CONSERVATION PRIORITY AREAS (CPA) INFORMATION

Summary: This CPA development is a first best attempt at improving the previous SWAP CPA Map (here: page 381 AL_SWAP_FINAL_June2017.pdf) used in the 2005 and 2025 SWAP. Based on criteria & background below, the CPAs were developed, and will be developed, for each Taxa Group and Statewide. These identified CPAs are intended to guide Conservation Partners where to prioritize conservation activities to benefit SGCNs. This gives an opportunity for Partners to maximize conservation opportunities on a strategic scale. Areas not highlighted can still be important and does not exclude opportunities for conservation activities to take place. Again, these CPAs only serve as a guide to maximize the most favorable conservation value for SGCNs. Future wishes are to continue the development of CPAs throughout the next 10 years, as needed, instead of updating at the 10 year SWAP Revision Anniversary, and make them web enabled.

Goal: To develop & identify areas around Alabama that will serve as SWAP Priority Conservation Areas (PCAs) for each taxa group (Mammals, Birds, Reptiles, Amphibians, Plants, Fish, Mussels, Snails, and Crayfish).

Development of CPAs: The first step was to identify a subset of species; what are called “Strategy Species”. These are a subset of species from all taxa (Plants, Mammals, Amphibians, etc) that serve as an effective representative for other SGCN species in their taxa. By creating habitat suitability models for these Strategy Species, were able to identify CPAs and also represent at least a portion of other SGCN species’ habitat needs and/or geographic range.

As a first step in this process, we looked for species that meet the following criteria for modeling:

1) Have enough data points to model effectively (this is an absolute minimum of 10 good points, ideally more); and

2) Have habitat needs that are at least somewhat specific. If they are too general, the habitat suitability model will not be accurate.

Once the first two criteria were met, then which species represent the most other SGCN species was determined.

This is done largely in ArcGIS.

1) How many other SGCN species have data points in the same area as the candidate Strategy Species; and

2) How many other SGCN species have similar ranges and habitat requirements; and

3) How many ecoregions the candidate species occurs in.

This is compiled to give each candidate species a score. From the top scoring species, there is a review to make sure a variety of habitat types are included, as well as having all species within their identified range.