II. RiverWare Software Maintenance

**Releases, Patches and Snapshots**

RiverWare 7.0.6 Release

RiverWare Patch 7.0.6 was released on March 23, 2017. Release notes are as follows:

**RPL Units**
RPL Units were added for the FlowPerTime unit type. This allows RPL Policy to reference slots with this unit type.

**Bug Fixes**
The following issues were addressed:

* 5858: On the Periodic Slot, the delete column operation did not correctly adjust numeric column headers.
* 5912: On some Table Slots, adding or deleting columns did not correctly update units.
* 5913: Within the SCT, when switching series sheets, the vertical time scrolling could become out of sync.
* 5917: A secondary bisection algorithm was added to the Level Power Reservoir's solveMB\_givenEnergyInflow dispatch method for better iteration and convergence.
* 5923: Within plotting, the alignment of grid lines to the right axis was not working correctly.
* 5924: Particular scaled unit combinations showed incorrect values (e.g. 1000 ML and 1E6 GL).
* 5926: A crash could occur in the Reservoir's Future Value category, Cumulative Storage Value Table method, when changing the run timestep.

**Software Updates, Bug fixes (not associated with new development)**

Bug Fixes:

* Bug 5617: Non-convergence when solving given inflow and energy. A secondary bisection algorithm was added to the Level Power Reservoir's solveMB\_givenEnergyInflow dispatch method for better iteration and convergence.
* Bug 5926: A crash could occur in the Reservoir's Future Value category, Cumulative Storage Value Table method, when changing the run timestep

**Regression Tests**

The regression tests continue to be maintained on a daily basis. This involves updating the regression tests to exercise new developments in the code. Also, as new code is added to the development area, the model comparisons performed in the nightly regression tests usually show differences (for example, because a new method category may have been added). When this occurs, the regression tests need to be updated to reflect the current state of the development area so model comparisons do not fail. In addition, every week, the daily history of each regression test is analyzed to determine if the run time or model size has significantly changed because of new development. In March, the 32 bit build machines had to be updated regularly due to conflicts in the merge. This prevented the regression tests from running each night.