

**Guadalupe, San Antonio, Mission, and Aransas Rivers and
Mission, Copano, Aransas, and San Antonio Bays
Basin and Bay Expert Science Team (BBEST)**

Thursday, July 8, 2010 at 10:00 a.m.
Harte Research Institute, Corpus Christi, TX

MINUTES

Call to Order and Introductions

Chairman Sam Vaughn called the meeting to order.

Public Comment

There were no public comments at this time.

Approval of Minutes from June 11, 2010

A minor edit was made to the discussion of a Sound Ecological Environment, and the minutes were approved by consensus.

Science Advisory Committee (SAC) Report (Ward)

George Ward, SAC liaison, discussed the topics currently being addressed by the SAC. He discussed the need to evaluate implications of flow arrays on water planning, and outlined the SAC's discussions concerning the WAM and its assumptions, noting the difficulty of moving from daily flows to monthly flows in the WAM.

BBASC Report (Vaughn, Raabe)

Sam outlined the BBASC discussion regarding the replacement of Dr. Paul Hudson on the BBEST. He relayed the thoughts of the BBEST to the BBASC members indicating they felt that there was sufficient expertise among the remaining BBEST members that a replacement was not necessary. The BBASC agreed to accept the recommendation of the BBEST and not replace Dr. Hudson.

Steve Raabe, SARA, discussed the approach the BBASC was taking, noting that the group was now in the information dissemination phase and was receiving several briefings and presentations. The group plans to discuss how to address and approach BBEST recommendations in the last several meetings prior to receiving the BBEST recommendations.

BBEST Budget Update

Members discussed the budget and it was noted that it is moving through TWDB for approval. Members agreed that if subcommittee meetings go beyond budgeted time that all members would reflect just the budgeted time spent in meetings. Members agreed to document activities and deliverables of subcommittee meetings in order to differentiate between subcommittee meetings and technical assignments of the members.

Subcommittee Reports (Brief w/ Identification of Key Work Elements & Issues)

Each subcommittee chair gave an update on the activities that have occurred since the last full BBEST meeting for consideration by the BBEST as a whole later on in the agenda.

Discussion of Sound Ecological Environment (Johns, et al)

Members discussed a strawman document as a starting point for defining a sound ecological environment. The discussions included how to judge what is or isn't sound and whether sound would mean "pristine" or otherwise be characterized. Several members noted that our focus must be on flows as they affect species status with understanding that other physical, chemical, or biological factors also affect species status. While the strawman was shelved for the time being, the BBEST anticipates developing a document that outlines the decisions and considerations used to determine what constitutes a sound ecological environment. This will be included in the final environmental flows recommendation report. Tyson Broad, BBASC member, commented that this document will be helpful to the BBASC.

Discussion of Instream Work Elements and Issues

Tim Bonner and Thom Hardy led a discussion of building a framework for selection of focal species and how to move forward with these considerations. The framework is based on known or suspected historical occurrence of species assemblages in the specific watersheds, an examination of their historical trends, and habitat guilds derived from existing literature. This framework allows the BBEST to tie biology to the selected sites. The BBEST agreed by consensus to formally create an Assigned Task of 8 hours billable time for Tim Bonner and Thom Hardy to move forward with this approach and develop a matrix of flow sensitive indicator species. Tom Hardy introduced a potential methodology for relating stream cross-sections, flow, and habitat using a large reference database including streams in the United States and the United Kingdom. This methodology and associated work efforts (including linkage of habitat to species) may be considered at a future meeting.

Discussion of Hydrology Work Elements and Issues (including Scope of HEFR Analyses)

Led by Sam Vaughn and other subcommittee members, topics of discussion were period of record, seasonality, and other issues and considerations related to hydrology. These considerations will feed into a scope of work for HEFR analyses and other hydrology-related technical support to the BBEST. These factors were discussed in relation to the sites selected as part of defining the geographic scope of the system. By consensus, the BBEST agreed to add the Guadalupe at River at Comfort and Gonzales to the previously selected set of 14 sites. The group agreed not to use the Guadalupe above the confluence with the Comal. This brings the total number of sites to 16. The group agreed to set January – March, April – June, July – September, and October – December as the default seasonality.

The BBEST also discussed the development of the hydrology scope of work and agreed by consensus to select 5 pilot sites that TPWD will use for preliminary time series and HEFR analyses which will allow the BBEST to refine the inputs to the final HEFR calculations and, ultimately, identify the appropriate period(s) of record on which to base flow regime recommendations. The pilot sites are: the Guadalupe at Victoria and Spring Branch, the San Marcos at Luling, the San Antonio at Falls City, and the Mission at Refugio. Dan Opdyke will perform this task with input from hydrology subcommittee and will report back at the next BBEST meeting.

Discussion of Estuary Work Elements and Issues

This subcommittee is considering factors to help define a sound ecological environment and discussed focal species selection, habitat components, primary production, as well as other factors.

The subcommittee recommendation is to set the geographic scope to include the TCEQ's recognized tidal river segments and the points of tidal exchange with the Gulf from the Aransas Pass Causeway to the Matagorda jetties. The subcommittee discussed period of record as well as indicator species and available habitat. The subcommittee has thus far recognized oyster reefs and *Rangia* beds as fixed habitats of utility since these species have well defined salinity ranges.

At the request of the subcommittee, the BBEST decided to initiate a "pilot project" with Guadalupe Estuary oyster beds to evaluate the utility of a salinity zonation approach to developing inflow recommendations. Subcommittee members will coordinate this effort with data and analyses provided by TWDB and TPWD. The group formally created an Assigned Task of 8 hours billable time for Norman Johns to analyze and present the results of this "pilot project" at the next meeting.

Future Meetings

The next meeting is set for August 12, 2010 and will be held at the GBRA River Annex in Seguin. The September meeting is scheduled for September 9, 2010. Various subcommittee meetings will also be scheduled.

Public Comment

No public comment was received.

Adjourn