

Value Propositions of Marxan Modeling for Seminole County

Dr. Jason Evans – Stetson University

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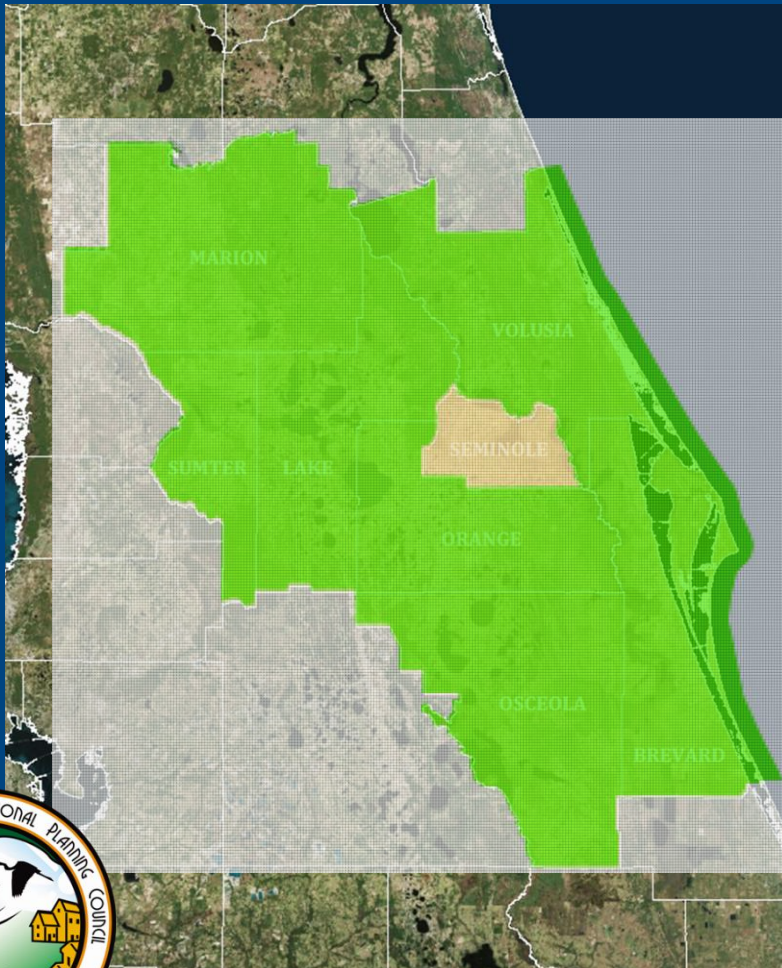
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Enhancing Environmental Resilience in Seminole County

1. Collaborate with Seminole County, its municipalities, and other partners to employ the Marxan model and associated decision support tools to identify opportunities for enhancing biodiversity conservation, stormwater management, floodplain function, and outdoor recreation.
2. Provide training and ongoing technical support for Seminole County staff in utilizing the tools, periodically updating model outputs, and applying the results.
3. Assist Seminole County with efforts to obtain external funding support for specific resilience-based projects, including through state, federal, and private granting entities.

Regional Perspective



- East Central Florida Regional Planning Council (ECFRPC) boundary includes 8 counties
- Provides technical assistance services to communities and organizations
- Marxan has been conducted in 7 counties across the region, a partnership between ECFRPC and Stetson University



The Marxan Model Overview

What is Marxan?

- The world's most widely used decision-support tool for spatial conservation planning and acquisitions.
- Marxan is supported and developed through The Nature Conservancy.

Key Features:

- Prioritizes conservation land and other green infrastructure opportunities based on ecological, economic, and social factors.
- Efficiently integrates many different datasets to evaluate attributes such as landscape connectivity, acquisition costs, conservation co-benefits, and trade-offs.
- Requires significant knowledge in geographic information systems, conservation science, and spatial statistics.

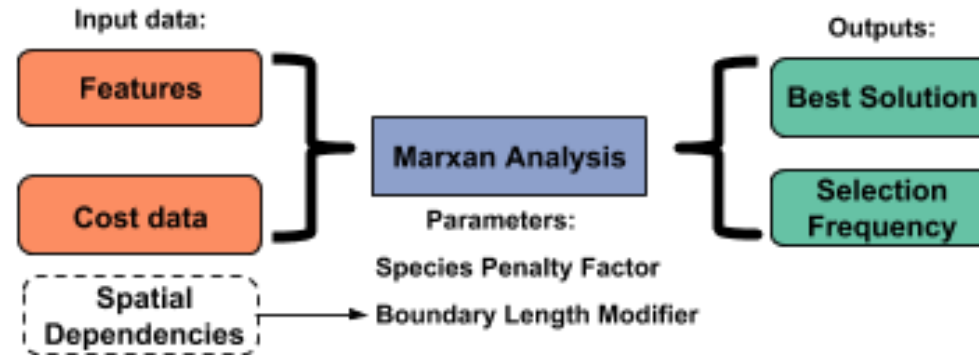
Benefits:

- Supports land acquisition prioritization and project resource allocation through an objective, collaborative process.

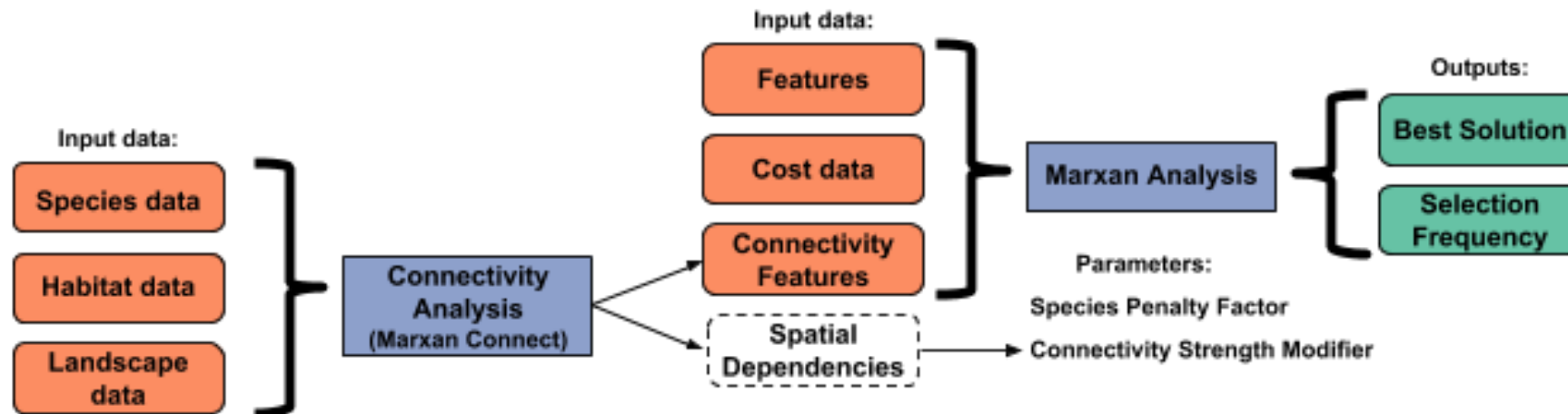
Standard Marxan Workflow



MARXAN
conservation solutions



Marxan Connect Workflow



We generally begin the Marxan process using these datasets:

1. Existing inventory of conservation and protected lands
2. All locally relevant layers of the Florida Natural Area Inventory's Florida Forever Conservation Needs Assessment
3. The most recent "just value" assessments available through the County Property Appraiser



Additional data from Seminole County or other sources can be readily integrated into the Marxan model.

Outputs from the Marxan models can be used to provide objective decision support for:

1. Conservation land acquisitions
2. Siting of trails and other green space recreational amenities
3. Flood vulnerability assessments
4. Stormwater master plan updates, especially to incorporate use of green stormwater infrastructure
5. External funding requests in support of any of the above



Thank You

Jason M. Evans, PhD

Institute for Water and Environmental Resilience

Stetson University

jevans1@Stetson.edu

386-822-7910

Jenifer Rupert

East Central Florida Regional Planning Council

jrupert@ecfrpc.org

407-245-0300 ext. 302

www.ecfrpc.org