

## Workshop 4

# Introduction to the Water Quality Analysis Simulation Program (WASP7)

Location: Georgia Center for Continuing Education (Room R), University of Georgia

Date: Wednesday, April 27, 2005, 8:30 a.m. - 5:00 p.m.

### Instructors:

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WASP7 is an enhanced Windows version of the USEPA [Water Quality Analysis Simulation Program \(WASP\)](#). WASP7 has features including a preprocessor, a rapid data processor, and a graphical post-processor that enable the modeler to run WASP more quickly and easily and evaluate model results both numerically and graphically.

WASP is used routinely throughout the United States in the development TMDLs and waste load allocations. The model contains algorithms for conducting: 1) Eutrophication/Conventional Pollutants, 2) Organic Chemicals/Simple Metals, 3) Mercury, 4) Temperature, Fecal Coliforms, Conservative Pollutants.

The objective of this short course is to expose the user to the capabilities of the model and present some of the underlying principles within the model.

### Agenda

- Introduction to WASP
  - Model History
  - Capabilities
  - Applications
- Segmentation
- Transport
  - Flows
    - Descriptive
    - Kinematic Wave
    - Hydrodynamic Linkage
  - Dispersion
  - Sediment
- Conventional Pollutants
  - DO/BOD/SOD
  - Nutrients
  - Algae
  - Periphyton
- Organic Chemical/Simple Metal
  - Sorption

- Kinetic Processes
- Mercury
  - Overview of Hg Model
- Case Study/Hands-On Example
  - Participants are invited to bring Notebook Computer to Workshop or follow along on LCD display
    - Develop input file
    - Calibration Procedures
    - Reviewing Model Results