

**Colorado and Lavaca Rivers and Matagorda and Lavaca Bays  
Basin and Bay Area Stakeholder Committee (BBASC)**

Tuesday, September 22, 2015, at 10:00 a.m.  
LCRA Eastern Maintenance Facility in La Grange, TX

**MEETING MINUTES**

**Attending Members**

Pat Brzozowski, Chair; Myron Hess, Vice-Chair; Steve Box for Andrew Sansom; Jennifer Walker; Ronald Gertson; Jim Dailey; Jack Maloney; John Gosdin; Karen Bondy; Jeff Fox for Teresa Lutes; Frank Lewis; Mike Rivet for David Hill; Michael Skalicky for L.G. Raun; Caroline Runge; Clarence Shomburg; Buddy Treybig; Carroll Hall

**Call to Order**

BBASC Chair, Patrick Brzozowski called the meeting to order.

**Public Comment**

No public comments were made at this time.

**Approval of Meeting Minutes**

BBASC members unanimously approved the May 21, 2015, meeting minutes.

**Acceptance of David Hill's alternate**

BBASC members accepted Mike Rivet to serve as David Hill's alternate to represent Chemical Manufacturing interests.

**Report from Texas Water Developmental Board (TWDB) on Results and Recommendations of Cycle 1 Studies and Process for Cycle II Funding**

Carla Guthrie, TWDB, provided members a brief overview of the results and recommendations of the two cycle 1 funded work plan projects. She indicated that the final reports had been received for both projects and that they will be posted shortly to the TWDB's contract reports webpage. BBASC Member Steve Box also informed members that the review committee had provided comments to TWDB on the draft study reports and their efforts were acknowledged by the group.

- 1) Studies to Evaluate Achievement of Inflow Standards and Ecological Response – Contractor: Anchor QEA

Dr. Guthrie reminded members of the project's goals which include updating and expanding analyses developed through the Matagorda Bay Health Evaluation Study and the BBEST's efforts on oysters and dermo, marsh vegetation, and finfish/shellfish responses and relationships. The suggested future analyses of the study team include long-term-monitoring of dermo and marsh productivity, measures and impacts of oyster health, improvements to the TxBlend hydrodynamic and salinity transport models, and application of TxBlend to quantify spatial extent of salinity areas. Members discussed the appropriateness of using the tidally influenced USGS Bay City gage for the models and inquired as to whether LCRA uses the Bay City gage. Bryan Cook, LCRA, indicated that the Bay City gage doesn't accurately reflect streamflow under 1000 cfs because of the tidal influence on the gage; thus, LCRA uses the difference between the upstream

gage at Lane City and the Bay City gage to estimate streamflow accurately in the lower basin.

2) Evaluation of Freshwater Delivery Alternatives to East Matagorda Bay –  
Contractor: AquaStrategies

Dr. Guthrie reminded members of the project's goals aimed at identifying cost-effective engineering solutions for augmenting freshwater inflows to East Matagorda Bay, with a focus on delivering flows from the Colorado River. Recommendations from the study team's report for future work include conducting a TCEQ full authorization WAM analysis to determine availability of water to support scenarios, conducting studies and data collection to inform seasonal and long-term ecological goals, characterizing the status of marshes north of GIWW and identifying causes of decline, and identifying land owners amenable to improving flows to marshes. The study team indicated in their report that additional efforts could include the use of a hydrodynamic and salinity transport models to determine location, volume, and timing of inflows to achieve the most benefit to East Matagorda Bay or to benefit marshes north of the GIWW. In addition, future studies could also investigate the feasibility of reconfiguring spoil islands to improve circulation and/or freshwater delivery as well as using brackish groundwater to augment freshwater inflows. Members inquired whether a model had been previously developed by TWDB to evaluate freshwater inflow to East Matagorda Bay and if similar projects had been undertaken in other bays and estuaries. Dr. Guthrie indicated that TWDB had worked on developing an inflow model for East Matagorda but that that work is on hold. In addition, members were informed that similar projects (Allison Waste Water Treatment Plant and Rincon Bayou pilot projects) had been undertaken in Nueces Bay and Estuary.

Following the results and recommendation summaries, Dr. Guthrie provided an overview of the Cycle II funding process. She informed the BBASC that the total amount of funding available for the continued study of environmental flows is \$2 million for all basins. She indicated that at present five out of seven of the SB3 basins have expressed interest in the funds and that the \$2 million would be evenly split among interested basins, resulting in approximately \$285,000 - \$400,000 per basin. The deadline to spend the full funding amount is August 31, 2017. Members were informed that funding could be applied to studies already underway. Dr. Guthrie stated that once a scope of work (SOW) is developed for one project that it can be taken to the Board for approval regardless if SOW development for other projects is incomplete. She also noted that persons directly involved in developing and scoring scopes of work likely would be considered ineligible to receive funding because of conflict of issue concerns.

At present, Dr. Guthrie recommended stakeholder groups identify priority projects and develop scopes of works to submit to TWDB for approval soon. In addition, members were informed that an addendum would need to be submitted for selected studies outside the scope of the original work plan. As outlined below, members were provided with a tentative TWDB board meeting schedule and deadlines for receiving the SOWs for priority projects of each group.

TWDB Board Meeting Date: Deadline to Submit Item

-----  
November 23, 2015 : October 16, 2015

December 7, 2015 : October 30, 2015

December 21, 2015 : November 13, 2015

**Discussion of BBASC Cycle II Evaluation Process and Project Prioritization**

Members decided to follow a similar process as before for the previous funding cycle and were in agreement to task a work group with developing project recommendations and drafting SOWs. The work group will submit their recommendations to the full BBASC before submitting to TWDB for approval. Volunteer workgroup members are Patrick Brzozowski, Myron Hess (chair), Steve Box, Jennifer Walker, Buddy Treybig, Jack Maloney, and Jeff Fox. Myron Hess provided BBASC members copies of Table 1 – Summary Table of High Priority Task and excerpts from Table 2 – Description of Work Plan Tasks from the group’s work plan on adaptive management. Members discussed potential priority projects as outlined below.

- 1) Item 2 Sub 3 – Describe relationships between physical habitat and flow – Myron Hess
  - a) Members discussed potential areas a project under this item would focus on, noting that extensive work already has been done on the lower Colorado River as part of previous study efforts. Other options might include Lake Austin Marshes, and the potential to include an analysis on the fate of freshwater water as it travels through the marshes to the bay.
- 2) Item 2 Sub 5 – Identify ecological effects of overbank flows and flows that reach, or almost reach, flood stage elevation but do not overbank – Carroll Hall
  - a) Members discussed whether it would be worthwhile to fund site specific studies for pulse flows, as well as out of bank flows and their relationship to freshwater inflows. There was some discussion among members whether freshwater inflows as they relate to pulse flows could be included under this item.
- 3) Item 3 – Describe relationships between groundwater and stream flow – Steve Box
  - a) Steve Box inquired as to whether the group would be interested in expediting the funding process for an extension to an already TWDB approved project, aimed at improving the Groundwater Availability Model for the Carrizo Wilcox Aquifer in Central Texas. Van Kelly, INTERA, provided members background information on the project and an overview of the proposed project extensions. He indicated that \$520,000 has already been awarded to improve modeling of faults and historic pumping for GMA 12 GAM model and that an additional 200,000 has been received to improve surface water- groundwater interaction in the models. The project commenced September 2015 with work expected to last till December 2017. Proposals to extend this project are outlined below.

- i. Option 1a – This option would include an additional model layer, produce a more refined model with a 0.25 mile grid for the main stem of the Colorado River and include alluvium layer as a separate hydrogeologic unit. The cost estimate for this extension is \$30,000.
    - ii. Option 1b (expanded) – This option would cost \$50,000 and includes an additional model layer and 0.25 mile grid for the Colorado including its tributaries.
    - iii. Option 2 – This option proposes developing a work plan with regard to data, collection, and analyses needs in the Colorado and Lavaca River Basin. For example, the project could evaluate collecting additional data using paired surface water gages and groundwater wells and an evaluation of approaches for using hydrographs to estimate groundwater-surface water exchange. The proposed cost of this option is \$10,000.
  - b) Members discussed the options above with regard to benefit of the data and whether the project is included in the BBASC’s work plan. Members did not reach a consensus at this time on whether to fast track one of the above options and inquired to the Board and study team on a timeframe for making a decision. It was indicated that a decision on whether to fund any of the project options would need to be made within the next couple of months. BBASC members were in agreement to task the work group with evaluating these options fully and ranking them in terms of prioritization.
- 4) Item 9 – Evaluate decline in flows in upper Colorado Basin with a particular emphasis on understanding the apparent change in relationship between rainfall and river flow – Carroll Hall and Caroline Runge
    - a) Members inquired whether LCRA had already started a similar project. Karen Bondy, LCRA, indicated that work is ongoing at LCRA concerning identifying causes of declining flows in the upper basin and that LCRA could present at a future meeting.
  - 5) Item 11 – Refine estimates of freshwater flow to the bays – Patrick Brzozowski
    - a) Specifically looking at the impacts of ungaged flow on bay and marsh habitats to help define a flow factor to include in modeling efforts.

### **Next Meeting Date**

The next Col/Lav BBASC meeting date is scheduled for 10:00 am Tuesday, October 27<sup>th</sup>, 2015, at the LCRA Eastern Maintenance Facility in La Grange, TX.

### **Public Comment**

Leslie Patterson, TCEQ, informed the members that updates to the TCEQ’s environmental flows webpages are currently in process.

### **Adjourned**