Notes on revision of zip-archive file, , associated with automated-execution of the NFSEG v1.1 model.

Description of revision process:

1. Copy file, [\\POSEIDON\Water\_Use\_Research\Modeling\NFSEG\version\_1.1\auto\_execution\working\_nfseg.zip](file:///\\POSEIDON\Water_Use_Research\Modeling\NFSEG\version_1.1\auto_execution\working_nfseg.zip), to temporary directory, E:\temp\nfseg\_v1\_1\_autotesting\, then unzip contents to new subdirectory, working\_nfseg.zip.
2. Copy file, sim\_cup\_sjr.bat, to file, sim\_cup\_sjr\_old.bat
3. Copy file, sim\_cup.bat to file sim\_cup\_sjr.bat. Edit this file as follows:
   1. change line 16 to ‘c:\python27\ArcGIS10.6\python update\_wellpkg\_nfseg\_sjr.py
   2. search and replace string, ArcGIS10.6, with string, ArcGIS 10.2.
4. Copy file, E:\temp\nfseg\_v1\_1\_autotesting\working\_nfseg\preproc\wellpkg\_update\update\_wellpkg\_nfseg.py, to file, E:\temp\nfseg\_v1\_1\_autotesting\working\_nfseg\preproc\wellpkg\_update\update\_wellpkg\_nfseg\_sjr.py, then edit as follows:.
   1. Comment out line 33, which contains the expression, spRef\_state\_plane\_north = os.path.join(this\_dir, "state\_plane\_north.prj")
   2. below line 33, insert the following line:
      1. spRef\_utm\_zone17n\_meters\_sjr = os.path.join(this\_dir, "utm\_zone17N\_linear\_unit\_meters\_sjr.prj")
   3. change the line with the ‘MakeXYEventLayer’ command (now line 43) to the following:
      1. arcpy.MakeXYEventLayer\_management(in\_Table, x\_coords, y\_coords, cup\_wells\_layer\_state\_plane\_north, spRef\_utm\_zone17n\_meters\_sjr)

The list of files, and where they go, that need to be included in a complete set of model files:

To the preproc\wellpkg\_update directory\

1. wellpkg\_header\_nfseg.asc
2. wellpkg\_stress\_period\_01\_records\_nfseg.asc

To the <model>\ directory:

1. Nam file:
   1. LIST 7 nfseg\_auto.lst
   2. BAS6 1 nfseg.bas
   3. DIS 29 nfseg.dis
   4. UPW 11 nfseg.upw
   5. ZONE 21 nfseg.zone
   6. MNW2 25 nfseg\_sp1\_and\_sp2\_are\_2009.mnw2
   7. WEL 12 nfseg\_auto.wel
   8. DRN 13 nfseg\_sp1\_and\_sp2\_are\_2009.drn
   9. RIV 14 nfseg\_sp1\_and\_sp2\_are\_2009.riv
   10. EVT 20 nfseg\_sp1\_and\_sp2\_are\_2009.evt
   11. GHB 17 nfseg\_sp1\_and\_sp2\_are\_2009.ghb
   12. RCH 18 nfseg\_sp1\_and\_sp2\_are\_2009.rch
   13. CHD 40 nfseg.chd
   14. OC 22 nfseg.oc
   15. NWT 15 nfseg.nwt
   16. DATA(BINARY) 50 nfseg\_auto.cbb
   17. DATA(BINARY) 54 nfseg\_auto.cbw
   18. DATA(BINARY) 51 nfseg\_auto.crc
   19. DATA(BINARY) 16 nfseg\_auto.hds
   20. DATA(BINARY) 19 nfseg\_auto.ddn
   21. DATA(BINARY) 23 nfseg\_sh.hds
2. The nfseg\_sp1\_and\_sp2\_are\_2009.evt file should be listed in the nam file. evt\_rate\_after\_mul\_2009.ref should be the file listed for both stress periods – the 2009 evapotranspiration arrays only – within nfseg\_sp1\_and\_sp2\_are\_2009.evt.
3. nfseg\_sp1\_and\_sp2\_are\_2009.mnw2 should be listed in the MODFLOW name file and should repeat the multi-node wells in both stress periods (need to double check this is correct)
4. nfseg\_sp1\_and\_sp2\_are\_2009.rch should be the recharge package file listed in the nam file. The files referenced for reading the recharge arrays in nfseg\_sp1\_and\_sp2\_are\_2009.rch should be recharge\_mul\_2009.ref – the 2009 recharge arrays only – for both stress periods
5. nfseg.nwt – increase number of iterations from 100 to 1000 (3rd column I believe)
6. Need to check:
   1. DRN 13 nfseg\_sp1\_and\_sp2\_are\_2009.drn
   2. RIV 14 nfseg\_sp1\_and\_sp2\_are\_2009.riv
   3. GHB 17 nfseg\_sp1\_and\_sp2\_are\_2009.ghb