

## MEMORANDUM

FROM: Texas Environmental Flows Science Advisory Committee (SAC)

TO: Environmental Flows Advisory Group (EFAG), Co-Chairs Senator Troy Fraser and Representative Alan Ritter

DATE: December 13, 2012

SUBJECT: Adaptive Management Work Plans for Senate Bill 3

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Senate Bill 3 requires that each Basin and Bay Area Stakeholders Committee (BBASC) prepare and submit to the Environmental Flows Advisory Group (EFAG) a “work plan.” Section 11.02362(p) of the Texas Water Code, as added by Senate Bill 3 [80(R) - 2007], provides:

*In recognition of the importance of adaptive management, after submitting its recommendations regarding environmental flow standards and strategies to meet the environmental flow standards to the commission, each basin and bay area stakeholders committee, with the assistance of the pertinent basin and bay expert science team, shall prepare and submit for approval by the advisory group a work plan. The work plan must:*

- (1) establish a periodic review of the basin and bay environmental flow analyses and environmental flow regime recommendations, environmental flow standards, and strategies, to occur at least once every 10 years.*
- (2) prescribe specific monitoring, studies, and activities; and*
- (3) establish a schedule for continuing the validation or refinement of the basin and bay environmental flow analyses and environmental flow regime recommendations, the environmental flow standards adopted by the commission, and the strategies to achieve those standards.*

The adaptive management process will require project prioritization, fund raising, project implementation, and re-evaluation of flow standards and strategies for achieving the standards. This process will take years to develop and implement and will require commitment, continuity, and persistence on the part of the group in charge. The work plan is the vehicle for implementing adaptive management, which is a critical component of the SB 3 process along with a focus on sound science and broad input from regional stakeholders. By including an adaptive management component, the legislature recognized that new information and new conditions could affect the flow standards initially adopted under SB 3.

The SAC has now reviewed four work plans prepared by BBASCs. Information on work plans also has been included by three other BBASCs in their reports to the Texas Commission on Environmental Quality or in the reports of their Basin and Bay Expert Science Teams (BBESTs).

As requested by the EFAG, the SAC has already provided substantive comments to the EFAG on the Sabine/Neches, Trinity/San Jacinto, Colorado/Lavaca and Guadalupe/San Antonio work plans. The Sabine/Neches work plan has been approved by the EFAG and the remaining three are pending approval. Work plans for the Nueces, Brazos and Rio Grande basins are in various stages of preparation by the respective BBASCs.

In reviewing the various work plans that have come before the SAC, and in conversations with BBASC, BBEST and state agency representatives, the SAC has identified a few issues that we believe may warrant the attention of the EFAG. We've grouped the issues into four categories, each of which is discussed in more detail below:

- Work plan implementation (lead entity, supervision, carrying out tasks);
- The role of state agencies
- Coordination with SB 1 and SB 2
- Funding

### **Implementation**

The BBASCs took a variety of approaches to work plan implementation and execution. Senate Bill 3 does not clearly assign work plan implementation responsibilities to any particular group or agency. In particular, the statute does not address a continuing role for the BBASC or BBEST in each basin. The completed work plans all recommend that, at a minimum, "oversight" of the work plan implementation be carried out by the BBASC itself, with "support" from state agencies. Others recommend a strong and active leadership role by the BBASC, with support from the BBEST, while some simply suggested "continued BBASC involvement," but seem to rely on a stronger state agency role in implementation. It is noteworthy that the statute requires that there be stakeholder participation by those having interests in the particular basin in any future rulemaking by TCEQ to modify environmental flow standards based on adaptive management results,<sup>1</sup> but there is no direct reference to the BBASC as the vehicle for this input.

In our view, this is an important issue for consideration by EFAG. Several BBASCs appear to want to stay in place and take a major role in implementing their work plan, which includes tasks such as prioritizing and finding funding for key research tasks; assisting in administration of contracts for such research; and examining how to implement potential strategies to meet environmental flow standards. Generally they also expressly state that they hope to get help from their BBESTs. In all cases, the BBASCs recommend that they be responsible for developing any recommendations to the TCEQ for modifying adopted standards. Lack of clarity as to the legal status of the group in charge would substantially lower the chances of successfully implementing the approved work plans.

Maintaining broad-based regional representation is consistent with the SB 3's provision<sup>2</sup> that:

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<sup>1</sup> Section 11.1471(f), Texas Water Code.

<sup>2</sup> Section 11.0235, Texas Water Code.

*(d-6) The legislature finds that recommendations for state action to protect instream flows and freshwater inflows should be developed through a consensus-based, regional approach involving balanced representation of stakeholders and that such a process should be encouraged throughout the state.*

However, Senate Bill 3 essentially provides that the EFAG, the SAC and the BBASCs, including the BBESTs, all expire on the “date that the commission has adopted environmental flow standards under Section 11.1471 for all of the river basin and bay systems in this state.”<sup>3</sup> Depending on how the meaning of the word "all" is interpreted here, it is not clear exactly when this expiration date occurs; but in any event, the statute appears to leave uncertainty as to the BBASCs and the BBESTs long-term availability for leading work plan implementation. Also, there is currently no statutory provision for the EFAG to continue providing long-term leadership for the SB 3 process.

***Recommendation: The SAC believes the continued involvement of the BBASCs in the work plan implementation phase of the environmental flows process, with appropriate technical support from their BBEST, would be beneficial. The SAC acknowledges that for this approach to work, legislation may be required. Furthermore, SB 3 does not provide for a full repeat of the initial BBEST/BBASC process through work plans in order to validate or refine the environmental flow standards. The SAC agrees that such a full repeat is not necessary. However, as work plans are executed, guidance from the EFAG regarding the process to refine flow standards over time would be beneficial.***

### **The Role of State Agencies**

The state resource agencies played a substantial role in the initial environmental flow standards development under SB 3. Virtually all of the work plans identify priority research tasks (hydrological or ecological field data collection and analysis, research, modeling or other tasks) that could be carried out effectively by one or more of the three state agencies involved in the SB 3 environmental flows process: the Texas Parks and Wildlife Department (TPWD); the Texas Water Development Board (TWDB); and the Texas Commission on Environmental Quality (TCEQ). Some of these tasks might be accomplished in certain segments of various river basins through the agencies’ on-going Senate Bill 2 studies. Importantly, the agencies have said they are trying to adapt their SB 2 study plans to directly contribute to SB 3 work plans where possible, and the SAC has strongly encouraged this initiative.

Senate Bill 3, however, is silent on whether the agencies should play either a central or assistance role in work plan implementation. While funding will certainly be an issue, as discussed below, the SAC believes that it is essential that the BBASCs receive some level of assistance from the agency resources in work plan implementation, both with completion of specific priority research tasks and assistance with contract administration.

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<sup>3</sup> EFAG expiration set by Tex. Water Code Sec. 11.0236(m); SAC expiration set by Tex. Water Code Sec. 11.02361(g); BBASCs expiration set by Tex. Water Code Sec. 11.02362(s).

***Recommendation: Maintaining all of the three key pillars of the SB 3 environmental flow standards - regional, stakeholder-driven, and science-based - suggests that it is inappropriate to cede the adaptive management process to one or more of the state resource agencies. Clearly, these agencies have and can continue to provide significant science-based input. Thus, the SAC recommends that the state agencies continue to play a support role to the BBASCs, or to other appointed regional representatives, with primary leadership and direction of the overall work plan process provided by the BBASCs.***

### **Coordination with SB 1 and SB 2**

As the environmental flows process matures, discussion has arisen about how SB 3 work plan implementation and any future standards revisions should or could be coordinated with regional and state water planning under SB 1 and the basin-specific detailed environmental flow studies contemplated by SB 2. Almost all of the BBASCs recommended some level of coordination with respect to regional water planning under SB 1. While it is not our role to suggest specifics as to how such coordination might best occur, we do believe that it should be structured so that the SB 1 planning process makes the best possible use of the flow standards and related science from the SB 3 process, and that the results of regional planning be employed to inform the “balancing” of water needs required by SB 3. Finally, while recognizing that the SB 2 studies alone will meet only a partial subset of the needs for the BBASC work plans, agencies should be empowered to adjust SB 2 studies insofar as possible to help meet work plan needs under SB 3.

***Recommendation: EFAG should consider how SB 3 work plan implementation and any standards revisions might be better coordinated with regional and state water planning under SB 1 and the basin-specific detailed environmental flow studies contemplated by SB 2.***

### **Funding**

Taken together, the work plans identify a number of priority research and analytical needs in order to carry out the “adaptive management” charge of SB 3. Several BBASCs sought to link these needs to other on-going programs (state, regional or local), to the extent possible. However, it is clear that there are substantial work plan implementation needs that cannot reasonably be funded through existing programs.

***Recommendation: The SAC believes that state funding of work plan implementation is critical to continuing an effective environmental flows process as contemplated under SB 3. The EFAG may want to consider whether and how work plan implementation can be funded.***