

## **Release Notes for IWFEM Version 2015.0.369**

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This version of IWFEM includes the following modifications and corrections:

1. **(12/09/2014)** An error in dimensioning the supply adjustment specification array when supply adjustment specification column for well pumping, element pumping or diversions was set to zero is corrected.
2. **(12/22/2014)** A finite element can no longer be part of two different lakes.
3. **(12/23/2014)** Only one bypass is now allowed to originate from a single stream node.
4. **(01/08/2015)** In Stream Component version 5.0, flow from an upstream reach can now flow into any stream node of a downstream reach. Before, the flow was allowed only to the most upstream node of a downstream reach.
5. **(01/09/2015)** An error in in computing the cumulative subregional groundwater inflows from small watersheds is corrected.
6. **(01/09/2015)** When the same groundwater node received inflows from multiple small watersheds, these flows were being double-counted creating a mass balance error. This error is now fixed.
7. **(02/02/2015)** When convergence details are printed out to SimulationMessages.out file, the sign of the MAX. DIFF. output is such that a positive value means the state variable estimate had to be increased and a negative value means the state variable estimate had to be decreased.

8. **(02/24/2015)** When constrained general head boundary conditions were defined, the code was accidentally referring to general head boundary conditions which was causing an error. This is corrected.
9. **(03/06/2015)** Tecplot output now includes solution times which allows immediate animations within Tecplot software once data is imported.
10. **(03/12/2015)** If deficit irrigation is being simulated, IWFM now prints out an informative message to make sure that the user is aware of the situation in case it was unintentional due to incorrect soil data entry.
11. **(03/17/2015)** It is now checked that diversions are greater than or equal to zero. This check was included because several projects to migrate IGSM models to IWFM were using negative diversions to represent inflows to streams creating problems with IWFM.
12. **(04/06/2015)** Source code is modified so that IWFM can be compiled as a dynamic link library (DLL) and efficiently be linked to other models.
13. **(04/30/2015)** A new option to generate a restart file and to restart the model run from the last successfully simulated timestep is implemented. This option is intended to be used in effectively debugging models that crash later in the simulation period.
14. **(05/04/2015)** In printing out the root water uptake from groundwater for ponded crops in Root Zone Component version 4.1, the unit rate was accidentally multiplied by the crop acreages twice. This was corrected.
15. **(05/05/2015)** In assigning aquifer parameters to node using parametric grid approach, they were not assigned a value of zero if all the parametric node values were zeros. This was corrected.

16. **(05/08/2015)** For a simulation with a single aquifer layer, velocity field output was generating incorrect results due to an array indexing error. This is corrected.
17. **(05/19/2015)** Setting adjustment specification column number to zero for diversions was causing memory errors. This is corrected.
18. **(05/20/2015)** In setting the initial groundwater heads, the specified head boundary conditions were not honored. This is corrected.
19. **(06/01/2015)** In printing the vertical flows between aquifer layers, the sign of the flow which is an indicator of the flow direction was being printed incorrectly. This is corrected.