



## TR-430

### Water Rights Analysis Package (WRAP) Daily Modeling System

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- [Full Text](#)

WRAP simulates development, management, control, allocation, and use of the water resources of river basins. The WRAP modeling system documented by the basic Reference and Users Manuals ([TR-255](#) and [TR-256](#)) is based on a monthly computational time step. TR-430 documents an expanded version of WRAP that allows use of sub-monthly time steps and provides additional features for simulating flood control reservoir operations and environmental instream flow requirements. The daily WRAP includes all of the capabilities of the monthly modeling system plus an array of additional major new features. Each of the 12 months of the year can be subdivided into multiple time intervals with the default being daily. Options are provided for disaggregating monthly stream flows and water demands to daily. Future time steps extending over a forecast period are considered in the simulation model in determining both water availability from a supply perspective and remaining flood control channel capacity. Routing methods reflect flow attenuation. Calibration methods for determining routing parameters are provided. The daily WRAP modeling system incorporates pulse flow environment instream flow requirements and reservoir operations for flood control.

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