

**Status Report  
Modeling Technical Review Group (MTRG)  
Savannah Harbor Expansion Project  
March 1, 2000**

A meeting was held on Wednesday, March 1, 2000 in Atlanta, GA at the EPA Office. The goals of the meeting were as follows:

- Coordination with Wastewater Characterization Data Collection Effort
- Review Tidal Amplitude Presentation for SEG
- Determine Appropriate Model Grid Resolution
- Begin Presentation and Review of 1999 In-stream Data

The following persons provided input and/or participated in the MTRG discussions:

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### **General Discussion**

#### **Wastewater Characterization Study**

For the Wastewater Characterization work, the MTRG provided coordination and discussion with the Harbor Committee as to the on-going evaluation of the data and the preparation of the data for potential use in the model. The MTRG did not provide specific recommendations since the work is being conducted under a separate COE project. A report will be provided in the future when the work is completed.

#### **In-stream Data Presentation**

The in-stream data presentation was an opportunity for the MTRG to view some of the results of the 1999 Monitoring Program, which will be presented in detail in the draft data report. No specific recommendations were made by the MTRG relative to the data, since this meeting was solely for preliminary information and coordination purposes. MTRG recommendations relative to data analysis and results will be provided at future meetings after review of a draft data report.

## **Recommendations**

A summary of the MTRG specific recommendations relative to the Tidal Amplitude Presentation and the Model Grid Resolution discussions are presented below.

### **Tidal Amplitude Presentation**

- Present graphical illustrations (through a cross-section of the river), as much as practical, to provide a clear breakdown of the major aspects of water level in the harbor and to show the potential effects of deepening.
- Have specific section of the presentation devoted to identifying what aspects of the impacts to water level in the harbor the model can and cannot address.
- Separate out subsidence from the list of factors that directly increase water level, this does not cause an increase in water level, but causes a lowering of the adjacent lands and possibly affects local datums.

### **Grid Resolution**

- Develop water quality model so that it is able to run a 90-day scenario in 14 to 16 hours.
- Utilize overall hydrodynamic model to develop forcing for water quality model, then cut grid at I-95 and Fort Pulaski to run water quality model.
- Further coarsen the grid to expedite water quality model application runs.

### **Mission Statement**

The MTRG recommended revision of the Mission Statement to the following:

Develop the scope of work for field data collection for dissolved oxygen model development, chloride model development, and to correlate in-stream salinities with interstitial marsh salinities. Amended by the SEG to include the scope of work for a field study of the distribution of shortnose sturgeon in the lower Savannah River. Further amended by the SEG to develop the scopes of work for the chloride model development task (SEGCL1), the dissolved oxygen model development task (SEGDO1), and the task to refine and verify the hydrodynamic and salinity model (SEGDO2). The MTRG should continue review of the model development providing guidance to GPA and reporting to the SEG through model calibration. The MTRG should meet on a regular basis to allow interim review of the model development and data analyses.

### **Future Meeting**

The next MTRG meeting will be held in Atlanta at the EPA office on March 29, 2000 at 9:00 am.