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DSM2 Hydro

DSM2-Hydro is a modified version of the FourPt Model developed by Lew Delong et. al., (US Geological Survey). The FourPt Model is capable of simulating one-dimensional, unsteady, open-channel flow by solving the governing equations of continuity and momentum in an implicit form. Unlike DSM1, the FourPt Model is public domain. Other major advantages the FourPt Model has over DSM1 include:

- The ability to simulate irregular cross-sections and nonprismatic channels
- The ability to conserve mass within a channel
- The potential to incorporate baro-clinic term (density driven flow)

In 1992 the Delta Modeling Section started evaluating the performance of FourPt Model using the DWRDSM Delta Grid. The results of initial tests looked very promising. Since then, the model has undergone major revisions—the ultimate goal being to create a production level model able to simulate the complex conditions in the Sacramento-San Joaquin Delta. The model was successfully calibrated and verified in 1997 using flow data. In the summer of 1997, DSM2 replaced DSM1 as the official model utilized in the Delta Modeling Section. For more information about DSM2-Hydro, consult the sources below:

- Delta Modeling Section's DSM2 documentation
- USGS report (FourPt Manual) (Lew Delong)
- Delta Modeling Section's home-page: **http://wwwdelmod.water.ca.gov**
- Delta Modeling Section's previous annual reports (1992-1997)