GEO 455 Final Proposal – Charlie Faude

Hydrilla Verticillata (Waterthymes) Map

Background:

Through my internship this spring with USGS I have been using a package called climatchR that computes a raster of climatch score for a desired area using climate and species data. The score is computed on a scale of 0-10, with 10 being the best climate match for the species being a 10, and the least likely match being a 0. I

Expected Layers:

-Heatmap of locations of H. Verticillata (USGS: [https://nas.er.usgs.gov/viewer/omap.aspx?SpeciesID=6#](https://nas.er.usgs.gov/viewer/omap.aspx?SpeciesID=6) )

-climatch scores along Mississippi River (raster created using USGSs climatchR package)

-major rivers and bodies of water vector files (may include minor water bodies)

-buffer around water bodies to show overlap with hydrilla locations

-HUC2 outline vector file (from course folders)

H Verticillata Current Climatch Scores

Climatch scores for Hydrilla Verticillata calculates using climatchR for Horizon Scanning

Hydrilla Verticillata, climatch Scores, Waterthymes, Horizon Scanning, climatchR