Project Status Report: CEEn-2018CPST-DR-003 **Report Date: 11/26/18**

Team Members: Chris Edwards, Jacob Lewis, Hunter Williams

Project Title: Flood Early Warning

1) Summary of technical/non-technical challenges encountered

- Continue to find GFS precipitation forecast data that is high resolution and for a longer time than 1-6 hours. Possible breakthrough in the formatting system of the GFS database.
- Find GFS runoff forecast. Determine whether the files are stored in a similar manner to the precipitation forecasts.

2) Team approaches & resolutions to overcome challenges

- Continue to search through the GFS database, recording what information we find out so we do not have to replicate our research.
- Begin to create ArcGIS maps to test the data and ensure it will be sufficient to meet our project's needs.

3) Status of challenge resolutions & potential project impact

- Still need to find the best forecast at .25-degree accuracy. This applies for precipitation and runoff.
- Begin to build python code to extract runoff and precipitation data from the internet and import it into ArcGIS.

4) Project status & summary

- Now that we have cracked the formatting system of the GFS databases, we can begin to build our GIS database. This should be able to pull forecast data from the GFS databases and automatically update our maps.