WORKFLOW for KBA THRESHOLD ANALYSIS

PROVIDED DATA

- Palletized Raster with Attribute Table, showing distribution of 800+ Ecosystem Types in CONUS

- HexGrid

- Create list of ecosystem types to be analyzed by Marxan process

- Define current KBA area thresholds under A2 and B4

- Create list of alternative KBA threshold levels to be tested (1.0, 0.75, 0.50, 0.25)
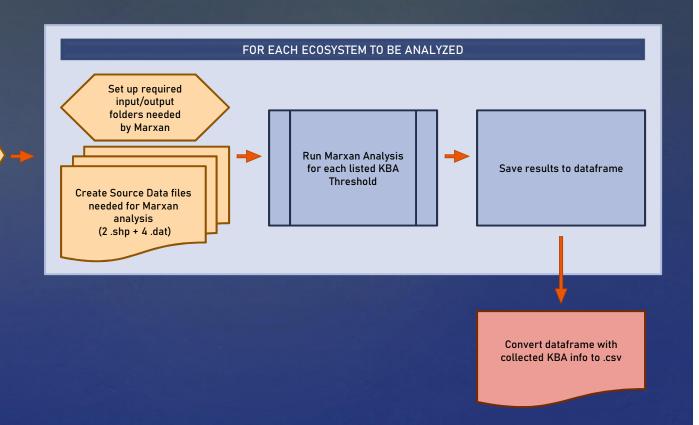
FOR EACH ECOSYSTEM TO BE ANALYZED

Set up required input/output folders needed by Marxan

Create Source Data files needed for Marxan analysis (2 .shp + 4 .dat)

Run Marxan Analysis for each listed KBA Threshold

Save results to dataframe

Convert dataframe with collected KBA info to .csv

INPUT
PREPARATION
PROCESS
OUTPUT

WORKFLOW for KBA THRESHOLD ANALYSIS

PROVIDED DATA

- Palletized Raster with Attribute Table, showing distribution of 800+ Ecosystem Types in CONUS

- HexGrid

Using ArcGis/QGIS

For each ecosystem to be analyzed, create the data files needed for Marxan analysis (2 .shp + 4 .dat)

1. Create Planning Unit .shp files using Lana's method (CAN THIS BE RECREATED IN QGIS?)

2. Create Marxan input files using either the ArcMarxanToolbox or QMarxanToolbox plugin

PYTHON WORKFLOW

FOR EACH ECOSYSTEM TO BE ANALYZED

1. Create list of ecosystem types to be analyzed
2. Define current KBA area thresholds (CR or EN=5%, VU = 10%)
3. Create list of alternative KBA threshold levels to be tested (1.0, 0.75, 0.50, 0.25)

Set up required input/output folders needed by Marxan, placing the created input files into the appropriate input folder

Run Marxan Analysis for each listed KBA Threshold

Save results to dataframe

Convert dataframe with collected KBA info to .csv

INPUT

ArcGIS/QGIS PREPARATION

PYTHON PROCESS

OUTPUT