

## Memorandum

**To: Environmental Flows Advisory Group**  
**From: Texas Environmental Flows Science Advisory Committee**  
**Date: 13 November 2012**  
**Re: Review comments on the Guadalupe/San Antonio Work Plan for Adaptive Management dated May 25, 2012**

### Preface

The Environmental Flows Advisory Group (EFAG) requested that the Texas Environmental Flows Science Advisory Committee (SAC) review Work Plans prepared by the various Basin and Bay Area Stakeholders Committees. The SAC has performed the requested review of the Guadalupe/San Antonio document pursuant to Texas Water Code 11.02361 (e)(1) and (p) as presented below:

**Sec. 11.02361 (e)(1):** “The science advisory committee [SAC] shall (1) serve as an objective scientific body to advise and make recommendations to the advisory group on issues relating to the science of environmental flow protection...”

**Section 11.02362 (p):** 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.

On May 25, 2012, the Guadalupe, San Antonio, Mission & Aransas Rivers and Mission, Copano, Aransas, & San Antonio Bays Basin and Bay Area Stakeholders Committee (BBASC), presented to the EFAG and the Texas Commission on Environmental Quality (TCEQ), their Work Plan for Adaptive Management.

As noted above, the EFAG has charged the SAC to review the Work Plans as submitted, and to provide comments to the EFAG. The SAC previously published a guidance document entitled “Considerations and Development of Work Plan for Adaptive Management” (Report #SAC-2010-02). This document has been available to the G/SA BBEST and BBASC, and has been referred to pursuant to this review. The SAC comments are summarized below.

## Overview

Overall, the SAC compliments the G/SA BBASC for preparing a document that is well organized and concise, and in most respects easy to follow. Various work elements are well defined, and a two stage prioritization was employed, first to the “tier” level (Tiers 1, 2 and 3), and then a detailed priority in the first tier of proposed elements. A five (5) year time frame is proposed, starting with the TCEQ rule adoption, which occurred in August 2012. Preliminary Scopes of Work are provided for each work element of the Work Plan, and they are conveniently formatted to provide the “what, why, where, and when” of each element. They go on to suggest who should be involved in each draft scope, and provide an estimate of the range of cost. Finally, dependencies between the various work elements are described. The initial table listing all work plan elements was a helpful guide to direct the reader (by page number) to the preliminary scopes which make up the bulk of the document.

The SAC observes that, while durations are identified for each work element, the report does not contain a proposed integrated schedule for the performance of the work. Uncertainty regarding funding sources no doubt contributed to the Stakeholder hesitancy to present a schedule. The SAC does presume that the Tier 1 studies, which are deemed to be the most critical to support review and evaluation of the original BBEST flow regime development and the Standards and Strategies, are anticipated to be completed in the first five year review cycle. These proposed Tier 1 studies are consistent with the recommendations in both the BBEST and BBASC reports.

The Tier 2 and Tier 3 work element scopes are generally very ambitious and less focused to specific data gaps. Given our presumption that these studies are unlikely to be performed within the first five years, absent materialization of significant sources of funding, it is understandable that these work elements remain less well defined and not specifically prioritized. Doing so as the Tier 1 work progresses appears prudent and realistic, but further development and specificity within these future tiers will be required before the work beyond Tier 1 is initiated.

The G/SA BBASC put significant focus on the need for a suite of strategies to meet environmental flow needs in the basin. SB3 is clear that the standards adopted by TCEQ after completion of the science team and stakeholder processes apply solely to new Water Rights permits and major amendments to existing Water Rights. However, SB3 also permits, and in fact encourages, voluntary actions by existing water right holders that could be directed toward more fully satisfying environmental flow needs as evidenced in the Standards. Referred to as “strategies” in the statute, these measures could be part of the adopted standards relative to new permits or to voluntary measures affecting existing rights.

As noted, the G/SA stakeholders put substantial emphasis on identification of Strategies in their recommendations report and in their Work Plan. However, this was a part of the report that was not quite as clear as the remainder of the document. It appears that Section 3: Strategies to Meet Environmental Flow Standards; Identification, Quantification, Implementation and Measurement is a “work plan” within the Work Plan. Again the argument is made, citing future utilization of existing Water Rights, that the primary focus for maintaining future environmental flows in this basin will be based on identification and execution of a set of strategies. A lengthy list of identified strategies is presented (largely from the BBASC report), and then starting at the middle of page 4 through most of page 5, an ambitious set of activities is laid out to support strategies refinement and development by the BBASC. While there is some limited overlap with the Work Plan elements, most of the work described apparently will run parallel to execution of the Work Plan elements. If this reading by the SAC is correct, the presentation of this effort

could have been integrated with the remainder of the Work Plan more effectively and with more clarity and specificity, while not compromising the significant role of the BBASC in this work.

### **Other Specific Comments**

- The number one priority item in the Work Plan is for the state to undertake the SB2 inflow study on the Guadalupe River (currently underway). Given the significance of this effort in the Work Plan, it will be critical that the TIFP study remain on schedule for completion in 2016.
- The Work Plan does not appear to specifically address how the recommended environmental flow regimes will be assessed during the 5-year period, and the need for adaptation in light of new information and/or potentially changed conditions. Such an assessment is important as it could affect the priorities for further work.
- With regard to the specific Tier 1 Work Plan tasks, the SAC largely agrees with the initial scopes of work and the prioritization with one exception. The portion of Priority #6 dealing with full accounting of flows and analysis of exempt uses, would appear to call for an unwarranted level of sophistication (GIS) to quantify what is essentially an ever changing universe of Domestic and Livestock uses which are exempt from water rights permitting. It would seem that a more qualitative approach would allow sufficient inclusion of these water uses in an overall accounting of flows for purposes of environmental flow considerations.
- While the report appeals to the Legislature to provide adequate funding for environmental flow studies, in particular execution of SB3 Work Plans, the preliminary Scopes of Work identify other potential sources. As noted in SAC guidance, continued pursuit of all funding vehicles is strongly encouraged.
- SB3 is silent on the administration of the adaptive management process. The G/SA report makes a clear recommendation that an appointed stakeholder body should be maintained and should take the lead. They also assert that maintenance of the role of the science team is critical to successful adaptive management, and that funds need to be provided for that purpose.
- Continued participation of the state resource agencies is presumed, and the G/SA BBASC recommends additional coordination with the TCEQ particularly with respect to water availability modeling.
- Unlike all of the other completed SB3 Work Plans, the G/SA BBASC did not mention how, if at all, the scheduling for adaptive management should be coordinated or integrated with the Regional Water Planning which is conducted on a five-year cycle under Senate Bill 1.