



Collaborative Modeling

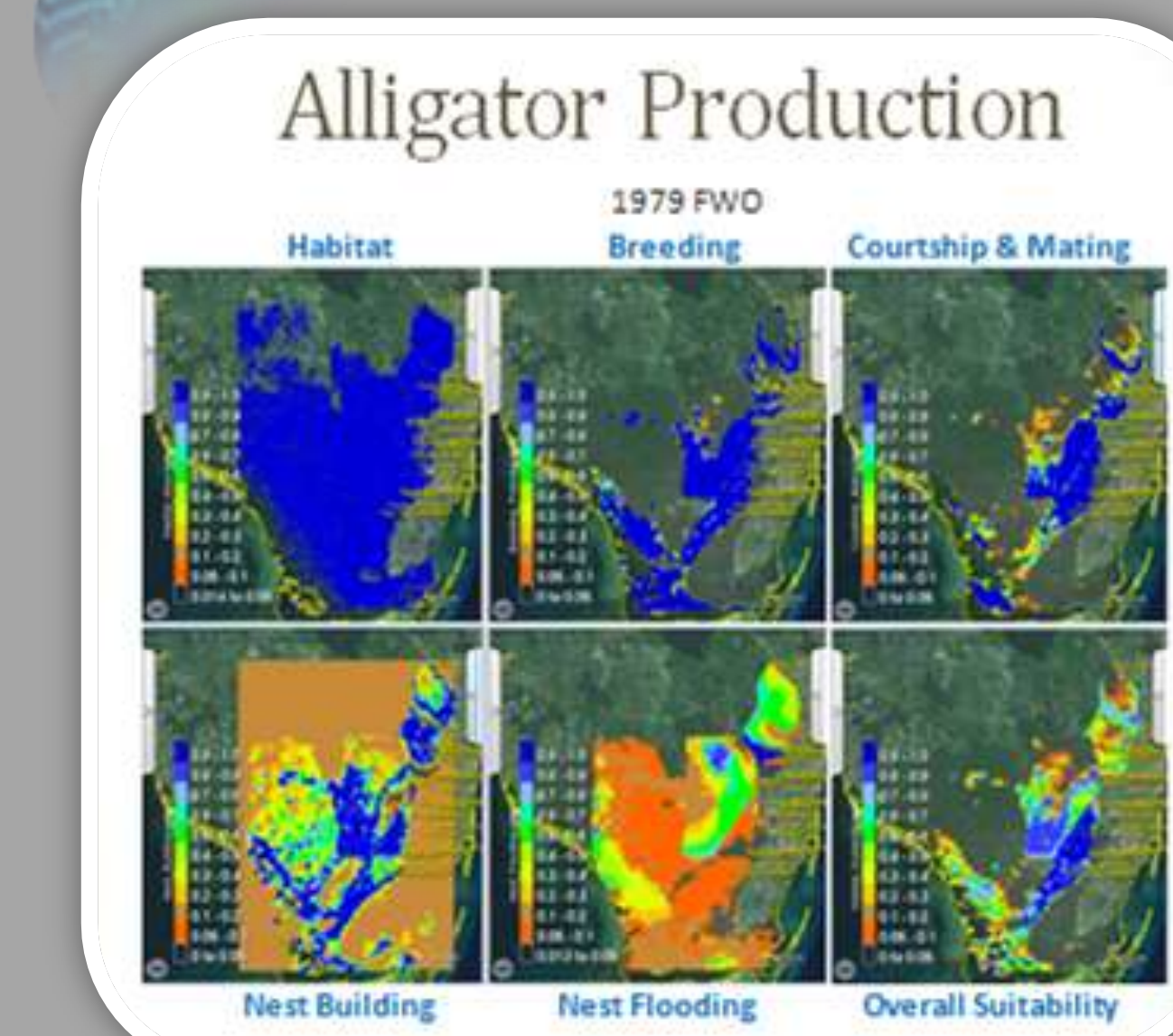
simGlades.org is a South Florida Natural Resources Center portal for research & development. It promotes continual improvement of National Park Service ecological models through communications with a larger community of users and programmers. simGlades.org facilitates rapid dissemination of in-development code and applications for testing, collaborative modeling, and peer-review from a broader scientific community.



Transparency of Methods

- Downloadable applications and full source code
- Model development workshop notes and Design Documents
- Model reports, metadata, User's Guides, slide presentations
- Downloadable example input, parameter and output files

Models, Applications, Tools



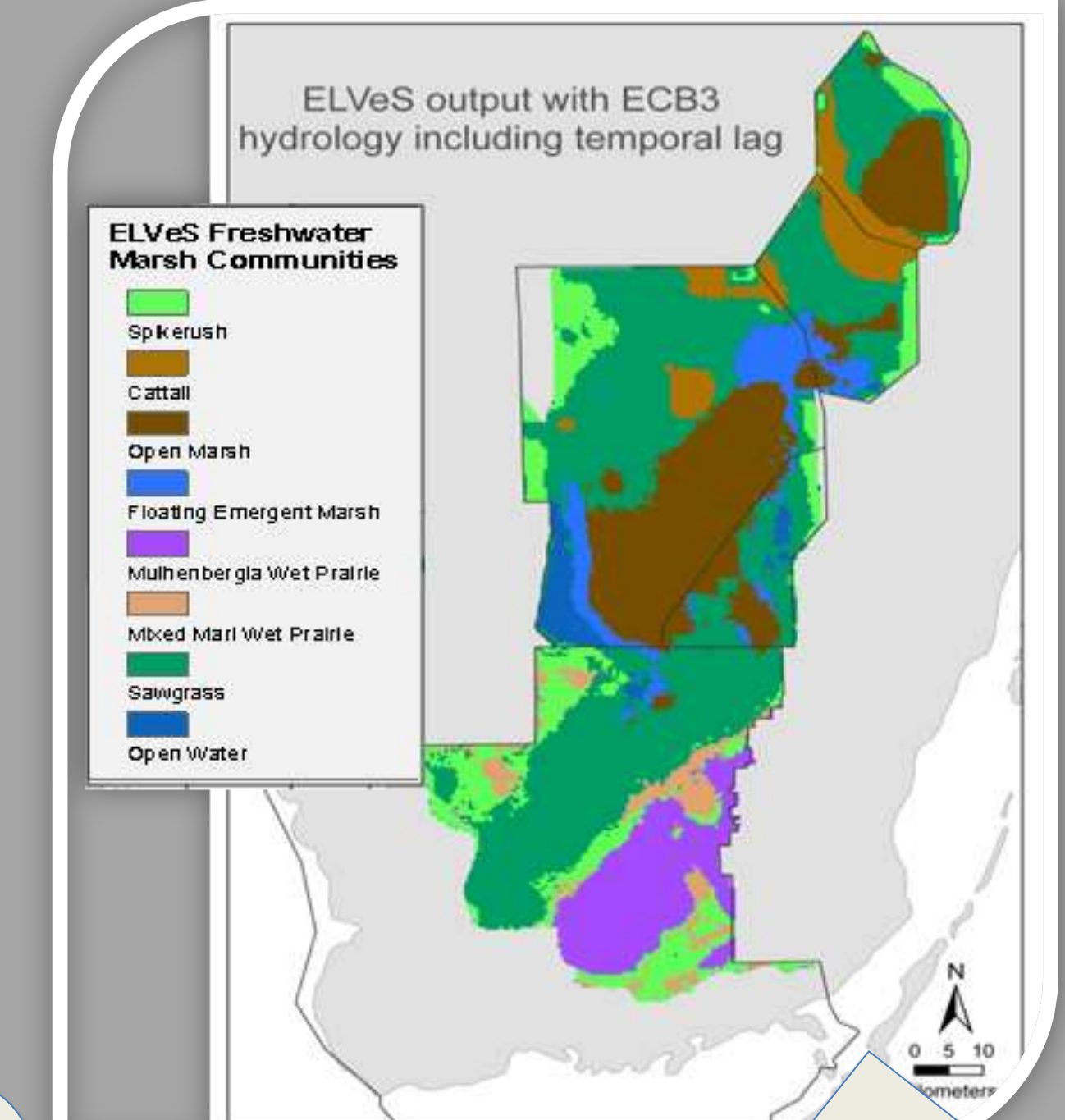
About Alligator Production Model

- Overall index is the geometric mean of 5 components
 - Habitat availability
 - Breeding
 - Courtship & Mating
 - Nest building
 - Nest flooding
- Daily time step

Outcomes:

- Habitat Availability
- Breeding Potential
- Courtship & Mating
- Nest Building
- Nest Flooding
- Proportion of suitable water depth days during breeding
- Mean water depth during courtship & mating
- Mean Water depth during nest building
- Maximum water depth during nest incubation

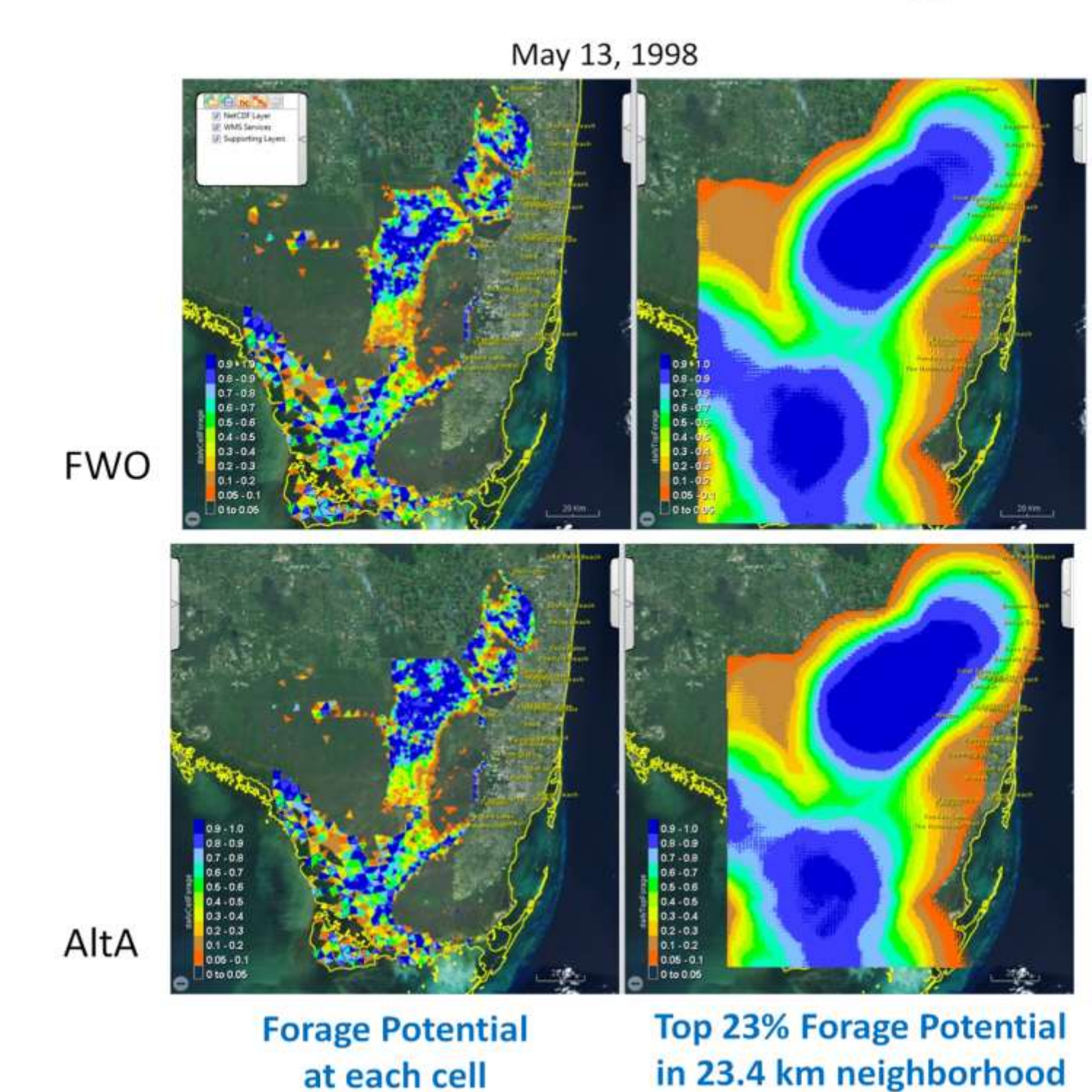
This model is also input to Alligator Population and Growth Model (Sloan et al.)



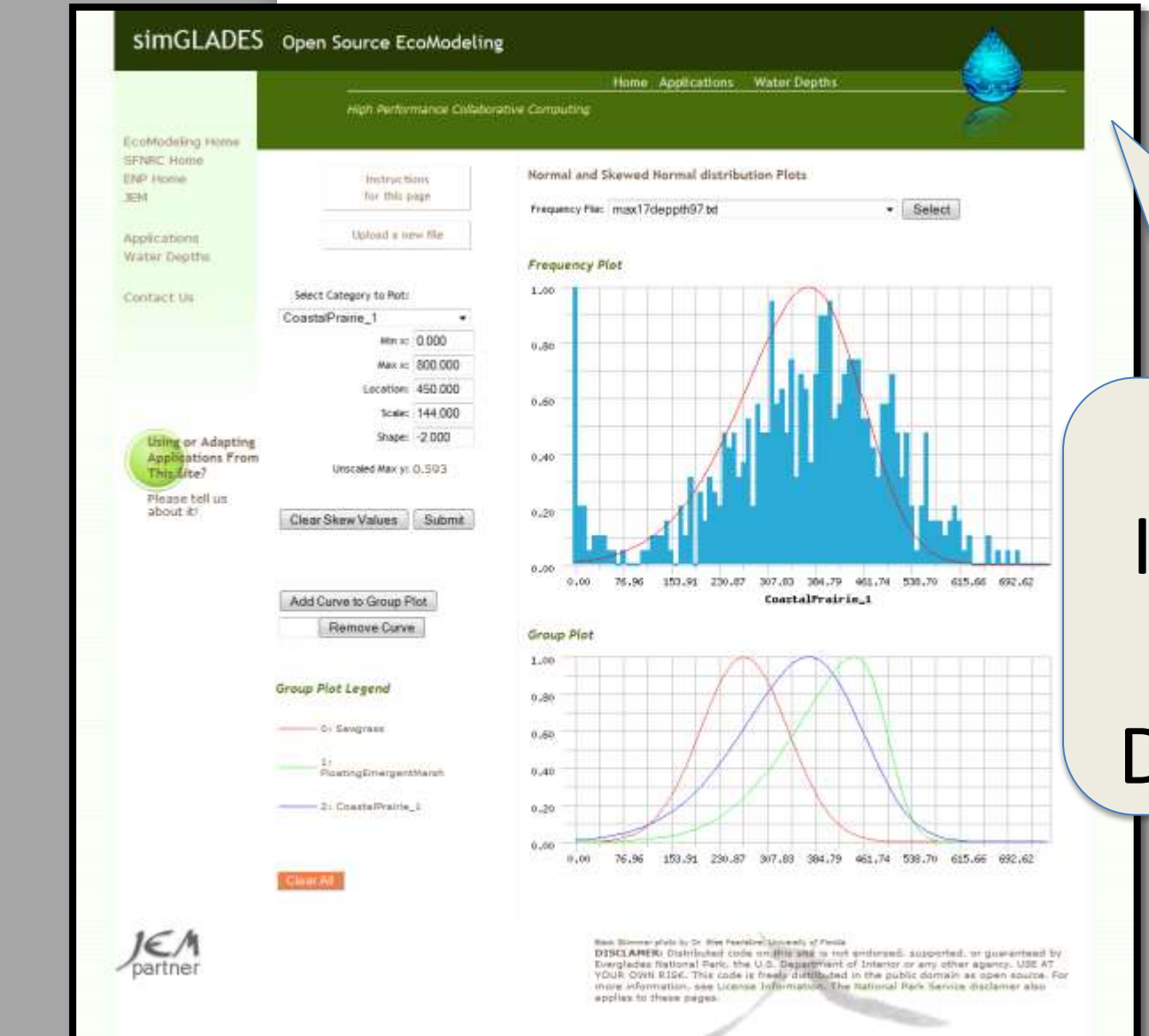
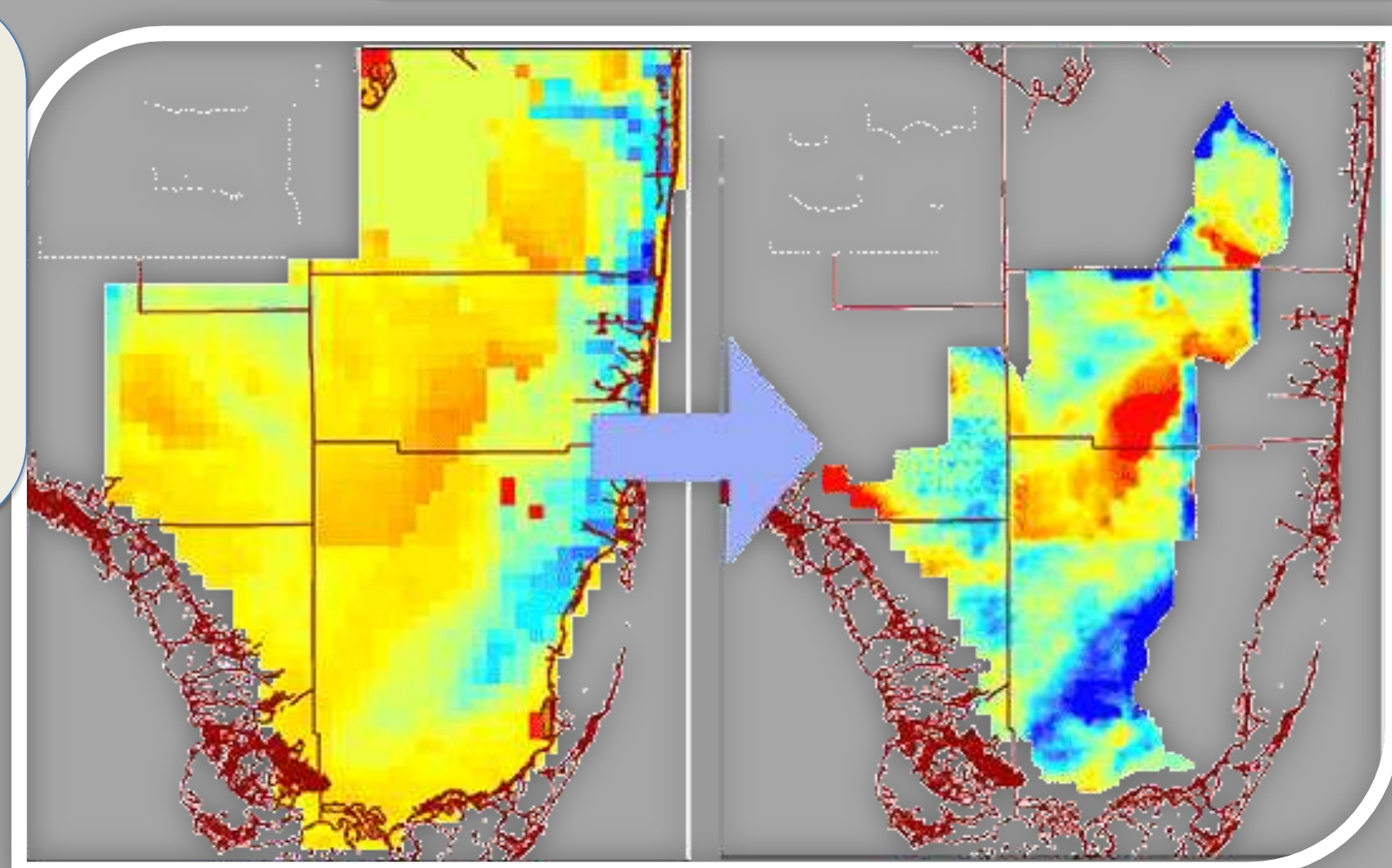
In progress and completed Ecological Models: Design and User Docs, Applications, and Source Code

Everglades Landscape Vegetation Succession Model (ELVeS) layers can be utilized as a dynamic component of other Wildlife Models

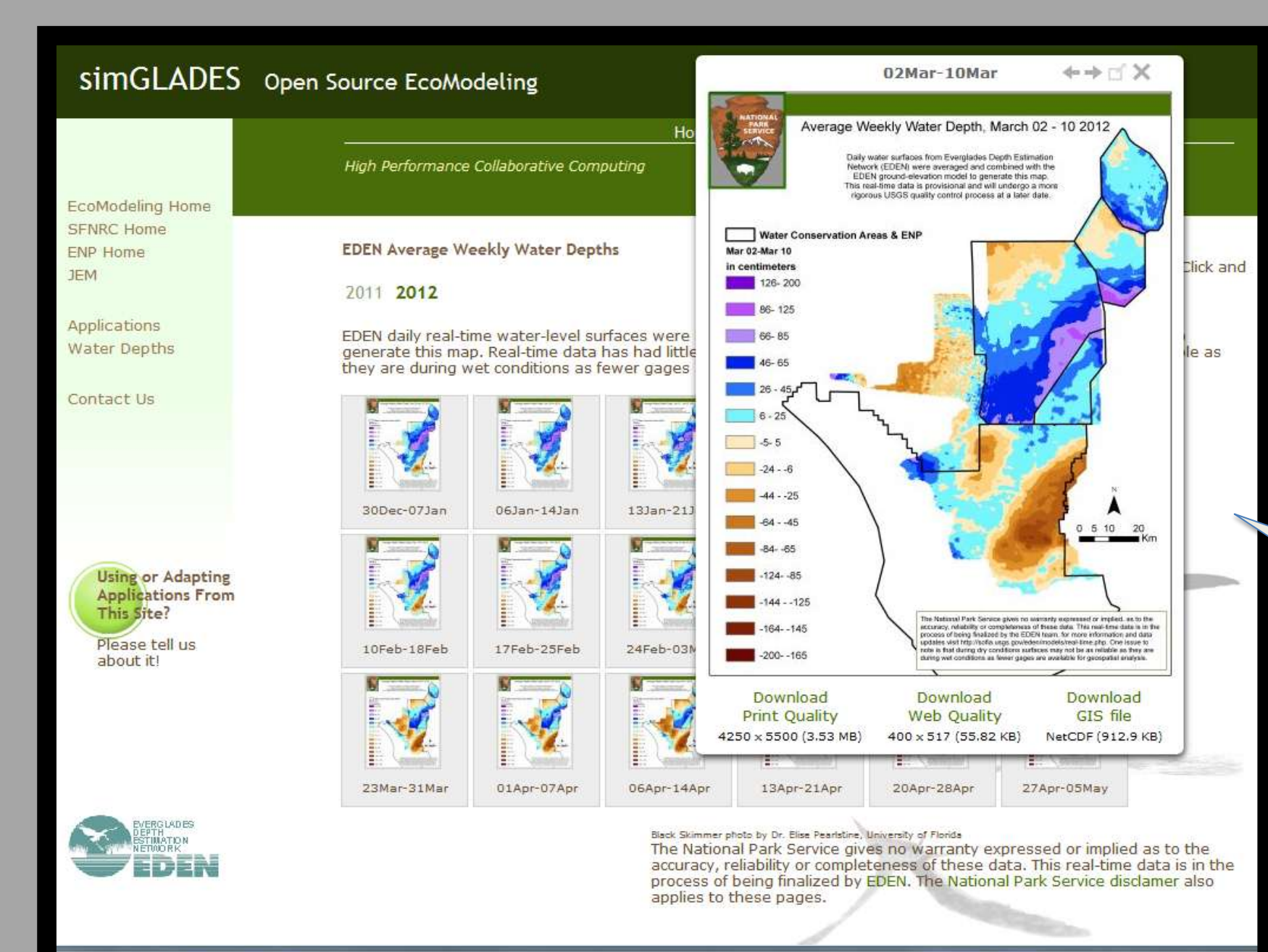
WoodStork Forage



Utility: Water Depth Estimation Routine WaDER++
 2² miles to 500² meter resolution



Utility: Online Interactive Skewed Probability Distribution Plotting



Geospatial Data Products: Water Depth Maps developed from real-time field data

