



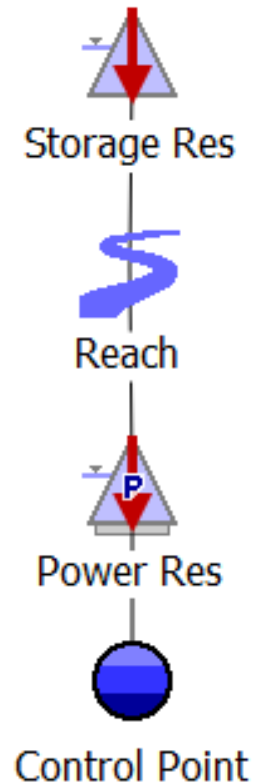
Selected Enhancements to Object Methods and Water Quality

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2015 RiverWare User Group Meeting
February 3, 2015

Unregulated Conditions

- Remove the effects of a reservoir
 - Category: Disable Reservoir Processes
 - Method: Pass Inflows
- New Dispatch Method:
$$\text{Outflow} = \text{Inflow} + \text{Return Flow} + \text{Hydrologic Inflow}$$
- Use to compute project impacts
- Scripts automate the process



Water User Soil Moisture

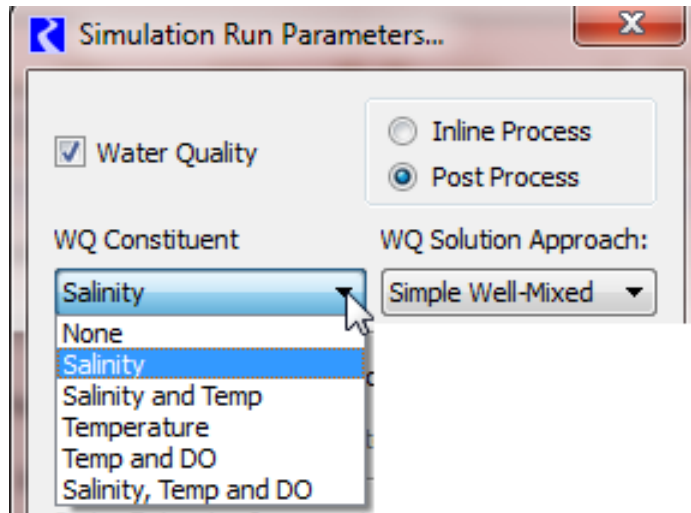
- Track Soil Moisture Volume
- Refill with excess diversions or pumping
- Consume soil moisture when diversions are insufficient

- Water User Methods:
 - Irrigation Requests with Soil Moisture
 - Proportional Shortage with Soil Moisture
 - Supplement Diversions including Soil Moisture

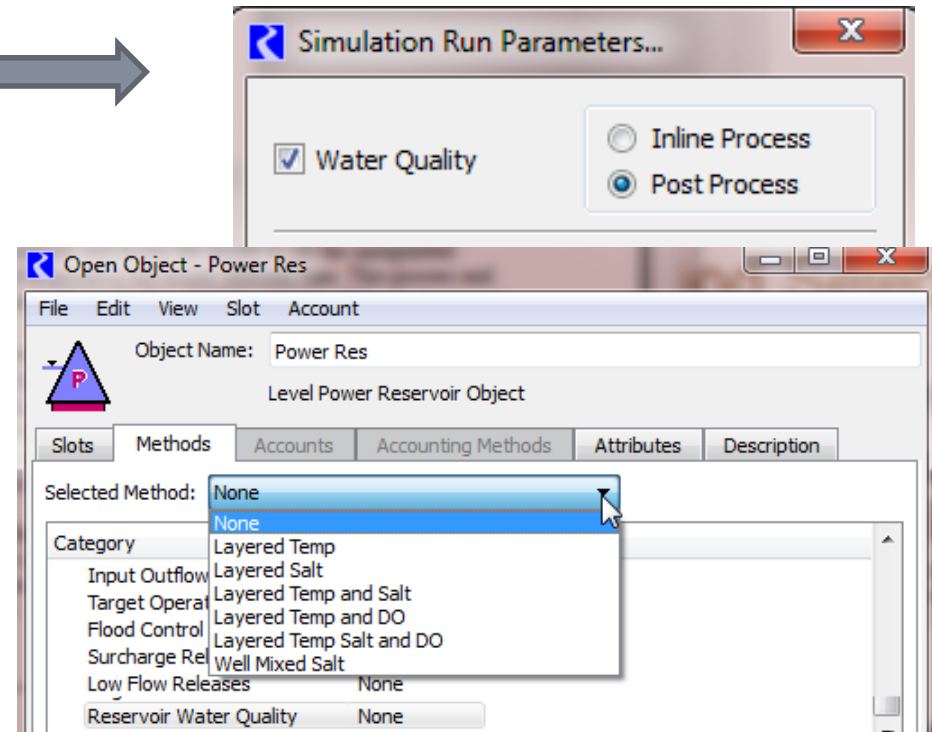
Water Quality Method Selection

- Selection mechanism change

6.5



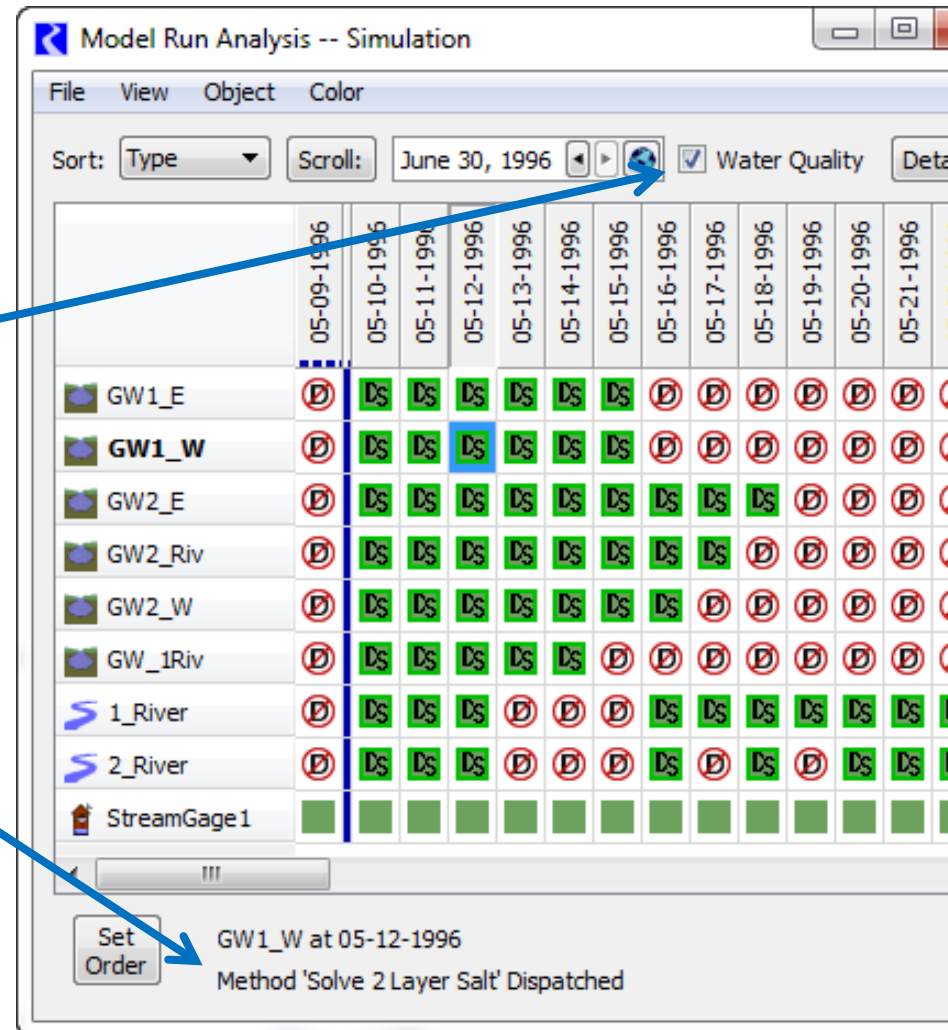
6.6



- Targeted water quality modeling

Water Quality Run Analysis

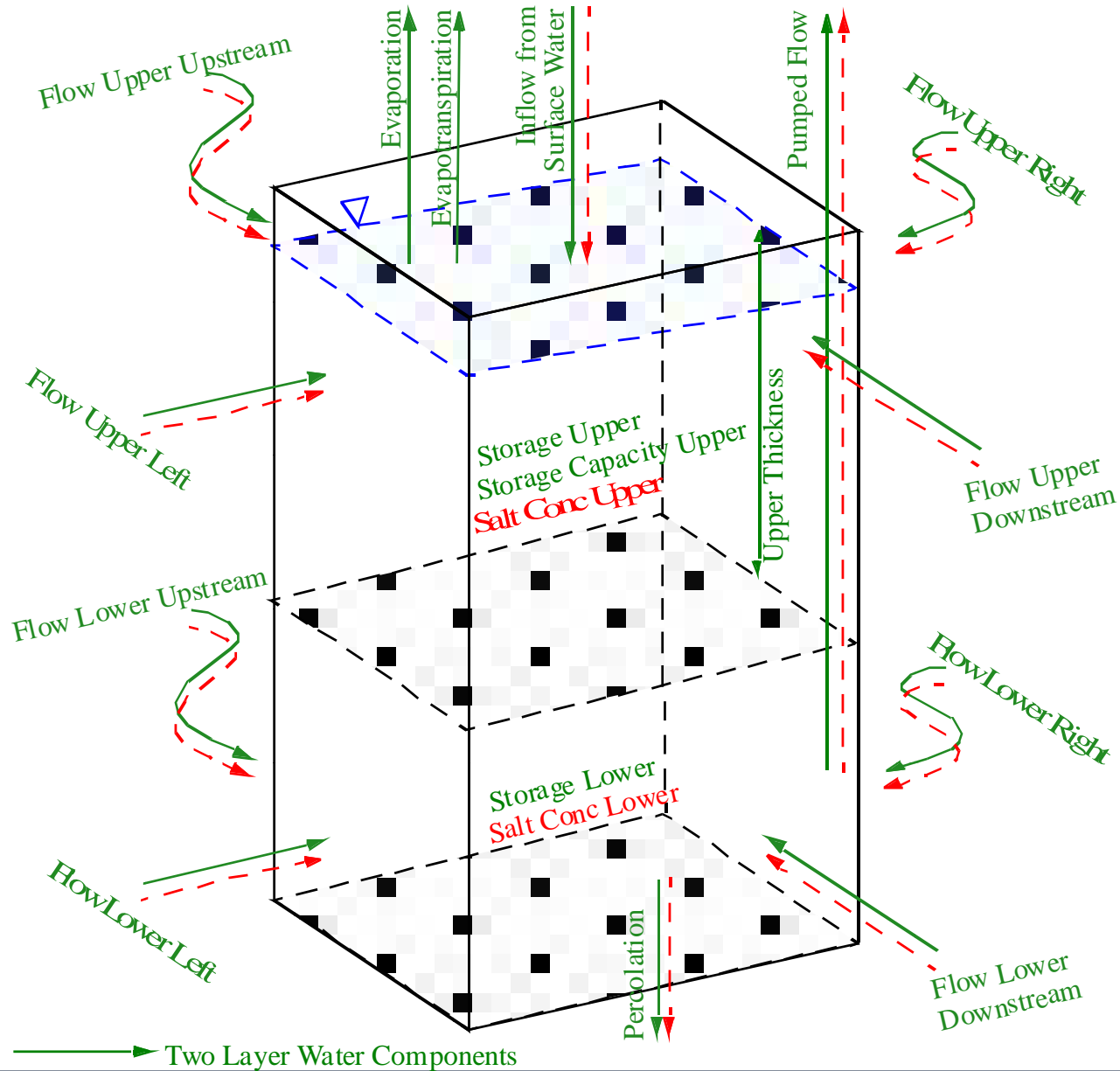
- Water Quality Dispatching Information
- Toggle controls
- See WQ solution Information
- Double click cells for details



Reach Salinity Modeling

- Salt mass for flows near zero
- **Diversion Salt Mass > Inflow Salt Mass**
- Improved upstream solution

Groundwater Salinity



— Two Layer Water Components

- - - Two Layer Salinity Components

Upcoming

- Improved reservoir modeling
 - Layers based on Temperature and Salinity
 - Ability to model seasonal mixing, under flows, and over flows based on Inflow conc and temp