Here is the files and the procedure I used for water budget analyses.

1. Files
    a. Working folder
        i. U:\Water Supply Planning\Evaluation and Modeling\GWM\NFSEG\V1.1\5_model\case_005b\CASE_005B_WaterBudget
    b. Unzip zip file case_005b_model_files.zip is from Trey to subfolder water_budget
    c. I built a subfolder bin to hold the command-line version of modflow-nwt and tools I built for the analysis
        i. mfnwt_jd.exe, special version of modflow-nwt compiled by John
        ii. cbb_cfd.nfseg.exe, program to read cbb file and generate files for cell-level analysis, which are used by Tim Desmarais's tools
        iii. nfseg.springflow.exe, program to evaluate springflow
        iv. cbb_table.nfseg.exe, program to generate water budget tables
2. Generate the CBC file consisting of all water budget components
    a. Copy subfolder water_budget to subfolder water_budget_wjin
        i. Copy gwv_springs_conductances.dat from U:\Water Supply Planning\Evaluation and Modeling\GWM\NFSEG\V1.1\5_model\PestFiles\Case005b
            1. This file will be used to evaluate springflow
    b. In subfolder water_budget_wjin
        i. Modify MODFLOW input files so that corresponding components will be written to the CBC file
            1. Modify nfseg_all_to_cbc.drn
                a. Line 3, replace "-50" with "50"
            2. Modify nfseg_all_to_cbc.riv
                a. Line 3, replace "-50" with "50"
            3. nfseg_all_to_cbc.ghb
                a. Line 3, replace "-50" with "50"
        ii. Rerun the model
            1. ..\bin\ mfnwt_jd.exe < mfnwt_all_to_cbc.in
3. Run water budget analysis tools
    a. In subfolder water_budget_wjin
    b. Generate cell-level water budget files that Tim Desmarais's tools can read
        i. ..\bin\cbb_cfd.nfseg.exe < ..\bin\cbb_cfd.nfseg.in
        ii. Two new files were generated
            1. nfseg_all_to_cbc.cbc.2001.csv
            2. nfseg_all_to_cbc.cbc.2009.csv
    c. Water budget tables
        i. Evaluate springflow
            1. You need to have nfseg.springs.csv put in subfolder water_budget_wjin. If you are working in a different subfolder other than water_budget_wjin, you need to copy that file always from there and paste it in the subfolder wherever you are working (in this case it is already there in water_budget_wjin.
            2. ..\bin\nfseg.springflow.exe
                a. note the following files need to be updated to be consistent with the final calibrated model

i. gwv_springs_conductances.dat, the spring conductance file
ii. nfseg.springs.csv, a file I made based on the spring lookup data file; if there is adding/removal of springs, this file has to be modify accordingly, and modifications are also needed to be done to nfseg.springflow.f to compile a new nfseg.springflow.exe

b. generate three new files
i. nfseg.springflow.dat
ii. nfseg.springflow.table.2001.dat
iii. nfseg.springflow.table.2009.dat

ii. Evaluate files for water budget tables
1. Run the following
a. ..\bin\cbb_table.nfseg.exe < ..\bin\cbb_table.nfseg.in
2. Two new files generated
a. nfseg_all_to_cbc.table.2001.dat
b. nfseg_all_to_cbc.table.2009.dat

iii. Combined files to generate the final water budget tables.
1. Copy the two files "NFSEG_2001_WaterBudgetAnalysis.xlsx" and "NFSEG_2009_WaterBudgetAnalysis.xlsx" from water_budget_wjin and paste them in the working directory. (in this case, the working directory is water_budget_wjin).
2. 2001
a. Open Excel file NFSEG_2001_WaterBudgetAnalysis.xlsx
b. Import nfseg_all_to_cbc.table.2001.dat to worksheet "cbb_table.2001.dat"
c. Import nfseg.springflow.table.2001.dat to worksheet "springflow.table.2001.dat"
d. The final tables are in worksheet "WATER BUDGET TABLE 2001"
3. 2009
a. Open Excel file NFSEG_2001_WaterBudgetAnalysis.xlsx
b. Import nfseg_all_to_cbc.table.2009.dat to worksheet "cbb_table.2009.dat"
c. Import nfseg.springflow.table.2009.dat to worksheet "springflow.table.2009.dat"
d. The final tables are in worksheet "WATER BUDGET TABLE 2009"