Data Analysis Workflow: Habitat Modeling

Executive Summary

This document outlines the workflow used to determine the level at which measured catchment attributes are associated with habitat integrity across Conservation Units (HUC8s) in North Carolina. This workflow presumes that HUC 6 level databases have been generated using procedures outlined in the [Script Metadata](https://github.com/Duke-NSOE/EEP/blob/master/Scripts/SCRIPT%20METADATA.docx?raw=true) document. In particular, this workflow requires the table (derived from Mark Endries’ species occurrence data) listing NHD catchments in NC and indicators for each species whether it was observed in that catchment or not. It also requires the feature class for all NHD catchments in the HUC 6 tagged with the ~120 attributes determined in the Script Metadata document.

Contents

[🡪Creating the statistical model data file 1](#_Toc425862288)

🡪Creating the statistical model data file

[STATS\_CreateDataFile.py](https://github.com/Duke-NSOE/EEP/blob/master/Scripts/STATS_CreateDataFile.py)

This script creates a CSV format file listing all the NHD catchments in any HUC 8 in which the input species was observed. Each catchment is tagged with whether the species was recorded within it (binary 1/0 value) as well as the catchment attributes calculated in the database assembly steps.

The script