

Instructions for running MODFLOW-NWT and File Descriptions

1. Running the Model

Navigate to “**Modflow_Files**” folder and enter the following at the command line to run the model:

- mfnwt_jd.exe < mfnwt_complex.in

2. 2010 simulation summary

- 2010 is represented by stress period 2 in modflow input files
- Model input files were developed using the same methodology as 2001 and 2009
- Water levels, spring flows and baseflows were evaluated in measuring the 2010 model prediction performance

3. Description of files contained in folder “**Observation_Data**”

- Baseflows were estimated using 5 different baseflow separation techniques. Simulated baseflows were compared to the average, minimum and maximum baseflow of the 5 estimations.
 - i. **2010_Estimated_Baseflow_Pickups.xlsx**
 - Baseflow pickups represent the change in baseflow between a downstream and upstream gage. Spreadsheet includes the average, minimum and maximum of 5 baseflow techniques.
 - ii. **2010_Estimated_Cumulative_Baseflows.xlsx**
 - Cumulative baseflows represent the total baseflow at a given gage. Spreadsheet includes the average, minimum and maximum of 5 baseflow techniques.
- Spring discharge rates for the year 2010 were developed based on direct observations if available for 2010 or estimates using direct observations from other years if sufficient data was not available. Observed spring discharge rates are included in the geodatabase “**Observations_2010.gdb**”.
 - i. **Springs_2010_Final feature class**
 - *SpqQ_10_cfs* includes observed/estimated spring discharge rates in cubic feet per second (cfs).
- Groundwater level observation data were compiled from a variety of sources, including the USGS and Water Management Districts. Observed groundwater levels rates are included in the geodatabase “**Observations_2010.gdb**”.
 - i. **WL_2010_Final feature class**
 - *WL_2010_ft* includes observed groundwater levels in feet, NAVD88.

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Please report any errors or corrections that otherwise need to be made to the St. Johns River Water Management District or the Suwannee River Water Management District:

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