
Methodology for Flow and Salinity Estimates in the Sacramento-San Joaquin Delta and Suisun Marsh

**18th Annual Progress Report
June 1997**

Chapter 4: Home Page Status

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4 Home Page Status

Extensive additions and development of the Delta Modeling Section Home Page (<http://wwwdelmod.water.ca.gov>) occurred last year. Highlights include:

- ❑ **DSM2 source code, executables, and sample input / output files.** A complete DSM2 package is available to run and test DSM2. Source code is provided for those who wish to modify DSM2, or do not have either an Intel-NT or Sparc-Solaris computer.
- ❑ **Particle Tracking Model animation using Java and MPEG.** Particle movement from the PTM can be displayed using either Java or MPEG.



Interactive Delta simulator using artificial neural networks (ANNs) and Java to calculate salinities when given flows. In the simulator, flows are historical daily values, modified by the user by adding or multiplying by a constant value. After setting the flow values at different locations and selecting one of several locations in the Delta, the user can choose to plot the historic (observed) salinity, the computed salinity using the ANN with historic flow values, and the computed salinity using the modified flow values. This allows the user to check the accuracy of the ANN, as well as perform experiments with carriage water estimates and the response of the Delta to different flow inputs.

- ❑ **Interactive Total Trihalomethane calculator**, using a hybrid ANN model and Java to calculate total trihalomethane concentration and individual THM species concentrations. Raw water inputs include total organic carbon (TOC) concentration, bromide concentration, ultraviolet absorption at 254 nm (UV-254), and ammonia concentration. Water treatment inputs to the ANN include chlorine dose, reaction time, temperature and pH, and fractional removal of TOC and UV-254 prior to chlorination. This simulator allows the user to test the response of THM formation in treated Delta water to changes in Delta operations for a user-defined set of water treatment conditions.
- ❑ **Continued dissemination of Section reports and study results**, such as CALFED studies. The World Wide Web is an efficient and cost-effective method of distributing results of work performed by staff. We will continue to use and expand our use of this medium for future work.