# SWAT+ Model Setup
# Hydrology for Engineers

Prerequisites

Make sure QGIS is installed
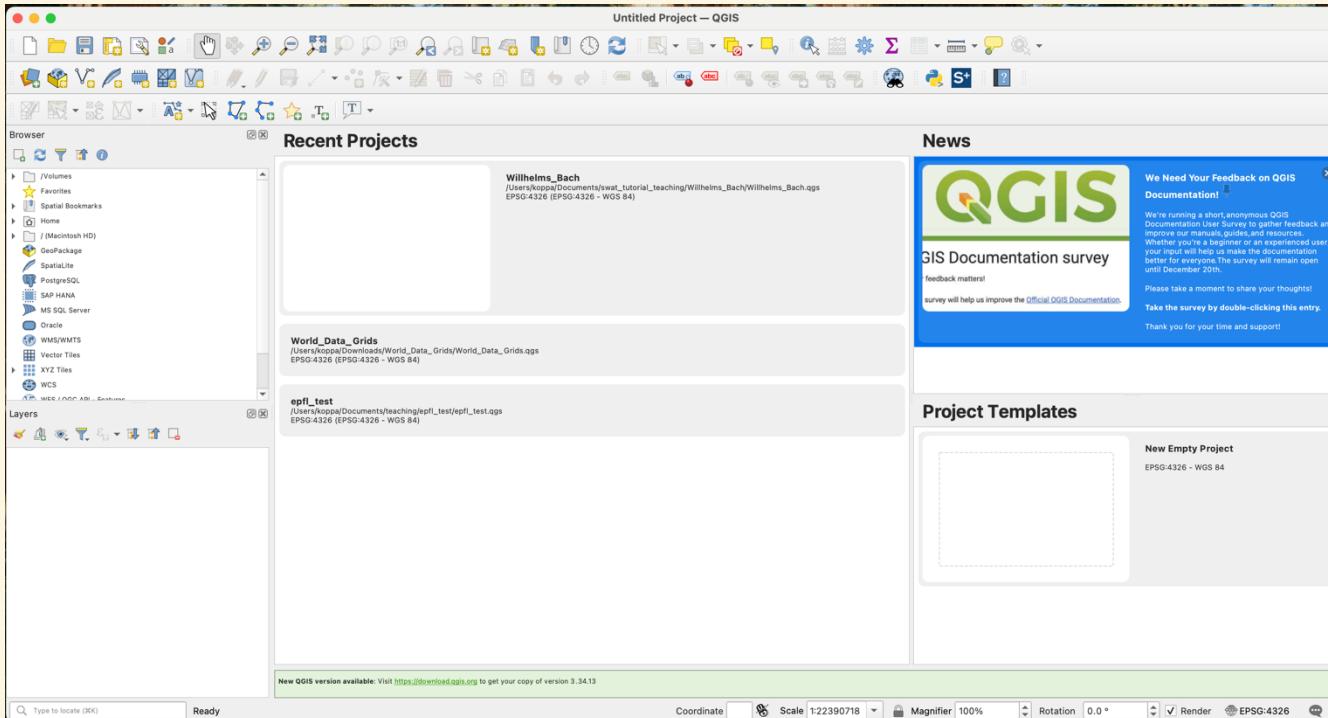
Prerequisites

Make sure QSWAT+ and SWAT+ editors are installed
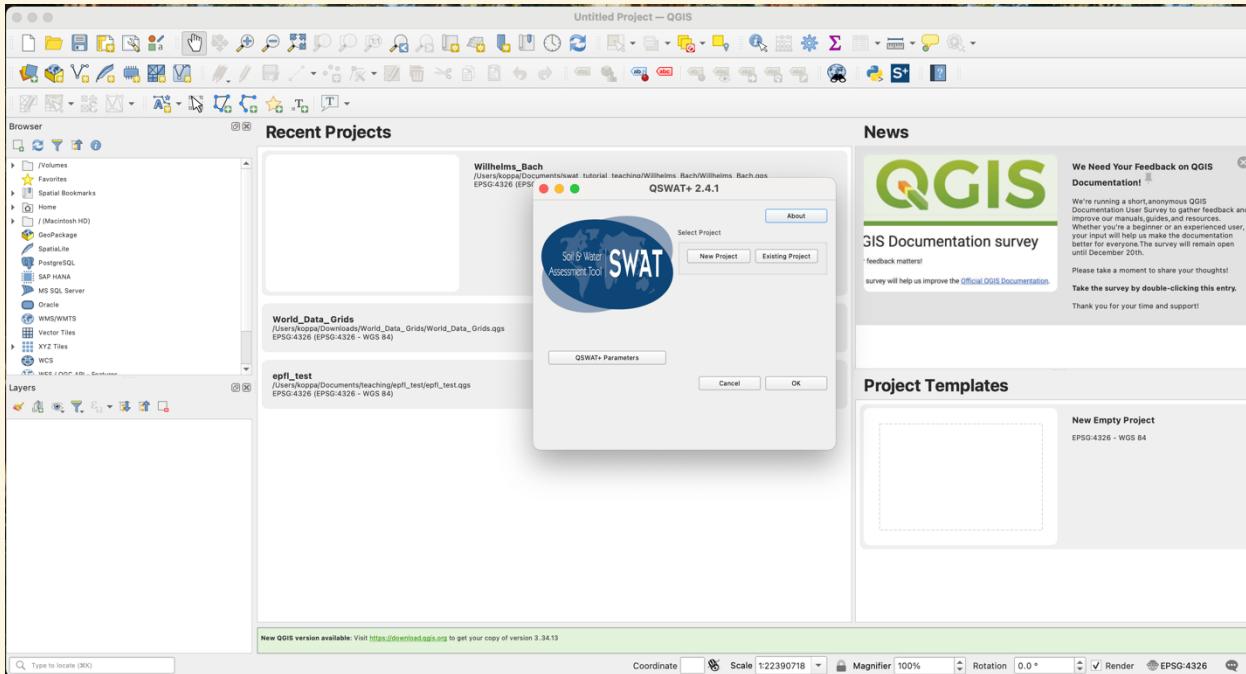
Download the input datasets


[Google drive download link](#)

Start QGIS

Start QGIS

Delineate Watershed
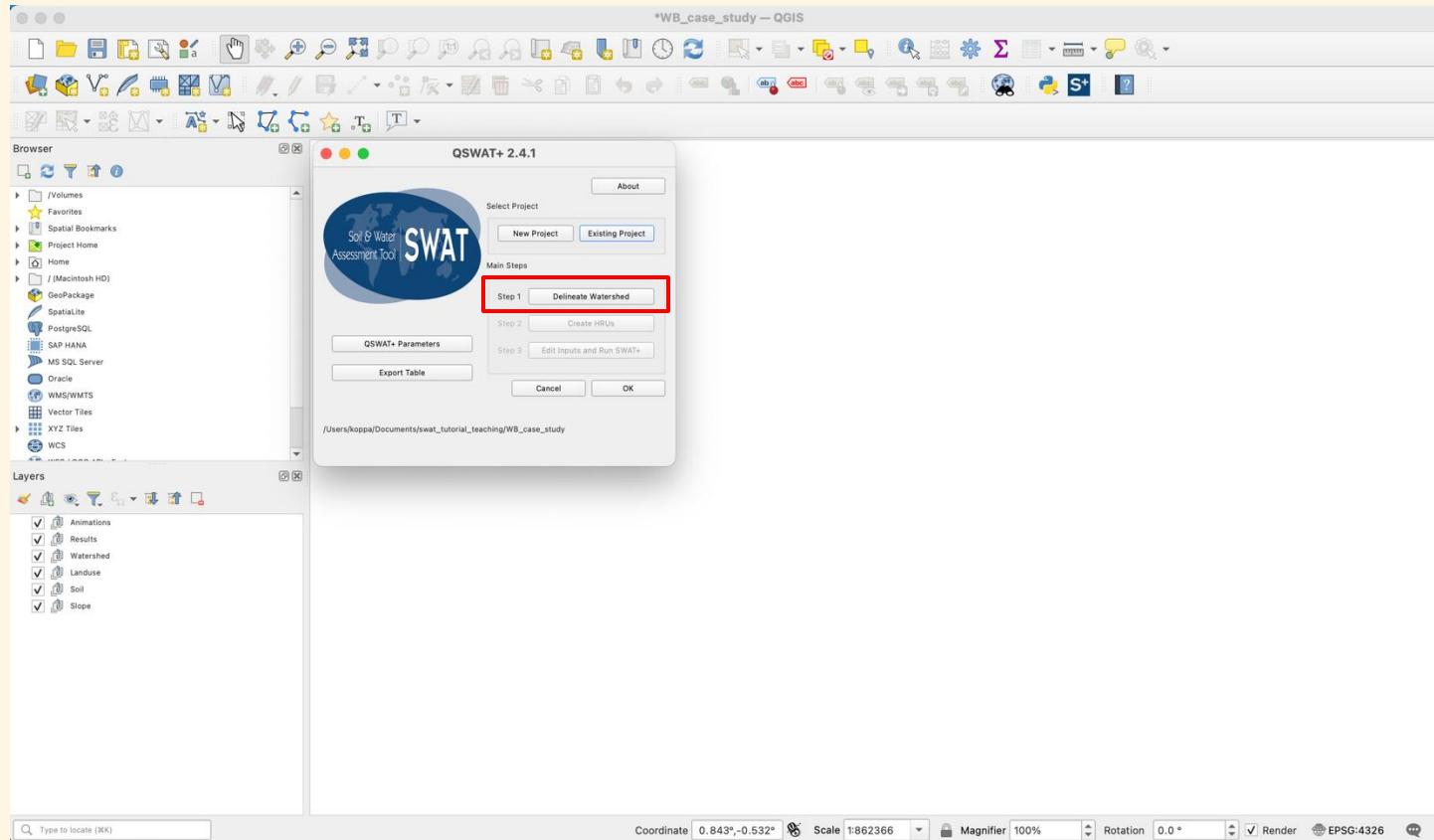
Load digital elevation model (DEM)
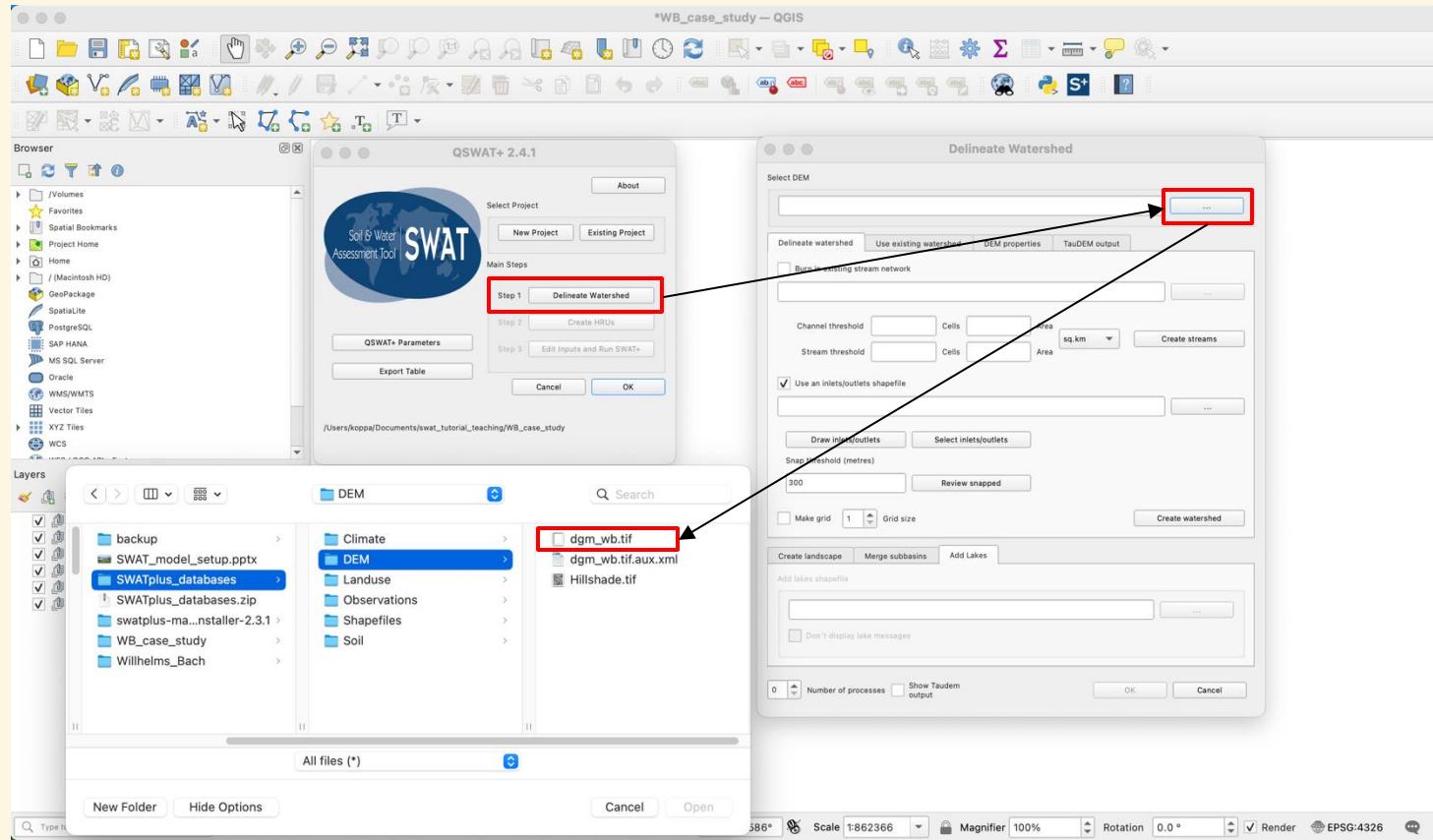
Create streams

What happens when these parameters are changed?
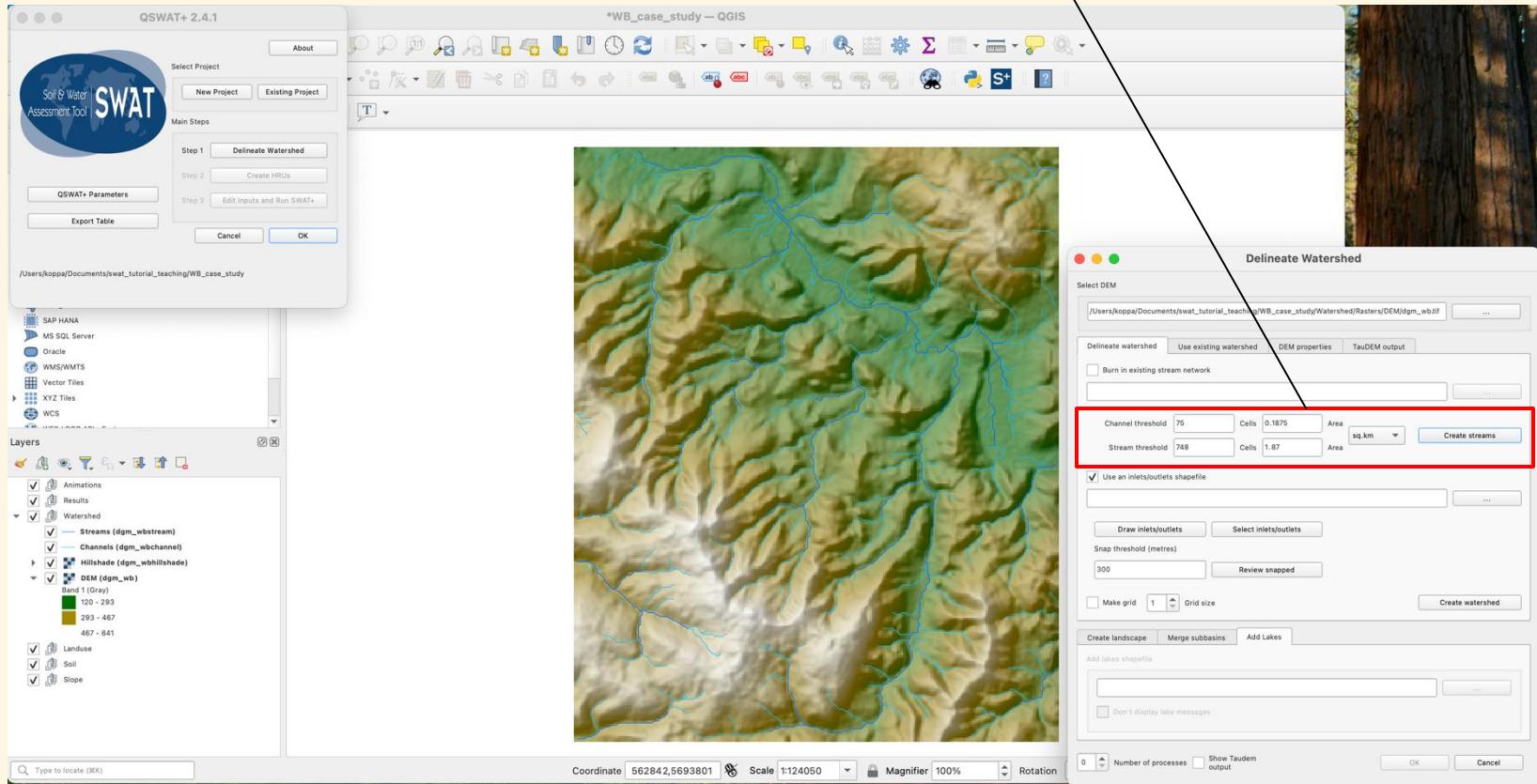
Create outlet

What is an outlet and why is it needed?
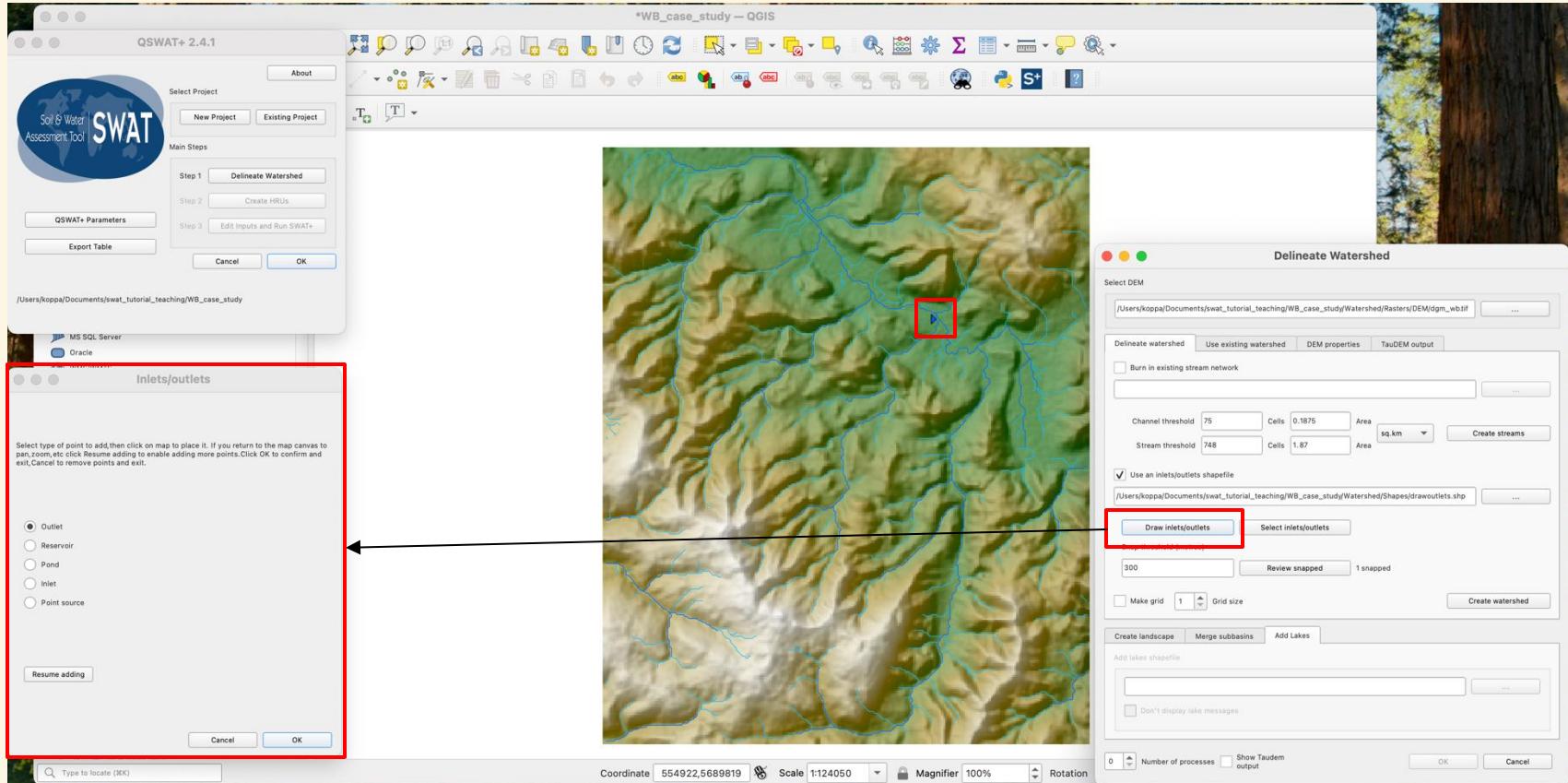
Create watershed
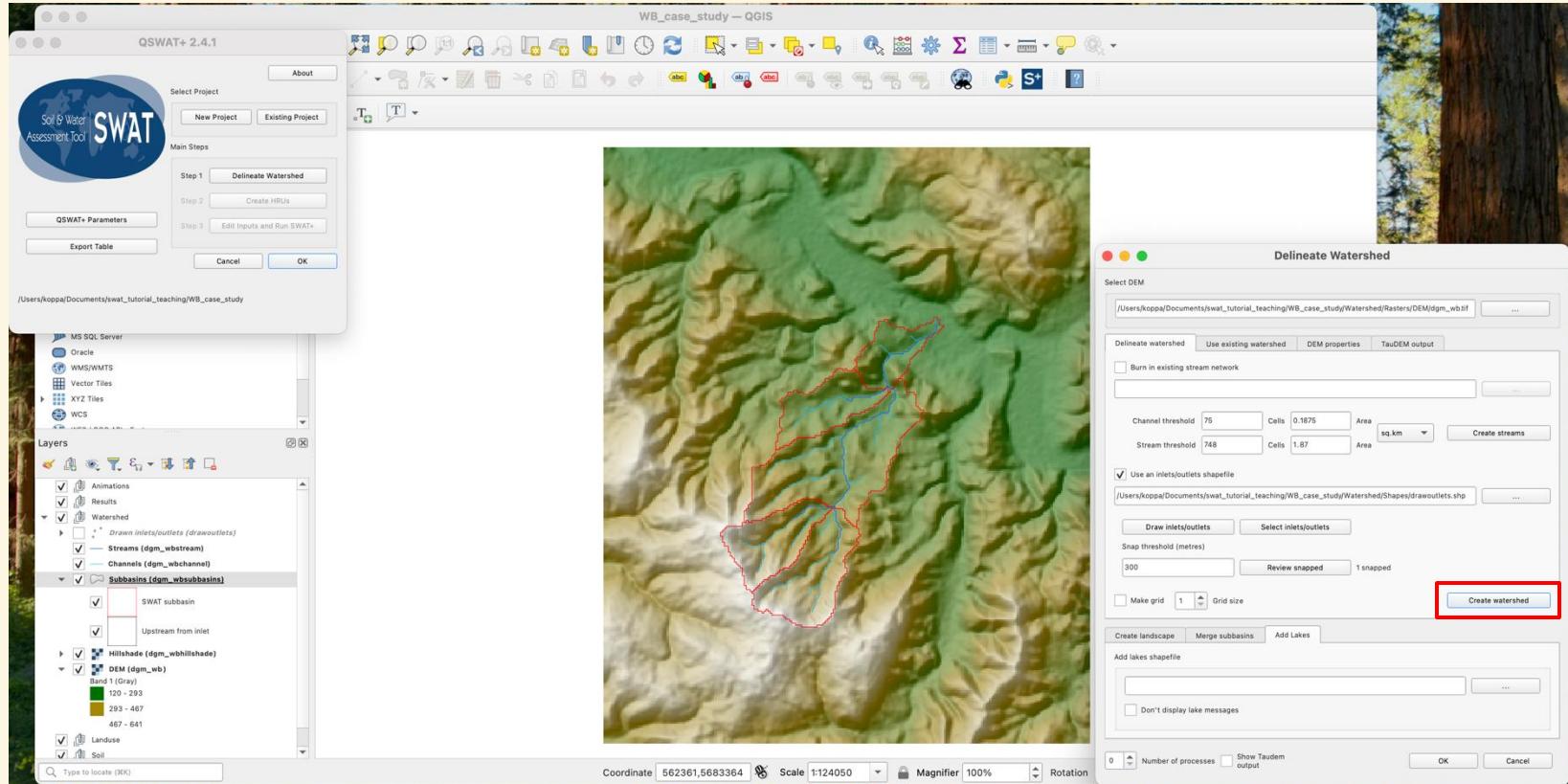
Create HRUs – Landuse and soil maps
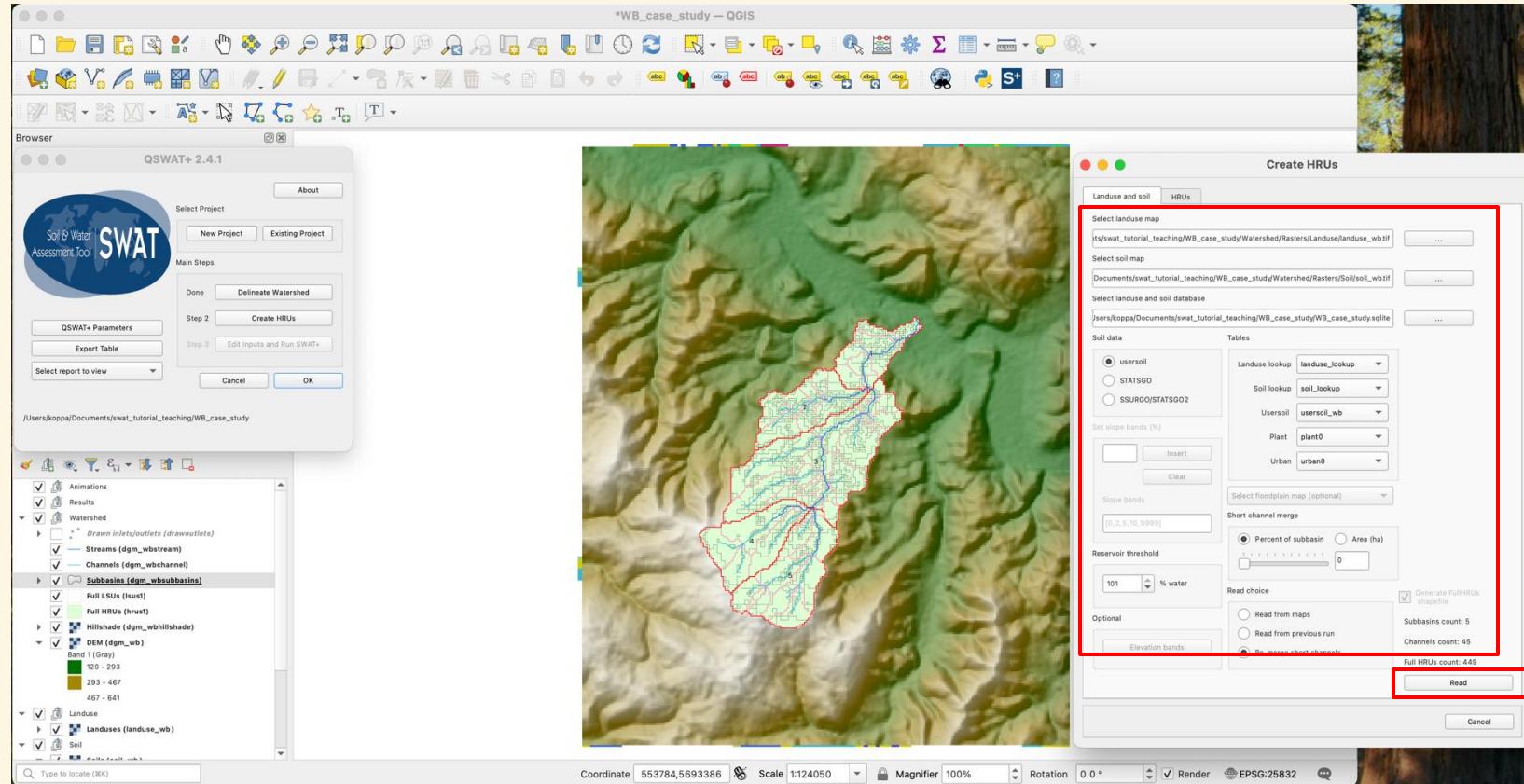
Create HRUs
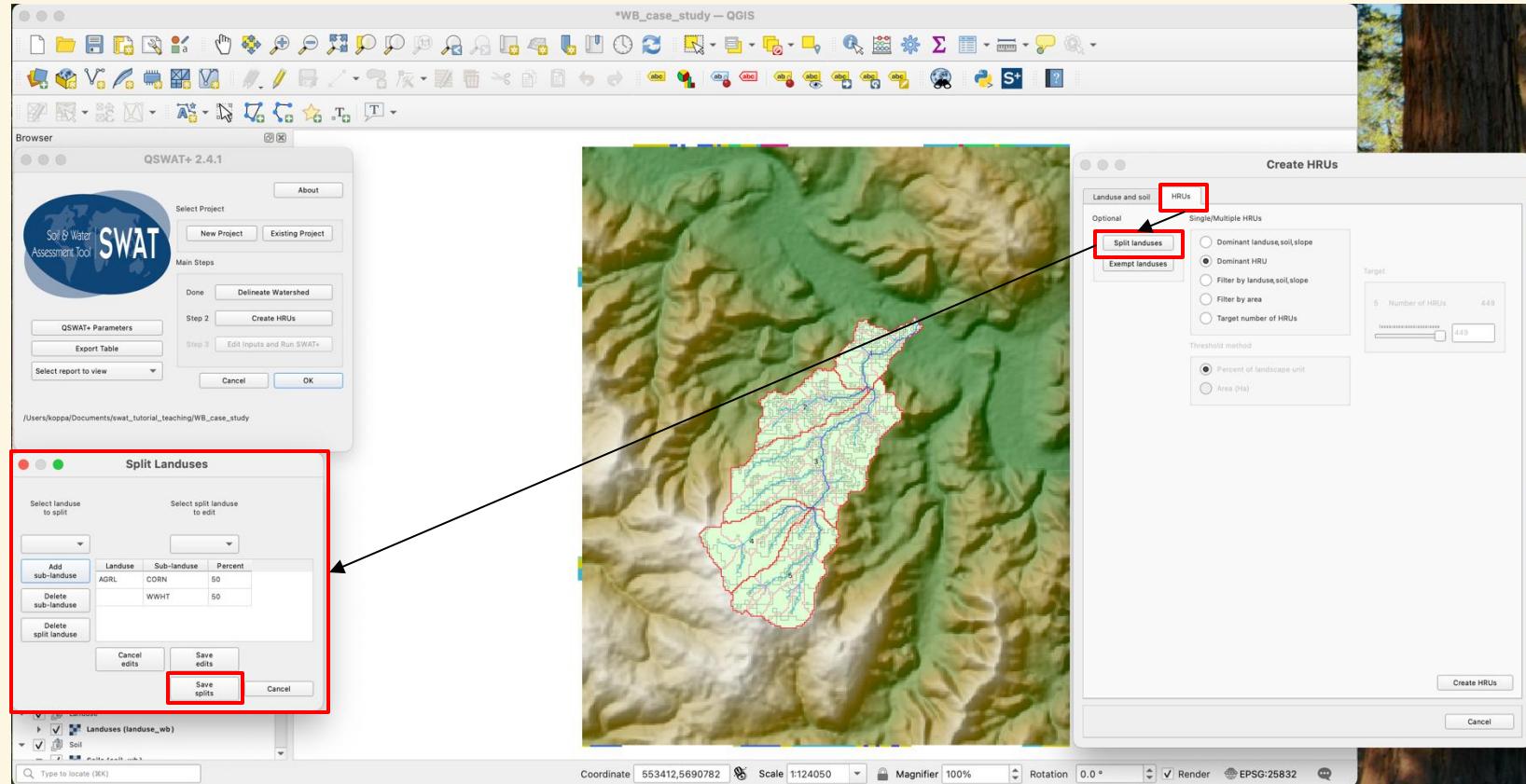
Create HRUs
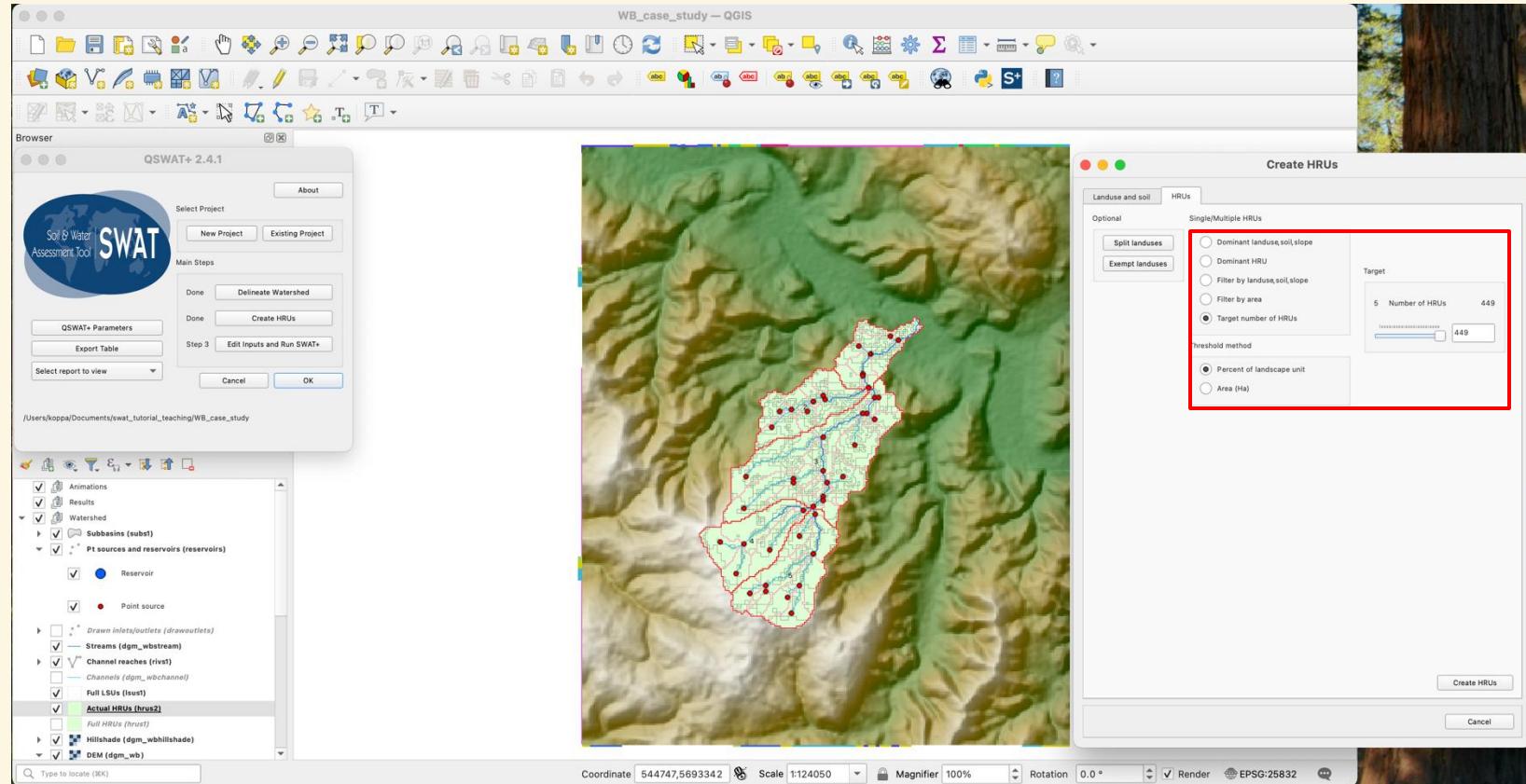
Open SWAT+ editor

Enter relevant details and start the editor
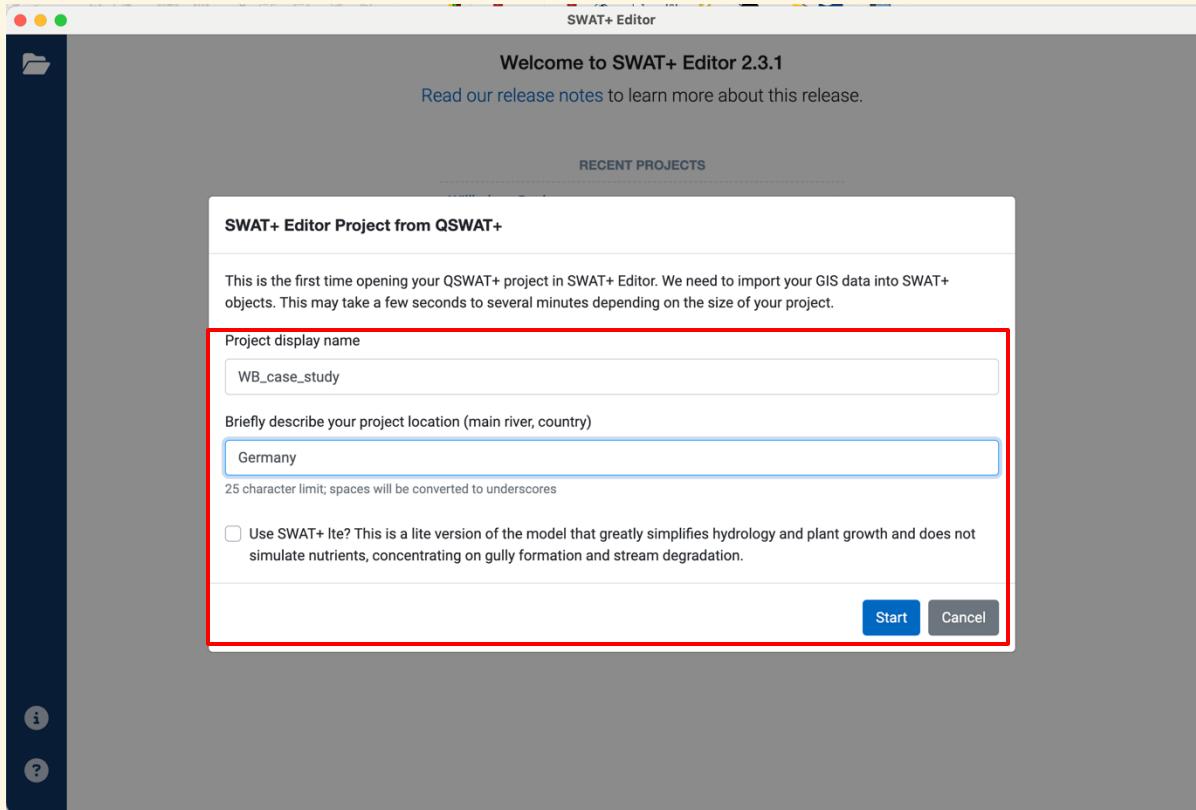
Open SWAT+ editor

Explore the different watershed characteristics
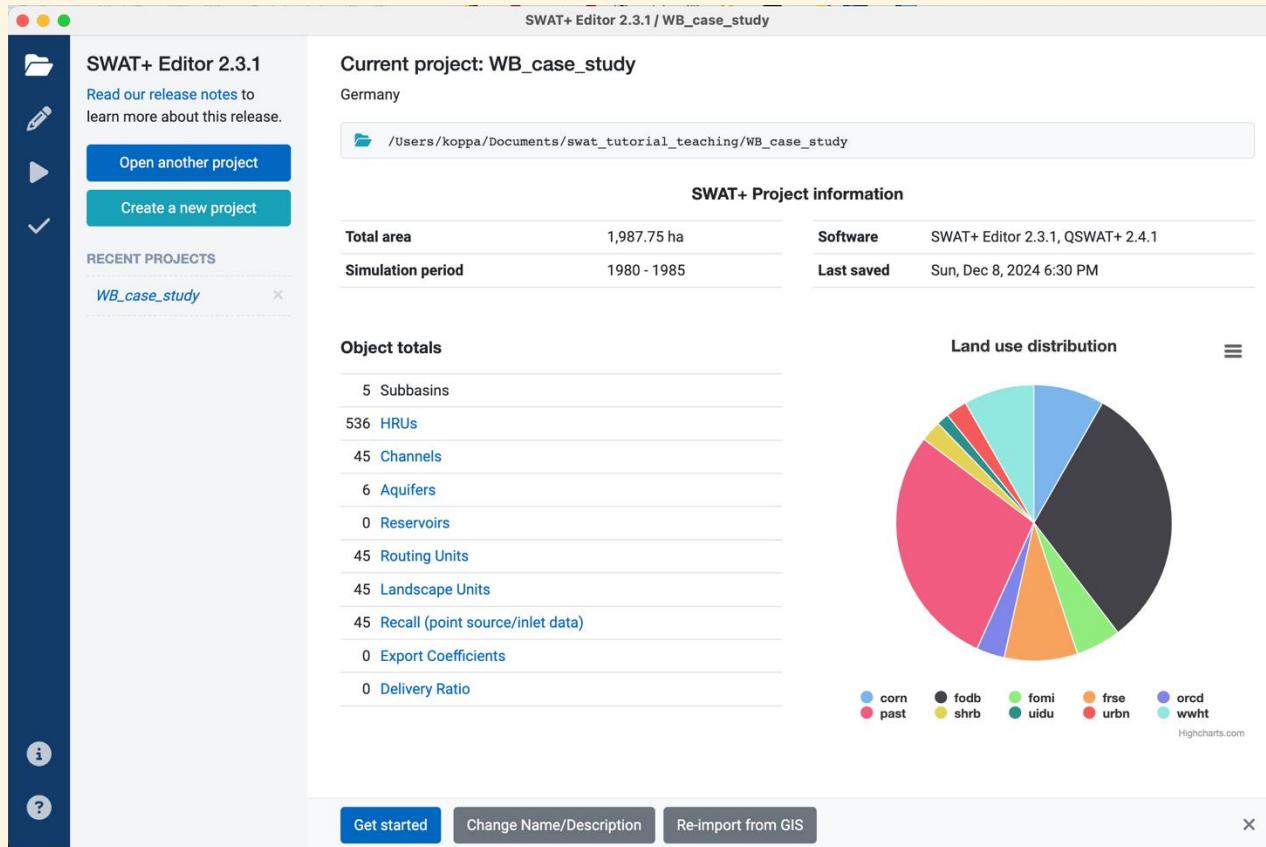
Load weather generator data
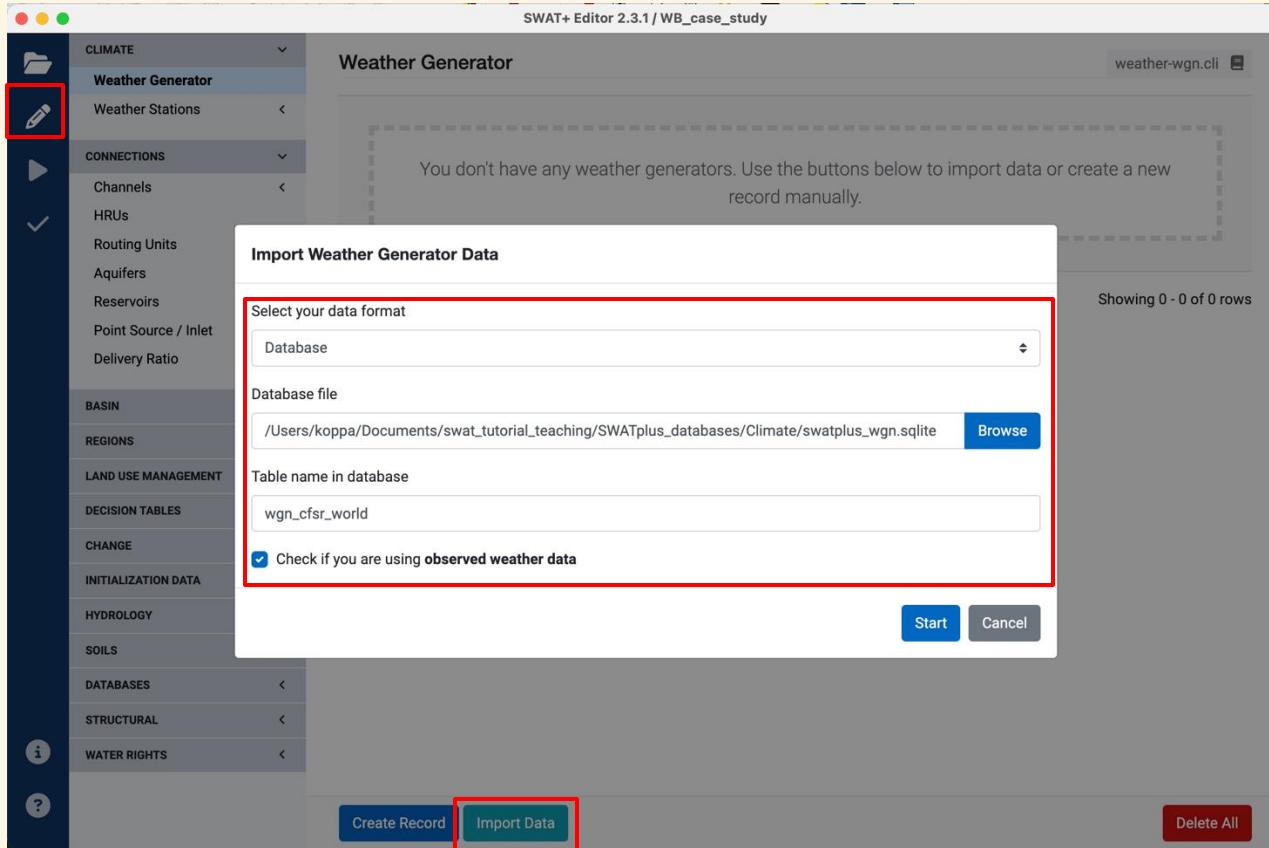
Load observed data
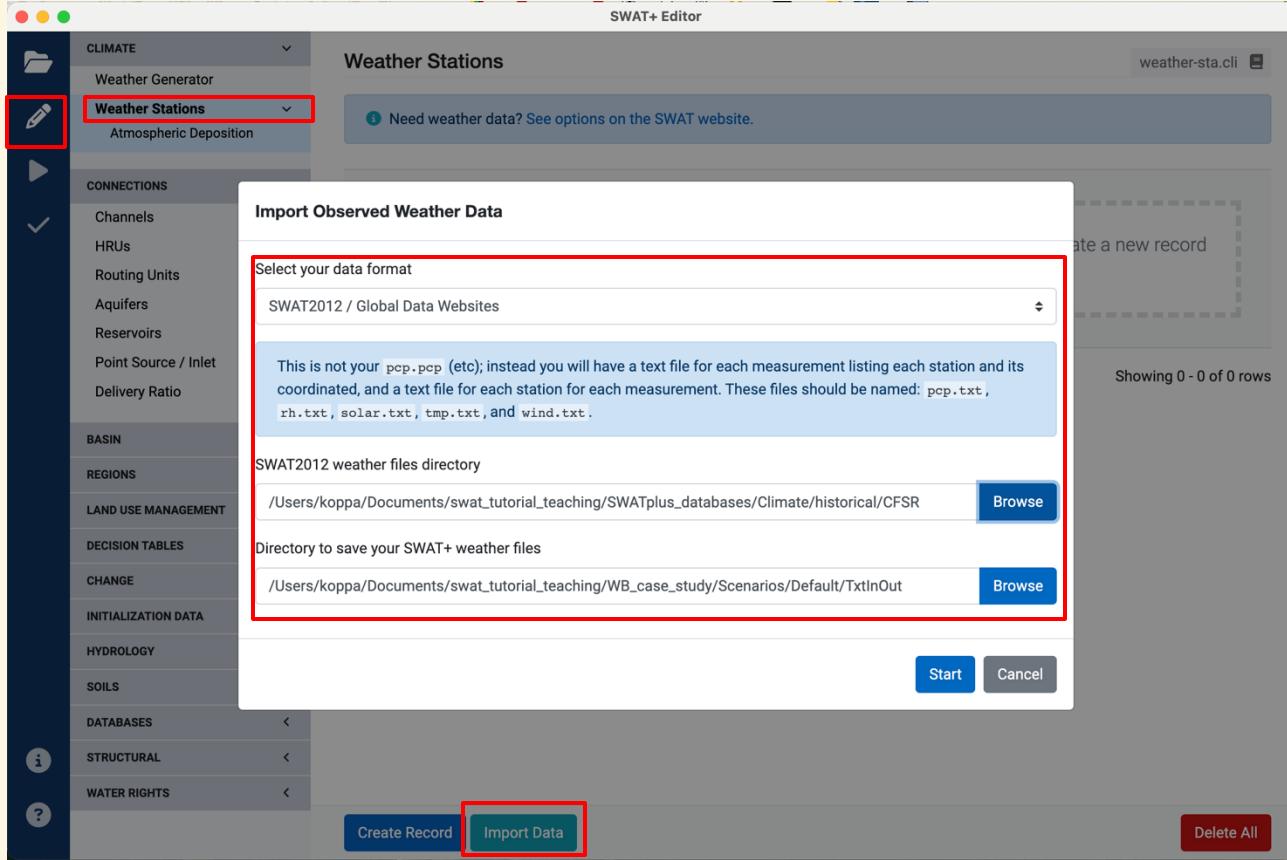
Load observed data
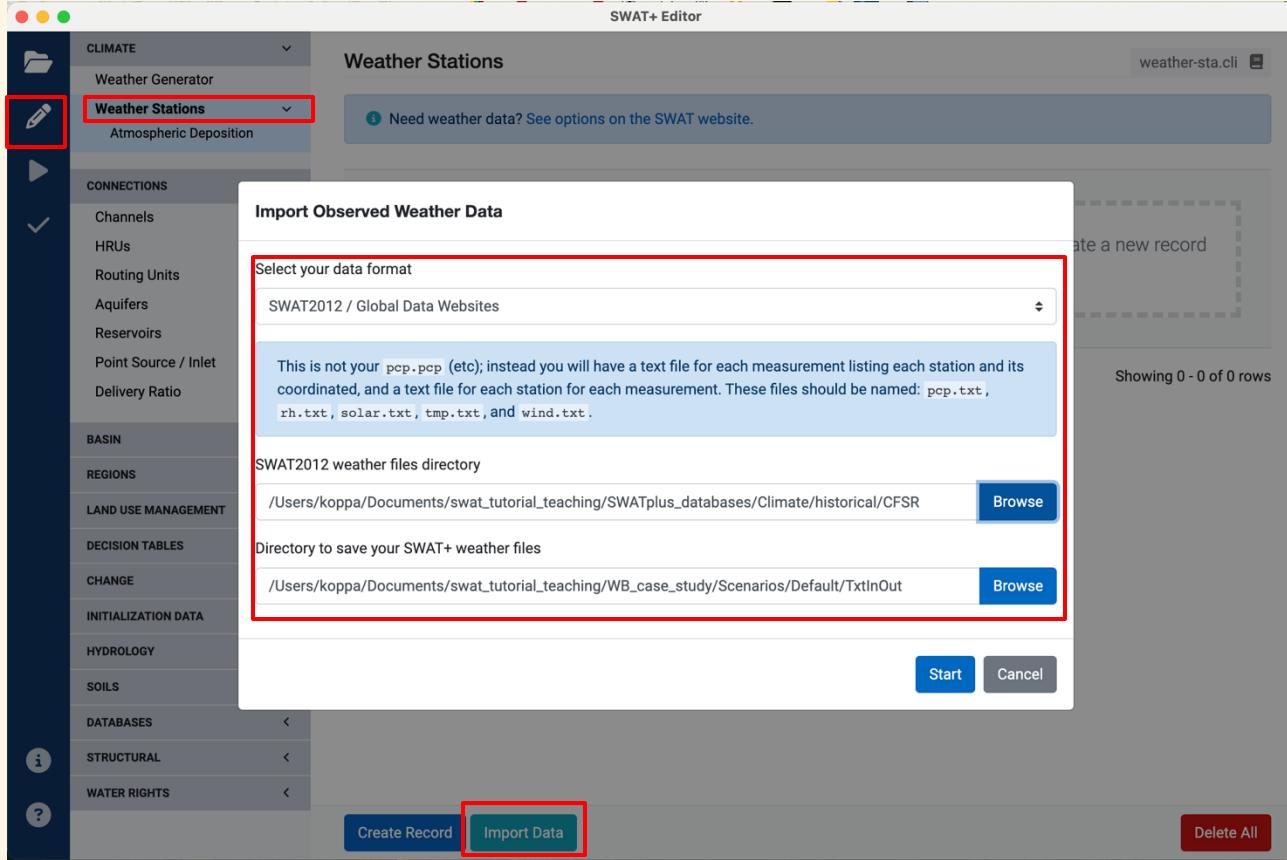
Run SWAT+
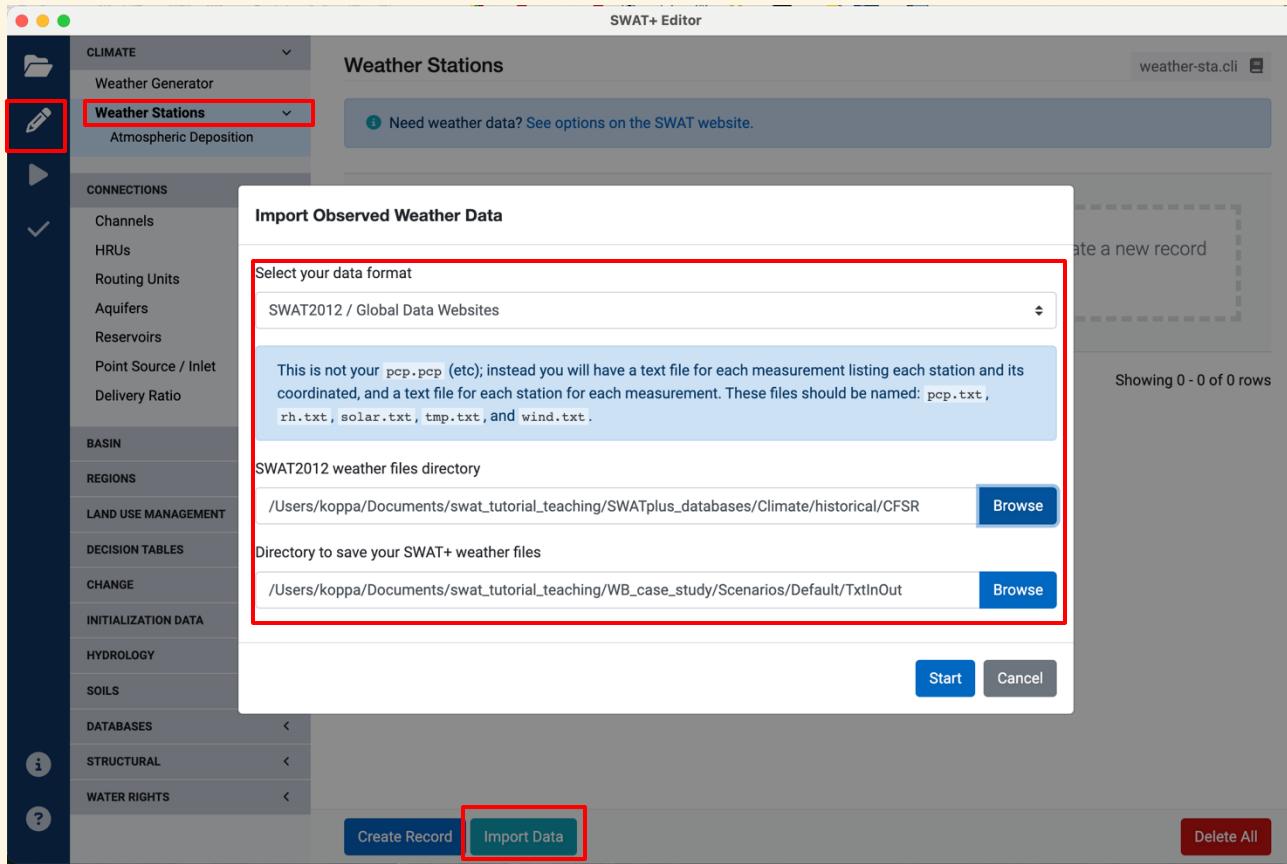
Run SWAT+: set simulation period
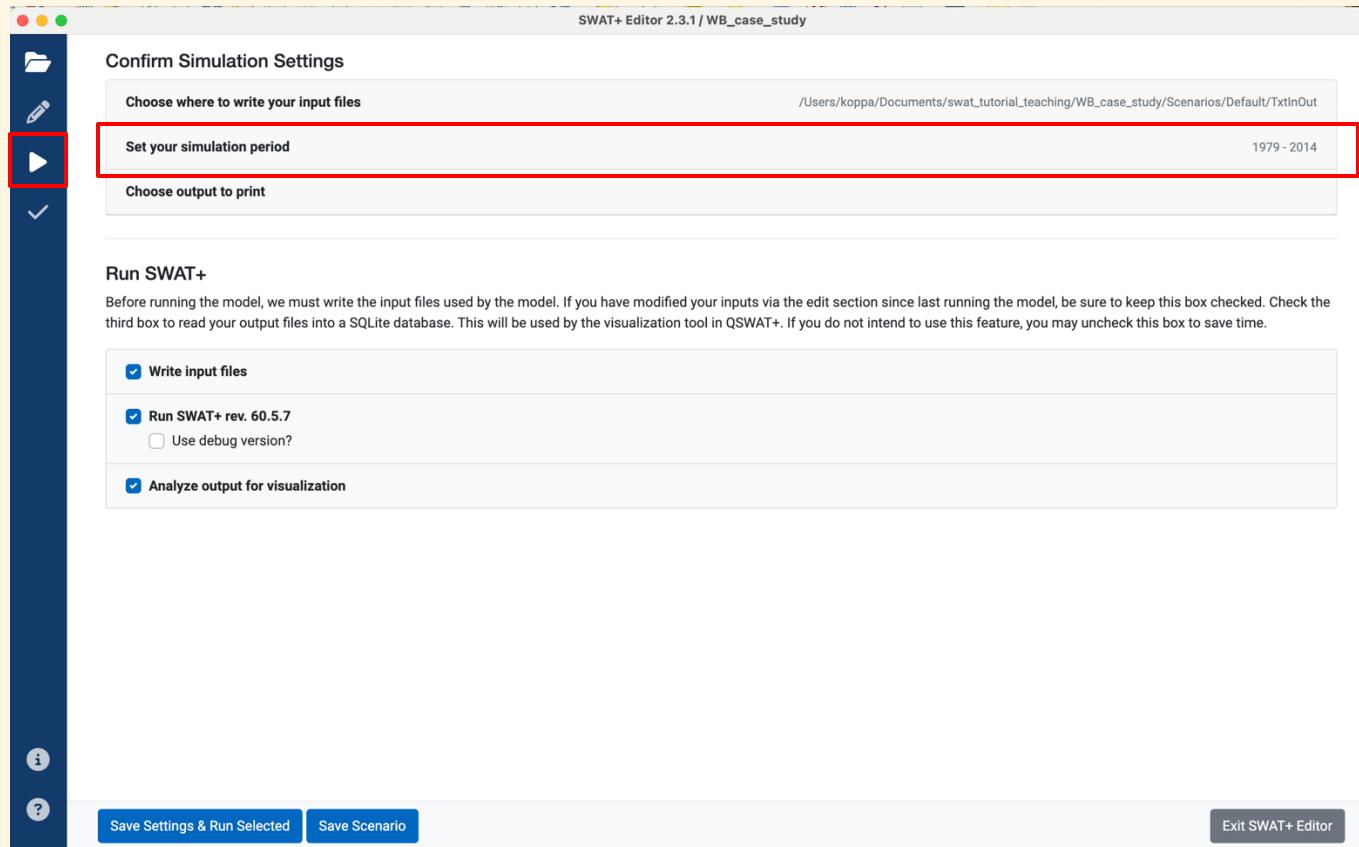
Run SWAT+: choose output to write out

Figure out how to set model time step to daily

Run SWAT+: choose output to write out

Run SWAT+: choose output to write out and run the model

Run SWAT+

Before running the model, we must write the input files used by the model. If you have modified your inputs via the edit section since last running the model, be sure to keep this box checked. Check the third box to read your output files into a SQLite database. This will be used by the visualization tool in QSWAT+. If you do not intend to use this feature, you may uncheck this box to save time.

- ☑ **Write input files**

- ☑ **Run SWAT+ rev. 60.5.7**
  - ☐ Use debug version?

- ☑ **Analyze output for visualization**

**Save Settings & Run Selected**   Save Scenario   Exit SWAT+ Editor

Save the model run as a scenario
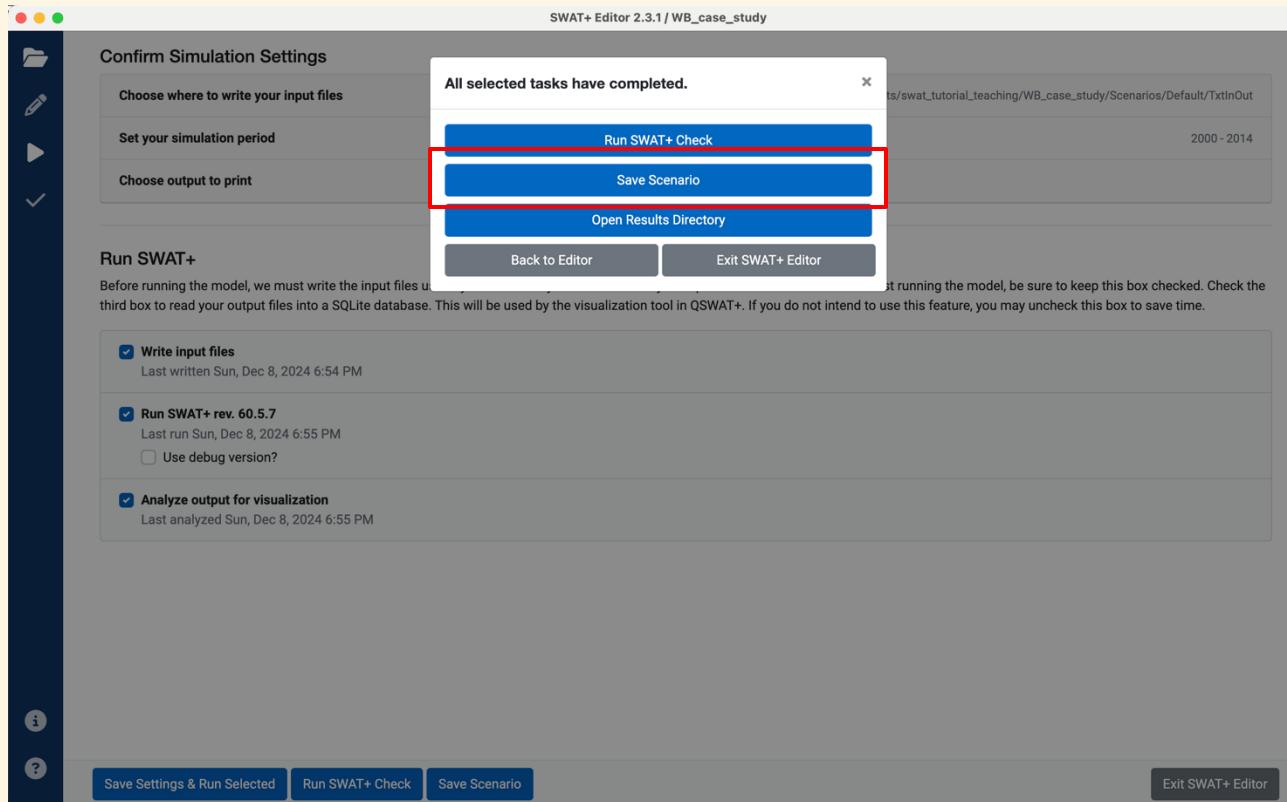
Check output with SWAT+ check
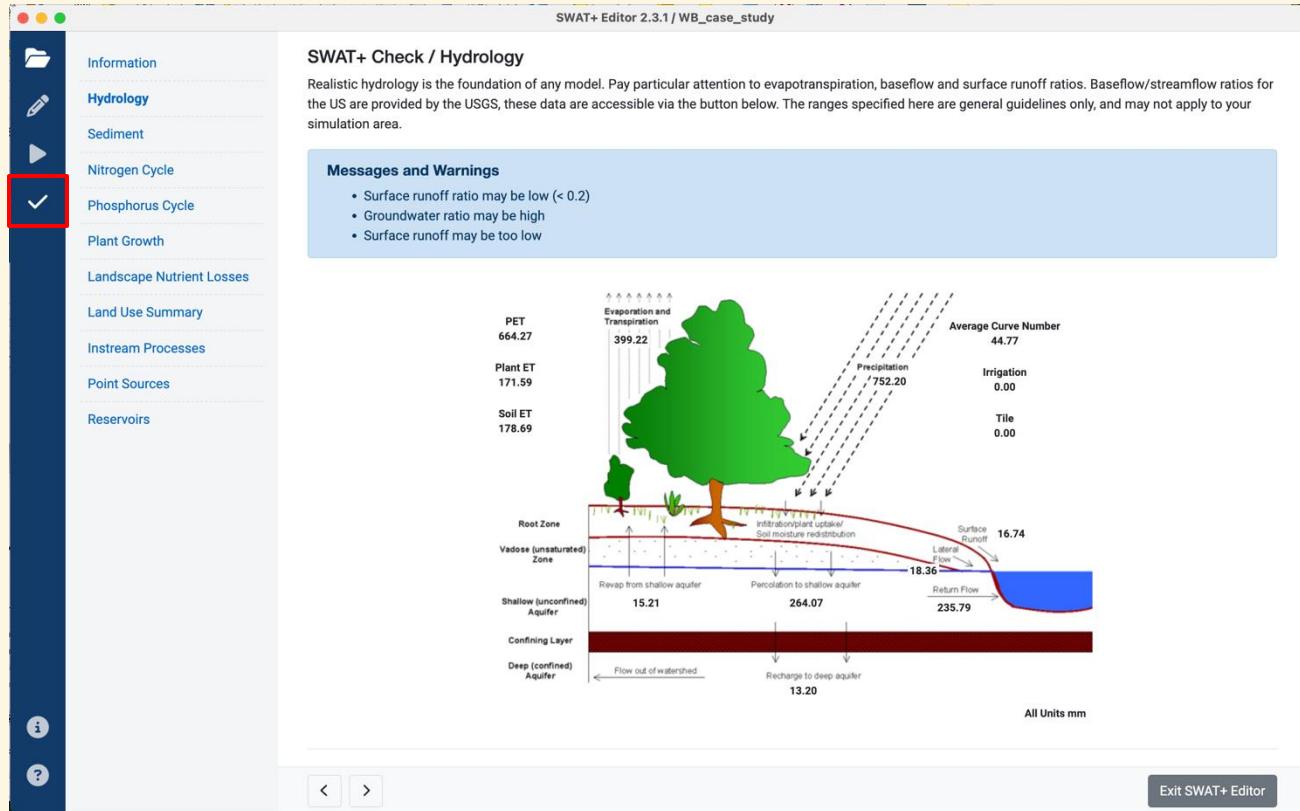
Visual results with QSWAT+