

# MWS Capstone Project - Monthly Update

<b>Project:</b>	Representation of spatial heterogeneity in the land-surface hydrologic model MESH
<b>Reporting Period:</b>	July 2019
<b>Date:</b>	Not submitted
<b>Student:</b>	Haley Brauner

## 1. Work completed in the last reporting period

- Selected parameters for Scenario 2 and 3
- Green Kenue / QGIS training and setup of r2c file for Scenario 3
- Time trials for Scenarios 2 and 3
- Ran Scenario 2 and 3 full calibration models
- Code model output graphs

## 2. Team meetings held in the last reporting period (dates, times, attendance)

July 3 - Meeting with Bruce to discuss model parameterization, report on the data preparation methodology used, and discuss the next step for increasing model complexity  
 July 23 - Meeting with Bruce to discuss the model progress, and meeting with Dan to troubleshoot issues with the Scenario 2 setup

## 3. Planned work for the next reporting period

- Finish output processing from model runs and checking that they ran correctly
- Take the model further - investigate an alternative methodology, depending on modelling outcomes
- Write the report

## 4. Information requested from advisors or partners

- Received assistance with model errors and constructing the drainage database file

## 5. Summary of any challenges

- Errors running Scenario 2 caused a sizeable hold-up
- Issues with run scripts required re-running the calibrations to ensure consistent results

- Tried to set up to run Ostrich in parallel, but was not successful, mostly due to problems with Plato

## **6. Summary of progress against the project plan**

- According to the project plan, I am about a week behind on the modelling. I will be working hard to complete the model calibration this first week of July, which will leave 3 weeks to take the model further and 2 weeks to prepare the first draft of the report for review.