

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

Wednesday, April 27, 2011 at 9:30 a.m.
Lower Colorado River Authority board room
3700 Lake Austin Boulevard
Austin, Texas

Meeting Minutes

BBASC Members Present: Chair Patrick Brzozowski, Vice-Chair Myron Hess, Jim Dailey, Ronald Gertson, Carroll Hall, David Hill, Deedy Huffman, Joe King, Teresa Lutes, Jack Maloney (alternate for Dick Ottis), Jennifer Walker (alternate for Bob Pickens), Caroline Runge, Andrew Sansom, Haskell Simon, Buddy Treybig, Karen Bondy (alternate for Suzanne Zarling)

1) Call to order and introductions

Chairman Patrick Brzozowski called the meeting to order.

2) Discussion and agreement on agenda

No changes were made to the meeting agenda.

3) Public comments (limit 3 min.)

None.

4) Administrative business

- **Approval of minutes**

Changes to the “BBASC responsibilities & TCEQ use of recommendations” item on the March 30th draft meeting minutes submitted by Kathy Alexander (TCEQ) had not yet been incorporated. Gregg Easley (TCEQ) will make those changes and distribute them to the group prior to the next BBASC meeting so that they can be considered for approval at the next meeting.

- **Attendance policy review**

Patrick reminded members to have their alternates attend meetings whenever the member can't attend. With more subcommittees being formed, he encouraged everyone to be involved in the process as much as possible.

5) Subcommittee and other updates

- **Facilitator/steering subcommittee report**

Brzozowski/Facilitators

Patrick reported that the subcommittee last met on April 21st and affirmed that the roadmap will be a good tool to use. The Facilitators encouraged BBASC members to use process checks if they believed the meeting was not on topic, the pace or process not right, or the meeting did not feel right to them (see process-check list at the end of these notes). Process checks are intended to address concerns members had expressed in the interviews about keeping meetings focused and recognizing the short time they have to complete their tasks.

- **Report drafting subcommittee** **Brzozowski/King**

The six BBASC members that expressed interest in joining the subcommittee are: Myron Hess, Joe King, Teresa Lutes, Andrew Sansom, Caroline Runge, and Suzanne Zarling. The BBASC approved the formation of the subcommittee with these members. Joe King, who will chair the subcommittee, said that the group will put together a report template and a table of contents that will be distributed to the BBASC.

- **Work plan subcommittee formation** **Brzozowski**

Vice-Chair Myron Hess gave an overview of the purpose of the work plan. There was concern expressed about the level of effort needed to produce flow recommendations and a work plan in the same timeframe. BBEST Chair Dave Buzan reminded the group that the BBEST, beginning at their next meeting on May 12th, will be developing a draft work plan by July 7th. Caroline Runge and Patrick volunteered to attend the upcoming BBEST meeting. It was discussed that alternates should be allowed to stand on subcommittees. Potential members for the work plan subcommittee are Caroline, Patrick, Jack Maloney, Carroll Hall, and Jennifer Walker/Bob Pickens. Patrick reiterated the SAC work plan guidance to keep it simple and implementable, considering existing resources and efforts within the basins.

Myron talked about the possibility of forming a smaller group to discuss strategies for meeting the BBASC flow recommendations. Patrick said that this can be revisited when we get to the WAM portion of the meeting, whether it could be an extension of the WAM subcommittee (or the work plan subcommittee) or a separate subcommittee. It was suggested that these meetings could be scheduled on the same day as the main BBASC meeting to improve participation.

6) Develop BBASC goal statement **Facilitators**

Starting with a draft from the facilitators, the BBASC members crafted their own goal statement for moving forward as a group in addressing their legislative mandate. They agreed to review the statement for discussion and final approval at the next meeting.

Draft Goal Statement: Develop implementable recommendations that provide for a sound ecological environment balanced with sufficient water for all other uses and which include an adaptive management process that provides for future sustainability. *(This statement was revised after the meeting to address grammatical problems.)*

7) BBASC roadmap & decision points

The facilitators provided a review of the BBASC responsibilities both for developing environmental flow standard (EFS) recommendations and identifying strategies to meet the EFS recommendations. They then provided a draft decision tree (handout posted to the BBASC website) that had been developed by the WAM subcommittee as a starting point to discuss approaches to selecting gauges for analysis in developing EFS and strategies. The decision tree was based on the idea of trying to focus the review on gauges where water could be managed for environmental purposes, with an initial focus on whether there was unappropriated flow available at that point. They noted that additional approaches had been suggested since the WAM subcommittee, both by subcommittee members and others. The BBASC members identified the following as possible ways to narrow its analysis:

- Focus the balancing at places where there are unappropriated flows

- Look at whether regulated flows can satisfy environmental flow regime
- If “unappropriated” flows are close, ask the BBEST about impacts
- Just endorse the BBEST Report. Use the BBEST Report after exploring if BBASC members have any issues at the various gauge locations in the report.

BBASC then explored a concern that the BBEST report merely reflected maintaining historical flows (WAM Run 8 – with water rights exercised at their current use), which some feared could have the result of preventing any development from occurring in the future. There was discussion with BBEST about this, and also acknowledgement that regulated water (water in the stream either because of environmental flow requirements in permits or because it was being transported downstream to supply contracts or to honor senior water rights) could go toward meeting environmental flow regime (EFR) recommendations. Kirk Kennedy of the BBEST indicated that WAM Run 3 (with rights exercised at their full appropriation) allows for a lot of water to be transported in the stream as regulated flow that satisfies the EFR.

BBASC members reached consensus on the following:

The WAM subcommittee should put gauges into groups, to analyze in different ways depending on conditions. The analysis should be presented in a way the BBASC can understand.

A question was raised about what would happen if an existing water right sought to move upstream, (the discussion indicated that this would not be considered a new appropriation subject to EFS). The question of what future projects would be reviewed by the BBASC also was raised. Members of the WAM subcommittee indicated a project in the Lavaca basin had been determined, but that they were having difficulty determining what project to use for the Colorado basin.

8) Discussion of BBEST report relating to Matagorda and Lavaca bay systems and interaction of instream flows and bay system flows (Buzan)

[This agenda item was taken up after the WAM discussion item (#9)]

Following presentations by David Buzan and Bryan Cook of the BBEST (the presentations have been posted to the BBASC website), the BBASC members asked questions and discussed issues relating to the report. The following are the facilitators’ notes on this discussion.

East Matagorda Bay

Q. Does text on page 2-216 of the BBEST report mean that freshwater inflows to East Matagorda Bay are protected?

A. It does not say that freshwater is not important, but that it is not gauged here, and can’t be quantified. Stream flow is important, whether gauged or not.

Q. Is there a way to quantify the ungauged flow in an annual volume?

A. Yes, that can be provided.

BBASC member comment: Even if you have that number for East Matagorda Bay, the flows may just go into intercoastal waterway.

(The BBEST FAQ, posted on the BBASC website, includes additional comments on the two questions listed above.)

Q. Is any of the inflow from shallow groundwater aquifers? (page 2-217)

A. Right now there are no data indicating how much shallow fresh, groundwater may be entering the bay. Salinity measurements suggest that groundwater inflow probably does not significantly affect salinity. TPWD comments on the BBEST report included a recommendation that BBEST evaluate the effects of groundwater discharges. It would be good to look more at its potential influence.

Q. Was there ever a conversation about diverting some water to East Matagorda Bay?

A. The BBEST did not discuss diverting water into East Matagorda Bay through physical modifications like opening or closing cuts into or out of the bay, or piping water from other sources. In the 1990's, there was some discussion of a cut near where the Colorado River enters Matagorda Bay. The Corps did not provide it.

BBASC Member Comments:

- Did not get a cut to the bay from the gulf. Previously flooding got to the bay. Now no shrimp eggs get into the bay. Wished the report had not called East Matagorda Bay a sound environment. Fisheries are not growing. Commercial fisheries are gone. The BBEST report can impact efforts to get help to the bay in the future.
- Suggestions for more circulation in East Matagorda Bay included a surface water cut, and a weir. Maybe this could be part of strategies indentified, or components of the work plan.

Q. On page 2-214, the paragraph above the chart: is the recommendation for Colorado River inflow a recommendation for Matagorda Bay or for East Matagorda Bay?

A. Matagorda Bay.

West Matagorda Bay and Lavaca Bay

Q. What do you mean by maintain 50% suitability?

A. It means if you maintain 30 parts per thousand (ppt) salinity, you can do a minimum for supporting oysters. See Figure 2.8.2 on p. 2-244, the oyster suitability line crosses 50% suitability (on the vertical axis) over a salinity of 30 ppt (on the horizontal axis). See page 2-242, which shows the locations of reefs and inflow. BBEST used the furthest point out, at the Middle Ground Reef to say if you maintain a salinity of 30 ppt there, the reefs higher up in the bay will be in fresher water and more protected.

Q. Is oyster viability a proxy for other species?

A. Yes. The salinity freshwater inflow recommendation is expected to produce salinity conditions that are suitable for other estuarine organisms such as juvenile shellfish (blue crab, brown shrimp, white shrimp) and juvenile finfish (Gulf menhaden, Atlantic croaker).

Q. Does the attainment frequency for the annual amount of inflow have a seasonal component?

A. It has seasonal pulses and intervening inflow. There freshwater inflow recommendation provides a spring and fall freshet. Attainment frequencies try to match the historical occurrence.

Q. Table 2.8.2 on page 2-240. What changed based on feedback already provided to the BBEST?

A. Table 2.8.2 displays TxRR modeled flow data for Garcitas Creek near Inez, instead of the gauged flow for the site. Recommendations are based on gauged flows and an updated table will be provided to show the correct information. The change in the data will change the percent inflow contributions amongst the various sources.

Q. On Lavaca Bay: Why does mercury affect fish but not the oysters?

A. Oysters and fish accumulate mercury. Fish will tend to concentrate more mercury because mercury concentrations increase at a rapid rate up the food chain (biomagnification). Since oysters are relatively low on the food chain (they are filter feeders), they do not accumulate the higher concentrations that fish may tend to accumulate. As fish eat smaller fish and crabs that may have already accumulated mercury, the fish builds higher concentrations in its tissues. Both fish and oysters can live with relatively high levels of mercury in their tissues.

Q. On page 2-250: Why is a high flow pulse of 450,000 ac-feet within a one-month period recommended?

A. After an extended dry period, oysters become susceptible to parasites and predators (like stone crabs and oyster drills) which tend to prefer salinities above 15 ppt. High flow pulses like the 450,000 acre-feet in one month will lower salinities below 5 ppt for a long enough time to kill many of the predators or drive them off the reefs. The diseased oysters will tend to die first, thus reducing concentrations of parasites on the reef during the freshwater flooding. The pulse also adds important nutrients and sediments to the bay which feed the food web and maintain the delta and surrounding marshes.

BBASC members' comments & responses relating to Lake Texana's impact on the bay:

C: With excessive amounts of rain, flood is prolonged because of releases from Texana. Also, high pulses used to flush marsh. This has been lost because of Texana.

R: LNRA tries to mirror inflow.

Comment: Problem with creating new oyster beds is the lack of pipeline construction. Turning over soil creates oyster beds.

Q. Explain the use of regression equations in the report?

A. The BBEST took monthly volumes and compared them to measured salinities using regression equations. The regression equations can be used to predict salinities that would occur during different freshwater inflows. Several studies have provided freshwater inflow recommendations for Lavaca Bay. The Freshwater Inflows Needs Studies in 1997 and 2006 used regression equations comparing freshwater inflow and oyster biomass. Specifically, the monthly volume of water flowing into the bay was used to predict oyster abundance. The BBEST used a slightly different approach for this freshwater inflow recommendation. Freshwater inflows were statistically regressed to modeled salinities at several oyster reefs in the bay.

(The BBEST FAQ, posted on the BBASC website, includes additional comments on the question regarding regression equations.)

9) Discussion and decisions on using WAMS & other tools for developing BBASC recommendations (Kennedy)

Patrick reviewed notes from the April 7th and 21st WAM subcommittee meetings. Kirk Kennedy of the BBEST gave a PowerPoint presentation of his analysis of a water development project on the Lavaca River (presentation posted to BBASC website). In discussing where similar WAM analysis should be done, the group agreed that the focus should be on locations (gages) where unappropriated water exists. The BBASC then discussed and agreed that the WAM subcommittee should evaluate the locations and categorize those that merit additional analysis.

10) Public comments (limit 3 min.)

None.

Two-minute meeting review (related to process):

What was good:

- Technical terminology not overused
- Times laid out and followed

What to change:

- Provide copies of handouts (power points etc) during presentation

Attachment:

Process Check

Progress: Is the discussion important to achieve our goals?

Pace: Are we moving too quickly or too slowly?

Process: Are we using the right methods, tools?

Pulse: How are you feeling about this discussion?