

Galveston Bay Freshwater Inflows Group 26 May 2004 Meeting Summary

Participants Present: Jim Adams, Barney Austin, John Bartos, Nicole Cass (for PoHA), Jeff DallaRosa, Jason Fluharty, Guy C. Jackson, Jim Kachtick, Ken Kramer, Carl Masterson, Junji Matsumoto, Bruce Moulton, Paul Nelson, Richard Browning, Ann Sheridan, Jeff Taylor, Pudge Willcox, Woody Woodrow

Support Team Present: Glenda Callaway, Greg Graml, Andy Sterbenz, Pris Weeks, Jim Dobberstine

Others Present: Lisa Gonzalez (HARC), Mitch Mathis (HARC), Bill Roberts (TWDB)

1. The Galveston Bay Freshwater Inflows group met at the offices of the San Jacinto River Authority in Conroe, Texas. Following a delicious oyster fry lunch, courtesy of **Guy Jackson and the Coastal Oyster Leaseholders Association (COLA)**, self introductions were made.
2. The agenda and the time allotment were approved. Corrections were made to the January 2004 meeting summary and the summary was subsequently approved.
3. Updated contact roster information for the GBFIG participants was distributed and corrections were submitted by individuals as necessary.
4. The following updates were provided by GBFIG members:
 - a. **Adams** and **Bartos** provided updates on Region H, noting that the next meeting will be at 10am on June 1st, 2004 in part to review consultant activity over the prior three months. Region H is considering using Run 8 for generation of a water map, which would include return flows and future increases and strategies. **Weeks** inquired whether consultants would be presenting information at the meeting, to which **Adams** replied yes. **Bartos** added that TWCA and the Sierra Club made proposals for managing inflows at the last meeting. This information was also given to the state Study Commission on Environmental Flows. Copies of these proposals will also be at the Region H meeting.
 - b. **Browning** provided updates on Region C, noting that at their last meeting they spent time on which WAM Runs to use. Opponents of the Marvin Nichols dam attended the meeting, which otherwise generally covered standard work issues. **Browning** noted that there have been small updates and changes to strategies to accommodate small population changes; the major strategies have remained the same. There will likely be a major adjustment to reuse strategies in the near future, however. **Jackson** requested a clarification regarding the run model differences. Clarifications were provided by **Browning** and **Austin**.
 - i. Run 3 is used for permitting and does not include return flows, and is conceptualized as a worst case scenario.

- ii. Run 8 estimates current conditions of water use, and includes return flows. Run 8 projects future conditions based on population estimates and future water use, etc.

There was considerable discussion among the group regarding the concept of modeling return flows and the impact of repeated reuse.

Graml noted that Run 8 will incorporate specific reuse strategies for 2060. **Jackson** stated that it may be that Run 3 is the better model, as return flows are as appropriate as the original flows; there needs to be a permit process for these flows. **Graml** and **Woodrow** noted that some reuse does in fact require a permit.

- c. **DallaRosa** and **Callaway** provided updates regarding the Galveston Bay Estuary Program. **DallaRosa** discussed the 10-year Galveston Bay Plan review as discussed at the Galveston Bay Council Budget and Priorities Subcommittee meeting earlier in the spring. The Plan evaluation includes the issue of freshwater inflows. **TWDB** and **TPWD** will be presenting data on circulation at the next Galveston Bay Council meeting on July 21st. This will cover circulation patterns with and without structures such as the Texas City Dike.
- d. **Callaway** announced that the TCEQ Water Right Advisory Workgroup would be meeting on June 7th from 10- 12 pm, with topics including reuse, permitting, etc.
- e. **Kramer** provided an update regarding the Water Conservation Task Force. He noted that they recently met regarding voluntary water conservation. The draft document on water conservation practices (BMPs) was completed and is open for public review. This draft will be revised based on public comments and posted for a 2nd public notice. It will be published for voluntary use by agriculture, municipal, and industrial sectors. Also, for all parties required to have conservation plans, all new plans are required by new legislation to include specific, quantified goals for conservation. The overall goal is to reduce use by 1% per capita per year, and eventually to reduce use to 125 gallons per capita per day. The Task Force will be coming out with incentives for water conservation for presentation to the legislature. Carole Baker with the Harris Galveston Coastal Subsidence District has raised \$150 thousand dollars to start designing a program to show the legislature what it would look like. There was discussion regarding water conservation mandates, including low flush toilets, rebate programs, etc. A report to the legislature is due in November, but they will be discussing the mandates at the meeting in September.
- f. **Mathis** provided an update regarding the Study Commission on Environmental Flows. There is no meeting date set at this time. The Science Advisory Committee to the Commission met Friday, May 22nd to hear how the three agencies will model (tools), what data they will have, etc. They will meet again on June 11th. They will look at socioeconomics and implementation. **Masterson** noted that the commission seems to be trying to do in a short time what GBFIG has been working on for a long

time. **Taylor** replied that they will be sticking to policy, not management strategies.

- g. Adams** provided an update on the Senate Select Committee on Water Policy, noting that there has been no activity since the special session. **Kramer** followed-up to note that many meetings have been cancelled due to the special session.
- 5. Nelson** provided an update on the status of recent City of Houston water rights applications. Not much has changed since the last meeting, although the applications have been accepted as “administratively complete”. **Nelson** and **Taylor** met with the Galveston Bay Foundation and the Bayou Preservation Association to discuss the permits. **Callaway** has copies of all of the permit applications. **Nelson** encourages anyone who wants to discuss the permit applications to please do so. **Masterson** noted that these permits might affect implementation of TMDLs.

Callaway inquired what return flows or reductions in flow might be expected. **Taylor** responded that they do not expect the permits to be approved in full. However, they do want to use the full amount for consumptive purposes, and then reuse it for industrial consumptive use. This will allow that amount of flow to remain in the Trinity as opposed to allowing waste flow to the Bayous. They expect a 100 thousand acre-foot drop within 10 years. **Nelson** added that they have confidence in the State to look at the environmental flows. **Taylor** stated that they expect the region to continue to grow, and they will have to have the water. Everything is an issue of trade-offs.

Jackson stated that water use should be considered on a regional basis-- oysters need return flows in the Trinity-- could the Lower Neches be involved in a regional outlook? **Taylor** responded that that they want to keep freshwater inflows in the Bay; they want to focus on reuse while keeping some flow in the basin of origin. **Jackson** stated that water pricing on the east coast of the U.S. is much higher than here (50x); and he inquired as to whether we are pricing water too cheaply, and encouraging overuse and increasing growth? **Taylor** responded that water pricing was not in the top ten reasons why companies relocate to the Houston area in a recent survey. For a variety of other factors, 50% of the state’s population is located within the Trinity basin. **Weeks** noted that these might be smart growth issues.

A 15-minute break was taken at this juncture

- 6. Taylor** provided a summary of the Galveston Bay Freshwater Inflow Study Review (see slides). He noted that the study began because of a dispute regarding reuse between Tarrant County and the City of Houston (CoH), but grew to include others. The question now is: is the Bay and Estuary study complete? The City does not believe that it is complete (some specific questions remain open), but overall it is a good methodology that works for the State of

Texas. The reviewers believe that there is more flow than the state agencies are stating that they need. The George Ward study team is looking at the drivers. When examining the harvest regressions, 78% of flow is determined by constants, but we do not know yet what the constants are. Two species (of eight) seem to correspond to the flows (oysters and white shrimp), which suggests the model would be clearer if they reduced the number of species. They are questioning whether the model is being determined by a small subset of the data based on the constraints placed on the model by the state agencies. When the harvest data is closely examined, the maximum values are within a very narrow band of the flow values. Flow values vary over a wide range; 700 thousand acre-feet to 20 million acre-feet. Harvest high values occur within the 5 to 7.5 million acre-feet range. The CoH is recommending applying the methodology to the new Galveston Bay data (as illustrated by the Sabine Lake study). Ward believes salinity is a key driver, but they are still trying to figure out why the constants are what they are. The new B & E study from Sabine Lake is using Coastal Fisheries data. The CoH recommends using this data over the older commercial harvest data, as it is more complete and has better coverage. The model that the state agencies are using is based on a data set from 1962 to 1987. The regression equation was able to build a pretty good model for that data set. However, when it is applied to the data set since 1987, the model predicts decreasing production, when the data actually shows increases.

The CoH does not think that the work needs to be started over, as the work is good and much of the data is as well. There is a need to keep examining the model while there is still time to work. Taylor recommends reevaluating some of the constraints on salinity and the regression equations, and examining and reevaluating the relationship between salinity and harvest. **Kachtick** noted that it appears that no matter what we do, Mother Nature seems to be taking care of matters. **Taylor** and **Austin** replied that while that may be true, we do not know what would occur in the event of zero inflow. The GBFIG goal of preventing any deterioration is good, as conditions currently appear to be OK. **Callaway** noted that the McFarlane study concluded that fishery monitoring does not appear to show the fishery condition accurately. **Austin** replied that the data showing increasing values may demonstrate an actual increase, or it may only demonstrate more sampling.

Kramer requested clarification whether the CoH wants us to delay developing strategies because we do not yet know enough, or develop adaptive, protective strategies that can be changed as we learn more. **Taylor** replied that they are willing to wait, but lean toward adaptive strategies if a relationship between flow and abundance can be demonstrated. (It may be salinity or nutrients that are key; not flow volume itself.) **Kramer** expressed concern about waiting until the science is perfect without having some mechanisms in place in the mean time. **Taylor** commented that, unlike many other Bay systems, there is time to work with in Galveston Bay. **Jackson** added that all participants need to have equal input when deciding instream flows. **Taylor** noted that the outcome of the

discussion thus far has yielded a 30% set-aside in the Tarrant permit specifically for environmental flows.

7. **Austin** provided an agency update and review of the Galveston Bay Freshwater Inflow Study (see slides). He noted that this study focuses on the science of the study, not the implementation. He also stated that there is more information on Galveston Bay than any other Texas bay, and much of it is new. GBFIG looks at the process of what to do with the data (number), whereas this study is focused on what the number is. **Kramer** inquired what is going to happen or change between meeting 1 and meeting 2; how was the schedule determined? **Austin** (*answer unclear*). **Jackson** inquired why the study was necessary. **Austin** replied that the science of the study does not benefit from political pressure; they may even request that the National Academy of Sciences review the methodology. **Callaway** stated that it doesn't seem likely that they will make great strides within the one-year timeframe; and water permits continue to be filed.
8. At this time, discussion on action and the path forward commenced. **Browning** stated that the letter from GBFIG regarding the proposed update to the inflow study should be sent to Bill Mullican, and that stakeholder meetings (such as GBFIG) should be held separate from the study group meetings (either before or after). **Kachtick** noted that the most difficult thing for groups such as GBFIG was developing an exit strategy; he thinks it is time for GBFIG to consider this issue and establish a benchmark for finishing at some point. **Adams** stated that harvest is affected by more than just inflows; for example, gas prices currently have many fishermen beached. We need to define the best situation that we could have on the bay (optimal conditions); i.e.: what was Max H and why (low gas prices, few imports, etc.)? **Sheridan** noted that GBFIG provides for a good forum for ongoing, constructive communication. **Kramer** stated that the group needs to quickly arrive at a management strategy for maintaining flow, which is adaptive so that it can be modified as the science improves. **Consensus was arrived at on sending to Bill Mullican the draft letter concerning the Proposed Updating of the Galveston Bay Freshwater Inflow Study.**

The meeting was adjourned at 3:30 pm.