

**Galveston Bay Freshwater Inflows Group
4 February 2002 Meeting Summary**

Participants Present: John Bartos, Richard Browning, Jeff DallaRosa, Reed Eichelberger, Woody Frossard, Guy Jackson, Jim Kachtick, Ken Kramer, Bob McFarlane, Bruce Moulton, Chris Paternostro, Linda Shead, Mary Ellen Whitworth, Pudge Willcox, Woody Woodrow

Support Team Present: Glenda Callaway, Lisa Gonzalez, Anne Ray, Jeff Taylor, Pris Weeks

1. The Galveston Bay Freshwater Inflows Group (GBFIG) met at the City of Houston's E.B. Cape Center for Public Works Excellence, 4501 Leeland, Room 131, Houston, Texas 77023. Self-introductions were made.
2. The August 29, 2001 meeting summary was approved with changes. The October 25, 2001 meeting summary was approved without changes. Approval of the December 4, 2001 meeting summary was deferred until the next meeting. Some incorrect information was conveyed by stakeholders at the December 4, 2001 meeting. Corrections to that information will be placed as an addendum to the December 2001 meeting summary.
3. There were no additions to the agenda.
4. The following updates were provided by GBFIG members:

Bartos updated the group on Region H activities saying that Region H has created a scope of work. Money from the TWDB and the legislature will fund approximately one third of the cost.

Browning reported that Region C is in a contract development phase.

Moulton then briefed the group on the TNRCC water right permitting process. He described the permitting process as having two steps:

- a) The applicant submits an application for a water right to the TNRCC. The TNRCC has a limited amount of time to review the application and declare it administratively complete (the required information on the application is provided; this is not the same as being technically complete) or request more information from the applicant. Once declared administratively complete, the first public notice is published in the Texas Register. Water right holders and interests in the basin are sent a notice by mail. The applicant must also post a notice in the local newspaper. The notice describes specifics of the application and provides a time period for public comment.

- b) Once the applicant provides all of the required technical information to the TNRCC, then a technical review is undertaken and a second public notice is given. A contested case hearing may be requested at this time.

Callaway asked how the TNRCC addresses requests for time extensions to complete an application. Moulton replied that if an application is not completed in the required amount of time, then the TNRCC is required to return the application to the applicant without prejudice.

Kramer added that he knew of an instance where the legislature trumped the agency and granted a time extension to complete a permit for the Eastex Reservoir.

Browning asked if recent legislation had changed notice requirements.

Moulton and **Kramer** were unsure.

- 5. **Weeks** led a discussion of the final two management scenarios listed in Task IV of the GBFIG Work Plan: 1) promote conservation practices and 2) no action. The group was reminded to think about the management strategies in terms of how much water would they provide (efficacy) and their feasibility (political, economic, etc.).

Management Strategy #1: Conservation/Variable Pricing

Callaway stated that 5-6 year block pricing was the normal practice, but the City of Houston had used some variable pricing to promote water conservation. Variable pricing can lower water demand across the board, decrease water demand in times of little water and can help prevent human-induced drought.

Moulton stated that the group must distinguish between continual conservation and drought contingency.

Kramer added that conservation measures are often ongoing as opposed to drought management.

Woodrow stated conservation measures might need to be activated before times of drought. Implementing conservation strategies will reduce the amount of water transferred from the Trinity to San Jacinto river basins.

Taylor stated municipal conservation yields a 10 percent water savings. Irrigation is more difficult to deal with. Return flows from irrigation are one-half to one-third the amount of municipal return flows. Irrigation water conservation yields less water savings than municipal water conservation.

Shead stated that overall, conservation does lessen the transfer of water from the Trinity to San Jacinto basins. This is an important issue since the Trinity basin is where most of the inflows are needed. Over time water savings occur due to changes in prices and the development of new , more efficient plumbing fixtures. Real conservation should yield even more water savings.

Kramer stated that San Antonio realized a 31% water savings per capita over a 10-year period due to leak detection and a pricing system.

Jackson warned that population growth can easily overtake any gains made due to water conservation.

Kramer replied by saying that even though population will nearly double in 50 years, conservation can significantly slow the rate of water consumption. There is no direct relationship between population growth and water consumption rates.

Woodrow stated that when the request was made in Houston for the public to conserve water, consumption immediately went up. An economic driver (pricing) was needed to back up that request.

Kachtick stated the public must be convinced that water is not free. Economics will come into play and pricing will make someone think about the real cost of water.

Eichelberger asked how San Antonio accomplished such a water savings.

Taylor replied that San Antonio utilized variable pricing along with leak detection and pushed for low-flow plumbing fixtures. San Antonio is Texas' best case of water conservation.

Management Strategy #2: No Action

Shead opened the discussion by saying "no action" is unacceptable.

Jackson replied by saying there may no way for everyone in the group to agree. If no action is taken, then market forces may be the most effective way of solving the problem.

Callaway stated, letting market forces prevail is not "no action". Market forces are another strategy that should be added to the matrix.

Shead stated the current system is not a market force system. In the current system, things are subsidized. The system does not account for the true cost of things such as losses in fisheries production.

Weeks attempted to clarify the term "no action". She asked the group if "no action" meant that the group would make no recommendations to Region H.

Taylor stated that if the problem is presently occurring, then one of the management strategies should be undertaken now. However, if the problem will not occur until some point in the future, then a different thought process is needed.

Paternostro stated that if the group decides "no action" or actions to be adopted in the future only, then that leaves the task for others to undertake.

Taylor stated that it might be easier to agree on future actions if the group defined freshwater inflows in Region H as a function of frequency. So far the time element associated with that frequency is undefined. Should target flows be accomplished every 3, 5, 10... years?

Shead stated that the group should be thinking long range. These strategies are not needed immediately, but would have to be implemented over a long range of time over a variety of conditions.

Jackson stated that if the group plants the seeds of action for the future, then someone can start where GBFIG leaves off.

Bartos stated that “no action” is important to use as a control, something to be compared against.

Weeks agreed that “no action” might be used as a comparative risk analysis.

Moulton stated he was not sure if “no action” was a viable option because of the task set out by the legislature. Even if no action is taken today, something will still be needed for the future.

Bartos replied, yes, however, “no action” is still good to define.

Jackson suggested that it be used as an unwanted alternative. “No action” will give some justification to adopting other actions.

Kachtick suggested that “no action” be used as a baseline for qualitative comparison rather than be ranked as an actual management scenario.

Break and management scenario ranking exercise

6. During the break, the group “voted” for their three most preferred management scenarios. The votes were tallied and a rank of management strategies was established for the next phase of discussions.

Scenario Rankings:	No. of votes
Purchase water rights for environmental flows	9
Conservation	7
Require pass-throughs	7
Return flows to basin of origin	5
Invoke Public Trust Doctrine	5
Interbasin transfers	5
Lease water rights for environmental flows	5
Implement Water Master program	2
New reservoir construction	1
Reallocation of flood storage	1
Enforce water rights	1
Cancellation of unused rights	1
Drought management	1
Interbasin trade	1
Voluntary dedication of water rights	0
Move the diversionary point of water right upstream	0
Dedication of return flows	0
Spatial redistribution of return flows	0
Special conditions on amended permits	0
Reallocation of water rights for environmental flows	0
Apply for water right to be used in drought periods	0

7. **Weeks** explained that the group should next define each management strategy in greater detail (who, how much, when and where).
Taylor asked if numerical criteria could be included in the definition of a management strategy.
Callaway agreed that if the numeric information is available to the group, then it should be included in the definition.
Weeks suggested the group move toward a more detailed management scenario matrix similar to that presented at a previous meeting by the LCRA.
Callaway asked if the frequency/periodicity of targeted flows should be defined.
Taylor answered, yes, that criteria should be set across all management scenarios.
Weeks reminded the group that they had already determined criteria by which to judge the management scenarios. These criteria are listed across the top of the current matrix worksheet. She asked if more criteria should be added to the list.
Taylor inquired as to whether the group had enough technical information to determine if a scenario can provide the necessary amount of freshwater inflow (efficacy).
Weeks stated that she wanted to know what information the group needed that GBFIG support staff might be able to make available via the Internet.

Paternostro stated that he could provide inflow statistics including historic median flow, averages, etc. Gary Powell may have already made this information available to the group, but Paternostro could supply it again if necessary.

Woodrow asked about the status of the WAMs.

Moulton replied that they are completed, but not yet available.

Regarding the purchase water rights management strategy, **Kachtick** stated that the group must have information/data that would enable them to connect the timing of the water right purchase with the timing of the needed flow.

Frossard stated that it depends whether one is talking about run-of-the-river rights or reservoir rights.

Shead would like to see water rights information including who owns the right, for how much water and what kind of right is it?
Moulton stated that the TNRCC has that information. It can be provided for the Trinity and San Jacinto basins. He stated that different uses (mining, industrial, environmental flows, etc.) have different temporal demand distributions i.e. flows available for industry in the month of May might not be available for environmental flows.

Callaway stated that water rights with a municipal use category might match temporally to environmental flows.

Paternostro asked if return flows were included in the WAMs.

Taylor replied, yes, but they are provided for specific point sources are buried within the model.

Kachtick asked if water right amounts are annual amounts. **Moulton** replied, yes, they are.

Kachtick suggested that agency staff intuition be used to help determine which Demand Distribution Aspect Ratio would be a best fit for environmental flows. **Moulton** replied that the TNRCC does have templates that might be applied to help answer that question.

Shead suggested that the group get information on pricing water rights.

Moulton replied that pricing depends upon the market.

Weeks asked if the group could look at recent transactions get an idea of water rights pricing.

Jackson stated that a recent Chambers County water right transaction was priced at \$275 per acre-foot.

Shead suggested that the group obtain a list of recent water rights prices within the basins of interest and a list of factors that can influence those prices.

Other information requests:

- A presentation on the WAMs
- Relevant regulatory guidance documents
- The diversion point and return flow destination associated with each water right
- Permitted water right amounts, who owns the right and how much water is actually used

Taylor stated that the WAMs might be available in May for release. Brown and Root submitted them and must respond to agency comments and go through the comment/notice periods. He explained that in the WAMs, each water right along a river represents an analysis point in the WAM. There are literally thousands of these points within each basin. The WAMs do include the types of information requested earlier in the discussion, however, the WAMs do not provide summary information. He suggested the group be very specific regarding the information that it needs.

Moulton agreed that the group must get specific on the information it needs since the information will be coming out of large databases.

Taylor suggested the group identify a certain set of water right holders in terms of location and timing and establish a baseline against which to compare them. He said the value of an interbasin transfer depends on its

proximity to the bay. He suggested the group 1) numerically define goals (already done i.e. Max-H, Min-Q and Min-Qsal), 2) temporally define the goals (seasonal, monthly, annual...) and 3) define triggering conditions that determine when a management scenario begins/comes into effect.

Jackson suggested the group think in terms of vision and goals rather than work in a technical manner like the engineers and consultants.

Callaway suggested the group make some simplifying assumptions.

Kachtick suggested the group 1) decide on monthly Max-H and Min-Q values desired, 2) determine the quantity of freshwater inflows available from the Trinity and San Jacinto basins, 3) decide what additional water is needed spatially and temporally and then 4) decide how that additional water will be obtained.

Weeks asked if the group still has modeling capabilities since there is no longer a contract to provide those services.

Paternostro suggested the Texas Optimization Model be used.

Taylor stated that money is available in the Region H budget for analysis. Region H might be able to assist in that regard.

Weeks asked if the group wanted to look at seasonal, temporal and spatial criteria.

Paternostro suggested the group determine a baseline.

Kachtick agreed by saying a baseline should be established for each scenario.

Weeks suggested Taylor help the support team identify information that might need to be made available again to the group.

8. Possible dates for the next meeting: Monday March 25, 2002 or Tuesday, March 26, 2002.
9. Adjourn