

# Monitoring and Modeling Workgroup Update

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STAC Quarterly Meeting

December 13-14, 2011

# November Modeling Workgroup Meeting

- Maintenance of historical CH3D-ICM Hydrodynamic-WQ model for CB open water
- Development of shallow water model ( $\leq 3$  m) to run/link with the above
  - Oysters
  - Benthic microalgae
  - Waves, sediment resuspension, erosion
  - Wetting/drying
  - Wetlands
  - SAV/clarity
- Demonstration project for transitioning ACE 2D ADH model into 3D ADH for undertaking the above
- Potentially expand CBP model capacity to include menhaden, climate change (SLR, T increase, flows/loads from changing hydrologies & hydrodynamics), and climate patterns and DO

# Discussion & Post-Meeting Activities

- Suggestion that any EPA funding for ACE demonstration project be made available for others with equally promising model options
- Use STAC-recommended skill assessment, peer review for selection of model/models
- Seek regional/national interest in model possibilities for shallow water modeling needs
- From the response, initiate discussions with CBP on options for pursuing new shallow water modeling

# Early 2012 Goal

- Group discussion with CBP/EPA modelers to identify
  - model needs (shallow water hydro/WQ for oysters, SAV/clarity, wetlands, waves, resuspension, and erosion; expanded general modeling such as climate change, menhaden, climate and hypoxia)
  - required deliverables (skill, output or code, etc.)
  - required schedule (timeline)
  - funding available including any match required for demonstration project & model(s)
  - demonstration sites and input data sets
- RFP for demo, or demo + future model, and subsequent peer review of possible future model/models for the CBP modeling suite