These are the files that I was using to calibrate the SWMM model:

**Continuous\_NWFC\_2016.inp** - This is the SWMM template input file that has tags (denoted by $something$) for parameters to be calibrated. This file is called in the Continuous\_NWFC\_2016.R file.

**tssCal\_1800N.csv**- A csv file of the observed TSS values at 1800 North

**tpCal\_1800N.csv -** A csv file of the observed TP values at 1800 North

**Continuous\_NWFC\_2016.R -** The R script that was called from the SLURM batch file. Prepares the SWMM input files and calculates the objective functions.

**parameterBounds.txt** - a csv that has a list of the model parameters, lower and upper calibrations bounds, and the tag used to identify it in the Continuous\_NWFC\_2016.inp file.

**newFunctions.RData -** These are modified R functions (“nsga2.r,” “apply”) used to run the algorithm in parallel. They are loaded in the Continuous\_NWFC\_2016.R file.

**FlowCal\_1800N\_2016.csv -** Observed discharge values at 1800 North during the 2016 irrigation season.

**Subcatchments.txt -** Output from ArcGIS geoprocessing. Has land use, rain gauge, imperviousness, slope, and flow width information

**SWMM Time Series -** a folder with rain gauge data and flow, TSS, TP, and TDP data for the upstream boundary (200 South).

**SWMMFunctions\_Continuous\_ParallelTest.R** - an R file that contains functions that run the SWMM simulations, read binary output files, and calculate the objective functions. This file is sources in the Continuous\_NWFC\_2016.R file.