

**Guadalupe, San Antonio, Mission, and Aransas Rivers and
Mission, Copano, Aransas, and San Antonio Bays
Basin and Bay Expert Science Team (BBEST)**
Thursday, August 12, 2010 at 10:00 a.m.
GBRA River Annex, Seguin, Texas

MEETING MINUTES

Call to Order and Introductions

Chairman Vaugh called the meeting to order.

Public Comment

There was no public comment at this time.

Approval of Minutes from July 8, 2010

The minutes from the July 8, 2010 meeting were approved by consensus.

Science Advisory Committee (SAC) Report (Ward)

George Ward, SAC liaison, brought the group up to speed on the activities of the SAC. He noted that the "Lessons Learned" guidance document has been formally released and is now posted to the web. He also discussed the development of a "Work Plan" guidance document which the SAC will be completing prior to their next meeting.

BBASC Report (Vaugh, Raabe)

Chairman Vaugh discussed the update on BBEST activities he gave to the BBASC at their August 1, 2010 meeting in New Braunfels. He discussed the decisions that had been made by the BBEST as well as the ongoing discussions. He also discussed the general activities of the BBEST subcommittees. He explained the pilot study on 5 selected gage stations for which a preliminary HEFR analysis will be done which will allow the BBEST to refine the inputs to the final HEFR calculations.

Steve Raabe, SARA, noted that the BBASC was in the information-gathering phase, focusing on presentations by the various interest groups represented on the BBASC, with the intent to better inform members of the basin conditions and other relevant considerations that will be necessary for the group in developing their environmental flow recommendations.

BBEST Budget Update (TWDB)

Carla Guthrie, TWDB, discussed the remaining balance of the BBEST budget, which has not yet been formally approved by the EFAG. She noted that if the budget is not approved by August 31, 2010, the group would not be able to initiate any contracts until the next fiscal year which begins on September 1, 2010. Vice Chair Norman Johns presented a summary of BBEST meetings, which included the length of billable time for

each and asked that members consider this information when submitting invoices for reimbursement.

The group agreed to allow 2 billable hours for subcommittee meetings and 5 billable hours for each full BBEST meeting.

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 Estuary Work Elements and Issues

Warren Pulich, Estuary Subcommittee Chair, explained that this subcommittee was following a salinity zonation approach, similar to what occurred with the Trinity/San Jacinto BBEST. He noted that this subcommittee had made significant progress in performing an oyster pilot project for San Antonio Bay in conjunction with TPWD and TWDB staff. Other meetings among Subcomm. members were held and information gathered from agency staff to help lay the groundwork for initiating similar projects to be done on Atlantic Rangia. The group is also considering a methodology which may be applied to motile species in the bay and estuary system such as white shrimp and blue crab.

Norman Johns presented the results of a pilot project looking at oysters in the Guadalupe estuary. He noted that, while the “raw” results of area within ideal 10-20ppt limits varied greatly as a function of inflows, that there does emerge an order to the results if antecedent conditions are considered. The BBEST members and SAC liaisons Ward and Wiersema discussed these results and offered comments on the project. Key suggestions from the SAC liaisons and the BBEST membership for refinement of the methodology presented included integration of transitional salinity suitability, periodic areal calculations, automated computation procedures, and development of a “grading scheme” to summarize results for development of recommendations. Dr. Johns explained that the subcommittee has learned a lot from the pilot and, with an eye toward further applications of the same method, would like to further refine their analytic method to automate the synthesis of results.

Subcommittee Chair Warren Pulich also proposed to begin the same process on Atlantic *Rangia* in San Antonio Bay and apply the same analysis using the TxBLEND output and determining the amount of area for the same period of record. However, the months of interest will be changed to coincide with important life history stages of the respective species (e.g. *Rangia* literature indicate salinity values which limit reproduction likely in spring and/or fall windows). The subcommittee would also like to do the same analysis on white shrimp to determine the area of their salinity zone.

Dr. Tim Bonner proposed that the subcommittee prepare a written statement of anticipated results and how these may be arranged into an inflow recommendation(s). By consensus, the BBEST agreed to allow this subcommittee to move forward with these proposed work elements, contingent upon bringing a formal outline / proposal to the BBEST membership.

Discussion of Instream Work Elements and Issues

Tim Bonner distributed and discussed a draft outline of a report to be developed by this subcommittee which describes the approach for the recommendation of focal species. The members discussed certain aspects and assumptions of the proposed process. The draft report lays out the scientific rationale and literature-based justification for habitat guilds, focal species, and why this approach is adequate to accommodate other taxa/groups not being modeled in the assessment.

The subcommittee proposes to follow through with the cross sectional information and further explore the desktop method proposed at the July meeting by Thom Hardy, at which point the subcommittee would be ready to apply their analysis to the HEFR outputs developed by the Hydrology subcommittee.

The BBEST members agreed by consensus to allow the Instream subcommittee to proceed as proposed.

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

Chairman Vaugh explained that the Hydrology subcommittee held two meetings which focused primarily on the preliminary pilot project for HEFR analysis (see minutes from July 8, 2010 BBEST meeting). The meetings were held so the members could define parameters and discover trends as well as refine and come up with recommendations to bring to the full BBEST. The subcommittee did not make decisions on what period of record to use, but requested that Dan Opdyke, TPWD, run scenarios consisting of pre-reservoir development, post-reservoir development, and full period of record for evaluation. The subcommittee presented the initial HEFR results from the 5 gages used in the pilot study.

Dr. Opdyke made an extensive presentation on hydrologic results and items needing further consideration. After extended discussion, the BBEST, by majority vote, agreed to use the MBFIT method, with appropriate parameter adjustments, as the hydrographic separation tool. Stated objectives of the MBFIT parameter adjustments were to address base flows that are too high and retain small pulses. By consensus, the group agreed to include zero flows but to caveat their frequency of occurrence. The group also agreed to allow Dr. Opdyke to continue to use the adjusted MBFIT and report back to the hydrology subcommittee the new results. After consultation with the

Hydrology Subcommittee regarding MBFIT parameter adjustments, he will proceed with the analyses of the remaining selected pilot gage sites using pre-reservoir development, post-reservoir development, and full period of record.

Regarding the draft scope of work for a hydrology consultant, the BBEST agreed to brainstorm what other features might be needed from a hydrology consultant, and identify items that the group will need over time in order to develop a potential scope of work. Potential items include water quality analyses, and how to turn HEFR matrices into a time series of flows.

Future Meetings

The next meeting was rescheduled to be held on Tuesday, September 14, 2010. The October meeting will be held on the 14th of that month. Following that, the next meeting is scheduled for November 18, 2010, likely to be held in Corpus Christi, TX.

12) Public Comment and Adjourn

Sam Helmle asked if there were any gage stations north or west of Elmendorf, and would they be considered by the BBEST. The group explained that there are selected sites in that area, specifically the Medina River at San Antonio and the Medina River at Bandera.