

HARRIS COUNTY

PUBLIC INFRASTRUCTURE DEPARTMENT

10000 Northwest Frwy., Suite 108
Houston, Texas 77092
(713) 316-4877

November 15, 2006

C. Allan Jones, Ph. D., Director
Texas Water Resources Institute
1500 Research Parkway, Ste. 240
College Station, TX 77843-2118

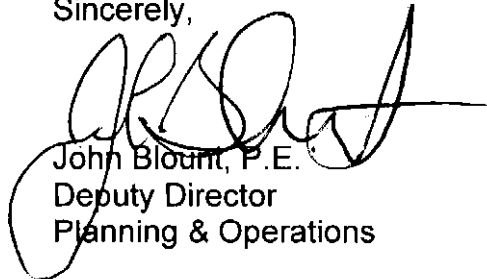
SUBJECT: BTMDL Task Force Report – First Draft, October 30, 2006

Dear Dr. Jones:

Harris County appreciates the opportunity to comment on the referenced report. We applaud the efforts taken by you and the other members of the Task Force in guiding future work in the field of water quality. Transmitted herewith for consideration by the Task Force please find attached my comments on the First Draft of the Report.

If you need further information or have any questions regarding these comments, please call me at (713) 316-4877 or Alisa Max at (713) 290-3089.

Sincerely,



John Blount, P.E.
Deputy Director
Planning & Operations

Attachments: Comments on BTMDL Task Force Report

cc: Kevin Wagner – TWRI
Pat Smiley, P.E. – Harris County
Alisa S. Max, P.E. - Harris County
Trent Martin - Harris County
Joe Myers, P.E. - Harris County Flood Control District
Catherine Elliot - Harris County Flood Control District

Comments on Bacteria TMDL Maximum Daily Load Task Force Report
First Draft – dated October 30, 2006

John Blount, P.E. - Harris County

1. The section on Bacterial Source Tracking should be incorporated into a broader section that more rigorously addresses how to calculate loading into a selected model, with bacterial source tracking being one means of doing it. For areas in which sampling is done instead of, or in unison with, bacterial source tracking, discussion should be included to discuss how samples should be taken, and what level of reliability should be sought out for the sample results.
2. A section should be added to discuss the need for development of consistent methodologies for usage of each model, including acceptable methodologies for determining, calculating, and calibrating model inputs. This should also include what maximum acceptable deviations should be allowed during model calibration when compared to historical events. A handbook should be developed for each recommended model that details the recommended methods.
3. Guidelines should be given as to when data collected for other sources besides the TCEQ (and its consultants) could be used.
4. Guidelines should be given for consistent and defensible data collection methodologies. For example, the Buffalo/White Oak Bayou Bacteria TMDL project team determined a bacteria regrowth equation in WWTP effluent based on a small-scale experiment whose methodology was not explained. Harris County conducted a bacteria regrowth in WWTP effluent study which found much, much greater levels of regrowth. Similarly, recent studies by Harris County found that bacteria inputs from WWTPs are much greater than what the Buffalo/White Oak Bayou Bacteria TMDL project team earlier determined. Which is correct?
5. A recommendation should be presented that allows Stakeholders to participate in a detailed manner in bacteria TMDL development, not just being presented with the answers. Stakeholders with technical knowledge could be a real asset in assisting with the design of bacteria TMDL studies required.
6. Bacteria must not be viewed in a vacuum. If other influencing pollutants - such as nutrients, dissolved oxygen, or pH - are responsible for the growth, die-off, or longevity of bacteria, then those other pollutants need to be considered. This becomes especially important as the project moves into implementation.
7. A section should be allotted for the treatment of bacterial regrowth, resuspension, and other bacterial life history issues.
8. Guidelines should be given for consistent and defensible policy decisions so as not to unfairly influence scientific modeling. For example:
 - a. In the Buffalo/White Oak Bayou Bacteria TMDL: Since illicit discharges are not allowable or permitted, contribution (allocation)

- from illicit discharges has been modeled as zero. This is in obvious contradiction to reality.
- b. Inputs from urban wildlife are sometimes allocated to background, but are sometimes not, since habitats for urban wildlife are the result of anthropomorphic disturbances.
 - c. Older fecal coliform data is simply converted to *E. coli* at a ratio of 200:126. In reality, Harris County studies conclude that each stream (and likely each wastestream) has its own particular ratio, which must be sampled in order to be determined.
 - d. When is the use of the geometric mean appropriate?
9. A recommendation should be included that the Bacteria TMDL team should use consistent terminology with the Permits teams, unless they specifically note otherwise.
 10. Harris County is very pleased with the emphasis placed on a state-wide bacteria source tracking library and methodology. One comment related to BST - does BST differentiate between bacteria that is a product of regrowth in the external environment versus bacteria that is from a discharge itself? These are two separate inputs into most models and spreadsheets, and the proposed implementation plan should be vastly different depending upon if the problem is based on regrowth versus direct pollutant loading.
 11. It should be noted that recommended reductions should be within the realm of achievability (*i.e.*; within the rates of existing best available technology at the time of TMDL adoption), or else it should be recommended that a UAA or re-evaluation of other loadings should be performed prior to adoption of any TMDL. For example, it should not be assumed, as is the case with the Buffalo/White Oak Bayou Bacteria TMDL, that 100% reduction in bacteria can be achieved from any one point source loading unless realistic existing technologies can achieve that.
 12. Similarly, policy should be developed to recommend that a TDML which finds that background levels exceed the desired standard should perform a UAA or re-evaluation of other loadings. Harris County conducted a study on an un-impacted stream and found that this stream could not meet primary contact recreation standard, despite its near-pristine condition. Big Creek in Fort Bend County, another un-impacted stream per TCEQ's own judgment, also cannot meet primary contact recreation stream standards.
 13. As of the time of this comment, TCEQ has not released the BLEST model, which is being used for the Buffalo Bayou and White Oak Bayou Bacteria TMDLs. We request that the models discussed in the paper are available to the public. We request to be provided with a copy of the model.
 14. An appendix should be developed to examine how different stream types influence how a TMDL and implementation plan is approached. For example, how to approach concrete flood control channels, effluent-dominated streams, rural streams, *etc.*

15. It would be helpful if Appendix 2 also included information related to what these approved TMDLs are doing for implementation, if there is any measure of success or failure being found with the implementation, if the stream is rural, urban or mixed, and if the stream appears to be effluent dominated.
16. Appendix 4: Please correct John Blount's affiliation on the expert advisor list. John is with Harris County.