CADSWES Accomplishments: September 2017

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I New/Enhanced Software

A. Sponsored Tasks

**BOR LC 7 – Expression Slot Time Range Using Symbolic Dates**

In September, 2017, CADSWES staff completed development work of BOR LC 7 – Expression Slot Time Range Using Symbolic Dates.

In order to make the configuration and evaluation of Series Slots with Expressions more flexible and robust, the sponsor requested an enhancement to RiverWare to represent the evaluation start and end dates using symbolic date syntax. This enhancement was completed in September, 2017 and included in RiverWare 7.2.

A new dialog, *Configure Timeseries – Evaluation Range*, was introduced and differentiated from the timeseries configuration for non-expression series slots. The new dialog presents three dropdown combo boxes: one for selecting the slot’s timestep size, and two others for assigning start and end date. The resulting number of timesteps is displayed and recalculated as timestep and date changes are made.

Evaluation Start and End dates can be assigned a real date value, a symbolic date value, or a RPL Function that performs a DATETIME calculation. Symbolic dates are represented with syntax similar to the symbolic dates currently available on Plot – Lower X Axis configuration, in formats such as: Start Timestep, Start Timestep + N Timestep, and Start Timestep – N Timesteps. A help screen is provided to assist with symbolic date syntax.

Symbolic dates are resolved during configuration as a convenience, and again at model runtime for each timestep.

For backward compatibility, expression slots previously synchronized with the model start and run dates will be assigned symbolic dates of: “Start Timestep” and “Finish Timestep” when the model is opened. Slots that included the init timestep will be assigned a symbolic start date of “Start Timestep – 1 Timestep”. In this case, a diagnostic message will be displayed when the slot’s timestep differs from the model run timestep.

It is important to know that it is the slot’s timestep that is used when evaluating the addition or subtraction of a timestep to resolve a symbolic date.

Additional information can be found in the following document:

R:\doc\ExprSlotTimeRange\BorLc7-ExprSlotSymbolicDate-2017-07.docx

**USACE ABQ 7 – Combine Output Canvas information with Geospatial View – Flow Lines**

In September, 2017, CADSWES staff began work on Combining Flow Lines, Canvas Lines, and Anchor Points from an Output Canvas onto the Geospatial and Simulation workspace views when including Output Canvas items on the Workspace. This task is currently in progress.