

MEMORANDUM FOR RECORD

SUBJECT: Savannah Harbor Expansion Project; 30 April SMART meeting

1. A SMART meeting was held on 30 April 2002, after completion of the MTRG. The following people attended:

Jim Greenfield	EPA
Paul Conrads	USGS
Dr. Sung-Chan Kim	USACE-ERDC
William Bailey	USACE-SAS
Larry Keegan	Lockwood-Greene
Bo Ellis	ATM
Matt Goodrich	ATM
Dan Mendelsohn	ASA
Eduardo Yassuda	ASATM

2. The group discussed comparing the Transfer Functions for salinity to conditions that existed prior to the 1993-1994 deepening project. The group decided, instead, that ATM will first look at the effects of further deepening of the channel to ascertain the extent to which such deepening alters the present trends and patterns of tidal flows and forcing. If such deepening would not appear to substantially alter the present trends and patterns, then the group would have more confidence that the physics represented by the salinity Transfer Functions would still be applicable with the proposed changes in river geometry.

3. ATM agreed to provide the Federal agencies with the following additional information to aid their review of the Hydrodynamic and Salinity Model. This information will be provided by 14 May:

A. Comparisons of the model to data at the USGS stations. This had been inadvertently left out of the Approval Package.

B. ATM will develop Transfer Functions for all or most of the 1999 data stations. An explanation will be provided where Transfer Functions are not developed.

C. ATM will perform a sensitivity analysis to evaluate the model's sensitivity to river depth where water levels do not match well. They will run the model twice; first with a ½ meter increase in depth, and then with a ½ meter decrease in depth. They will report only the statistics of the model's performance.

4. The group discussed Convergence Testing. No additional work was done on this issue after the March 2001 Calibration Report. Information in that report should be used to assess the model's performance on this issue. Danny will review Figure 5-4c from that

report and provide additional explanation on why ATM believes the convergence is acceptable.

5. The group discussed the link between the Hydro Model and the D.O. Model. ASATM will check salinity movement in the D.O. Model early in their development of that model to ensure both models are moving salinity the same.

6. The next meeting will be the afternoon of June 6th, after the MTRG meeting. The group will provide initial responses to morning's presentation of the D.O. Model, and discuss Critical Conditions for application of the models.

William Bailey
Physical Scientist