addressed by the Board.

1. *Discounting costs and benefits over the life of the planning horizon to estimate the present value of a project.* Discounting is the only way to accurately compare and evaluate projects that incur costs and benefits at different points of time.
2. *Closer examination of the relationship between user demand and price, especially considering the reaction of quantity demand to water prices and the opportunity to transfer water from one use to another.* The current planning regime often treats demand as a static concept and does not adjust demand forecasts to account for rising water prices and alternative patterns of water use in response to price.
3. *The definition of a drought and the way the probability of drought is distributed over the 50 year planning horizon.* The current planning protocol appears to overestimate the expected severity and frequency of drought conditions. This would exaggerate the benefits of water development projects and could result in wasteful investment in resources.
4. *Analysis of the cost and benefits of individual projects.* Unless cost-benefit analysis is conducted for individual projects, a regional or state plan may actually consist of several good projects that subsidize other projects where the benefits do not outweigh

costs. More efficient use of scarce water resources and water development funds requires funding only the specific projects that generate positive benefits.

5. *Costs and benefits should include impacts on environmental values such as instream flows, bays and estuaries, and recreational values.* Current plans do not evaluate the impact of water development projects on environmental values. This has the effect of underestimating the cost and/or overestimating the benefits associated with a particular project.

## **1. The effectiveness of public participation needs to be evaluated**

A central principle of the water planning process envisioned in SB1 is public participation. Regional planning has been described as a “bottom up” process. The TWDB points to the figure of 900 meetings as a measure of public participation. But the number of meetings is not an indicator of public participation.

For example, prior to receiving comments on the draft State Water Plan in public meetings, TWDB staff indicated to the audience that while they were there to listen to what people had to say, it would not influence the State Water Plan. Obviously this kind of approach sends a message that the public’s participation is of little consequence. Many commentators have suggested there was little real opportunity to make a difference in the regional planning process.

Environmental Defense suggests that the TWDB contract with an independent organization to review the public participation in the first round of SB1 planning and make recommendations to improve public participation in the second round. This review could include the following questions:

What range of interests were present at meetings?

How was the meeting time divided among interests?

Did participants feel that their viewpoints were considered in the planning process?

How effective were attempts to notify affected interests?

How much advance notice of meetings was offered?

How were tasks divided by the regional planning groups?

How were decisions reached?

## **Conclusion**

If the TWDB takes these opportunities for improved state leadership, we believe that state and regional water planning has a greater chance of living up to the potential envisioned in Senate Bill 1. Environmental Defense stands ready to assist TWDB in this important endeavor.

Sincerely,

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