Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays Basin and Bay Area Stakeholder Committee (BBASC)

Wednesday, June 1, 2011

Chisholm Trail Heritage Museum, Wofford Room
302 N. Esplanade Street
Cuero, Texas

MINUTES

Members Present: Suzanne Scott, Chair; Dianne Wassenich, Vice Chair; Tyson Broad; Thurman Clements; David Crow; Paula DiFonzo; Earl Matthews (for Everett Johnson); Steve Fotiades; Chris Hale; Jerry James; James Lee Murphy; Mike Mecke; Mike Peters; Con Mims; Jack Campbell; Kim Stoker; Walter Womack; Garrett Engelking; Bill Braden; James Dodson (for Ken Dunton); Josh Gray (for Jay Gray); Jennifer Youngblood; Steve Clouse (for Robert Puente); and Jennifer Ellis.

I. Introductions:

Roll call was taken and a quorum was reached. Member Bill Braden welcomed members to the Chisholm Trail Heritage Museum. Robert Oliver, Chairman of the Board for the Chisholm Trail Heritage Museum gave members a brief history of the museum.

II. Public Comment:

Mr. Richard Fritz of Victoria spoke of the May, 2011 BBASC meetings and his concern that the BBASC and BBEST were not considering human needs and the needs of the commercial fisherman to the same degree as those of the environment. He urged members to consider the needs of all the stakeholders.

Mr. Charles Smith of Aransas County representing a large group of noted members in the community stated that the full utilization of water rights would not be beneficial for the county and spoke of the loss of habitat and decline of aquatic species due to the lack of instream flow. He urged members to focus on the work of the BBEST in determining their recommendations.

The Honorable Ron Outen, Aransas County Navigation District Commissioner, spoke about the ecological response to loss of inflows and the process used by the BBEST and BBASC. He stated that the BBEST report was based on scientific methodology and lacked the benefit of personal knowledge from individuals who have direct experience in the bay area having seen what the lack of flow has done through the years. He noted that the salinity approach used is flawed when applied to motile species since these species don't move as was suggested by the BBEST.

Leslie "Bubba" Casterline, Aransas County Commissioner, talked of the effects of high salinity on oysters and his disappointment with the Region L Planning Group's lack of consideration of the need for inflows in the bay areas. He considered the salinity approach flawed when used for motile species since these species don't move as was suggested by the BBEST, and the environmental conditions are critical in the larval stage.

Mr. Steve Barrett, Harbormaster, stated that the health of recreational and commercial fishing affects the economy of the area, and river inflows have a direct impact on the fish and bait population. He talked about the Whooping cranes and how the loss of forage due to low inflows has directly impacted the population.

Mr. Steven Andrews, a recreational fisherman, discussed the effect of droughts on fishing and the commercial fishing industry.

Ms. Jane Wendt discussed the impact of the increasing number and use of water rights on the bays since the 1970s.

III. Discussion and Agreement on Agenda
Chair Suzanne Scott discussed the revisions made to the agenda. The agenda as revised was approved.

IV. Approval of Minutes from the May 4, 2011 and May 19, 2011 Meetings
Approval of the minutes for the May 4, 2011 and the May 19, 2011 meeting will be considered at the next meeting.

V. Preliminary Results of BBASC Balancing Analyses for Exampled Water Supply Projects Near Goliad and Gonzales (Brian Perkins, HDR)
Chair Scott, gave an overview of what has been completed and what results are forthcoming. She asked members for their perception of where the BBASC is in the recommendation process and what additional effort is needed for members to reach their objectives.

Mr. Brian Perkins, HDR, addressed two issues brought up at the last meeting. In response to the instream subcommittee's question concerning seasonality of when water is available with respect to Task II run of the river diversions, Mr. Perkins checked random locations and found no seasonality patterns. In response to the TPWD proposing to raise the subsistence flow level and the request to compare the 7Q2, BBEST recommendation, and Q95 using the 7Q2 data, Mr. Perkins presented a table showing the comparison of the methods on 16 specified sites. Results indicate that the 7Q2 method was higher than the BBEST recommendation and Q95 values.

Mr. Perkins gave a quick recap of what was presented at the last meeting on Task I (6 run of the river projects) and Task II (2 large firm yield projects) comparing the Lyons method, CCEFN (Consensus Criteria), no flow restriction and the BBEST recommendation. With those comparisons completed, he stated Task III is to apply modifications to the BBEST recommendations and review the results to determine the best recommendation.

Mr. Perkins presented the results of increasing the subsistence flow to the SB2 estimates at Goliad and Q95 estimates at Gonzales. Increasing the subsistence to both the SB2 and Q95 estimates reduced the firm yield.

He also presented the results of the additional BBASC charge to look at two iterations of the full comprehensive method (including yield, cost, flows and the ecological effects of those) at two sites. The first scenario eliminated diversions below base level so once base flow was

reached, there were no diversions at the subsistence flow level. Mr. Perkins indicated that the reduction in firm yield seen did result in increase flow in the river. However, the increase flow during periods of drought is more a result of flow left in the river to satisfy downstream senior water rights. He added that it should be considered whether increased flow is a result of flow criteria or senior water rights. The second scenario used the TCEQ adopted flow standard structure with the BBEST recommendation numbers which resulted in an increase in firm yield.

SAC member Dr. Ed Oborny discussed the ecological impact of the results. He stated that at low flow conditions there is no difference between TCEQ structure and the BBEST recommendation since the TCEQ recommendation has subsistence and a base dry. Differences are seen at the intermediate flow which can be captured using pulses. The differences become more obvious with the addition of multiple projects.

BBEST member Dr. Norman Johns discussed the bay and estuary impacts. He discussed the historical inflows into the bay and estuaries and compared them to the drought of 2009. He presented tables on different scenarios on the Guadalupe project with different criteria applied to see the impact on flows and species in the bay and estuaries.

VI. Review and Discuss Potential Strategies to Meet Environmental Flow Standards (Johns, Ellis)

BBASC member Jennifer Ellis distributed a revised list of potential strategies developed by National Wildlife Federation. Ms. Ellis gave an overview of the strategies listed in the handout. BBASC member James Murphy noted that the group should realize that these strategies are for future needs and not existing needs especially considering that the BBEST determined that there is an existing sound ecological environment.

Dr. Norman Johns noted that this is a National Wildlife Federation (NWF) project and the foundation intended to contribute funding to the process. He noted that to complete the analysis of specified strategies by June and present the results to the BBASC in July, the consultants would need to begin next week. Dr. Johns explained that to investigate the different strategies, the Water Availability Model (WAM) is used to predict inflows to the estuaries. Strategies he discussed included dedicating wastewater return flows, “dry year option” or unused irrigation water rights for not planting, unused water rights, and the Edwards Recovery Implementation Plan (ERIP) to protect spring flows.

Dr. Johns also mentioned the potential to use some of the monies acquired by the state from the British Petroleum settlement to build up the resiliency of the estuaries to prevent similar impacts from potential oil spills. Member Con Mims noted that the RIP project is at a critical stage and asked that the group avoid considering involvement with the RIP at this time.

Members directed Dr. Johns to investigate the following strategies: voluntary dedication of return flows (or wastewater dedication), “gap” approach, unused water rights by category, and the “dry year” strategies. The motion to direct Dr. John to investigate these options was approved by majority (21 in favor).

VII. Full Group Discussions

Chair Scott opened the floor for discussion. Based on all information received and analyses to

date, members were asked to provide feedback on BBEST recommendations and identify additional information/analyses required from BBEST and the technical consultants.

Members noted the following as favorable elements of the BBEST recommendations.

- Pulses: Use of pulses good for the bays and estuaries and narrative support for the use provided in the report. BBASC should emphasize pulses source of nutritional flows;
- Sound Ecological Environment (SEE): First good description of conditions needed in rivers, bays and estuaries of SEE;
- Subsistence flow "rule": Defining subsistence flow as 50% of baseline a positive approach;
- Instream Flow Recommendations: Use of a range provides easier means for implementation;
- Estuary Inflows: Favored the fresh approach and appreciated effort in moving away from the state methodology though had concerns with some of the elements;
- Estuary Needs: Appreciated recognition by the BBEST of the estuaries' need for all types of flows to create a healthy environment.
- Confidence in Recommendations: Members are confident in the recommendations because of the expertise of the BBEST members, and science used to develop them;

Members noted the following as concerns regarding the BBEST recommendations.

- Flow Requirements of the Bay: Understanding of the flows;
- Consideration of Habitat: Use of habitat curves to support Recommendations. Some linkage seen in San Antonio basin however don't appear to be present in Guadalupe basin;
- Lack of Effort in Headwaters: More effort needed to address springs and groundwater interaction and contribution to the flows. Don't appear to be considered as that important;
- Methodology used to derive Subsistence levels: Lack of justification as to why HEFR used over Q95 especially in light of TPWD letter;
- Indicator Species: Oysters and *rangia* are not motile species and thus are not representative. Failed to show importance of timing of inflows. Would like to see white shrimp or blue crab used;
- Length of Period used for Assessment: Evaluating flow on monthly or seasonal basis not adequate. Three years needed to restore bays. Assessment should be based on broader basis;
- Default Analyses: Instream flows defaulted to HEFR and Bay & Estuary flows defaulted to indicator species. Did not utilize wetland habitat evaluation, geomorphology concerns, and nutrient components to evaluate this complex system;
- Adequate Data: Not adequate data in bays and estuaries to come up with predictive tool;
- Estuary Flows Addressed in Permitting Process: Not a clear understanding of how it will occur.
- Limitations of SB3 Charge: Conditions (time, etc.) established for process by legislature limited ability to thoroughly evaluate charge and may result in a recommendation more protective than needed;
- Concept of Existing flow restrictions vs. Rules for Future: BBEST should have focused on assessment of every aspect of basins to present a concept of what a SEE is, how it is defined and what is needed. Role of BBASC is to recommend how to preserve and

improve environment in the future. Did not address lowest stretches of the rivers, long pulses. Should have started with the estuaries.

- Address the Entire System: Report should have addressed the system as a whole and assessed all components and their contributions. Lacked "linkage";
- Mission and Aransas Rivers not linked to the overall system
- TPWD Concerns: Need to capture concerns of TPWD.
- Integrated system: Recommendations focused on flows and elements in the river. Estuary has different issues and assessment was insufficient and should have been given equal attention.

Members noted the following as how the BBEST recommendations can be altered to address these concerns.

Understanding the flows to the Bay:

- BBASC directed Dr. Johns to perform analysis to provide a better understanding of the type of flows and provide a linkage between instream and freshwater inflows to the bay;
- Need monitoring of flows below Victoria;
- Need access to monitored flow data over the saltwater barrier
- Flow challenges of bay may not be addressed with BBEST recommendations as applied to future water rights;

Consideration of Habitat Curves:

- Instream flow subsistence flows on the San Antonio River
- Funding SB2 work on Guadalupe River

Lack of Effort on Headwaters

- Groundwater/Spring water Interaction. Better monitoring, more data collected and analyzed for spring flow, groundwater flow and gages on headwaters.
- Better understanding of contribution of headwaters on streamflow. Do these have any relevance other than releases from Canyon Dam and what is groundwater impact on rivers downstream fed by groundwater (Comal and San Marcos)
    - Above Kerrville
    - Comfort and Canyon North
    - Medina River
- Determine the proportional impact of groundwater derived flows in work done by Dr. Johns

Methodology used to derive Subsistence levels

- At last meeting Dr. Dan Opdyke discussed TWDB comments and he will provide a list recommendations to address their concerns at a later date

Indicator Species

- The fact that better species are available should be mentioned and other ways to evaluate this are available should be mentioned in the report. Also recognize existing methodology as well as other methods may have utility.
- UTMSI will study blue crab in Rockport pending available funding

Length of Period used for Assessment

- Increase the period used for assessment

Default Analysis

- Acknowledge the uncertainty of the recommendation and provide TCEQ more regulatory flexibility in applying rules. More stringent rules for instream flow and the use of adaptive management in measuring the effects on bay and estuaries

Estuary Flows Addressed in Permitting Process
- BBEST reports assumes all flows recorded by the most downstream gage flow to the estuary. Possible establishment of "Fail Safe Override" in cases of extremely high salinity

Limitations of SB3 Charge
- Address concerns through policy decisions and the workplan

Address the Entire System
- Consider the entire watershed
- Allow TPWD to make recommendations on how to handle the bay and estuaries through adaptive management

Mission and Aransas Rivers and Copano Bay
- Determine the influence of Mission and Aransas on the system. What if these rivers stop flowing

Integrated System
- BBASC directed time series work by Dr. Johns

VII. Review Dates and Agenda Topics for Remaining July and August Meetings
The next meeting will be held at 10:00 a.m. on Wednesday, July 6, 2011.

Agenda Topics
- Presentation draft report by Brian Perkins (HDR) due July 15
- Presentation of preliminary evaluation of strategies, (NWF) due July.
- Presentation of Instream Flow Recommendations on San Antonio by Dr. Hardy
- Report on Ecological Impacts on "Brown boxes" by Dr. Johns
- Presentation on Task 4 (qualitative analysis of invasive plants, GMA 9, Climate Change by Brian Perkins, HDR in July or August
- BBASC Water Womack requested a presentation by GBRA similar to the one given by NWF on strategies.

Group facilitator Mary Rozelle stated that the framework of BBASC recommendations would not be discussed today. A subcommittee was formed to look at the format and framework for the report; subcommittee members include: Chair Suzanne Scott, Vice Chair Diane Wassenich, Jennifer Ellis, Paula DiFonzo and Dr. Earl Matthews

IX. Public Comment

X. Adjourn