

CLIP

Critical Lands & Waters Identification Project



What is CLIP?

- **Statewide Natural Resource Spatial Database**
- **Prioritizes Biodiversity, Landscapes, & Water**
- **Identifies Florida's "Green Infrastructure": e.g., the critical concept that ecosystem function, biodiversity, and the health of human communities are inextricably linked.**
- **Century Commission and Cooperative Conservation Blueprint decision support**



CLIP Timeline

- 2006:** Century Commission asked for CLIP
- 2006 – 2008:** CLIP Database version 1.0 development; coordination with Cooperative Conservation Blueprint
- July 1, 2008–
Fall 2008:** CLIP priorities complete; gather input on CLIP; focus on Blueprint

Technical Advisory Group

Purpose: Develop consensus data and methods

- Experts on Florida natural resources and GIS analysis
- Organizations represented:

FDEP

FNAI

FWC

BDA

DOF

Rayonier

TNC

WMDs

UF

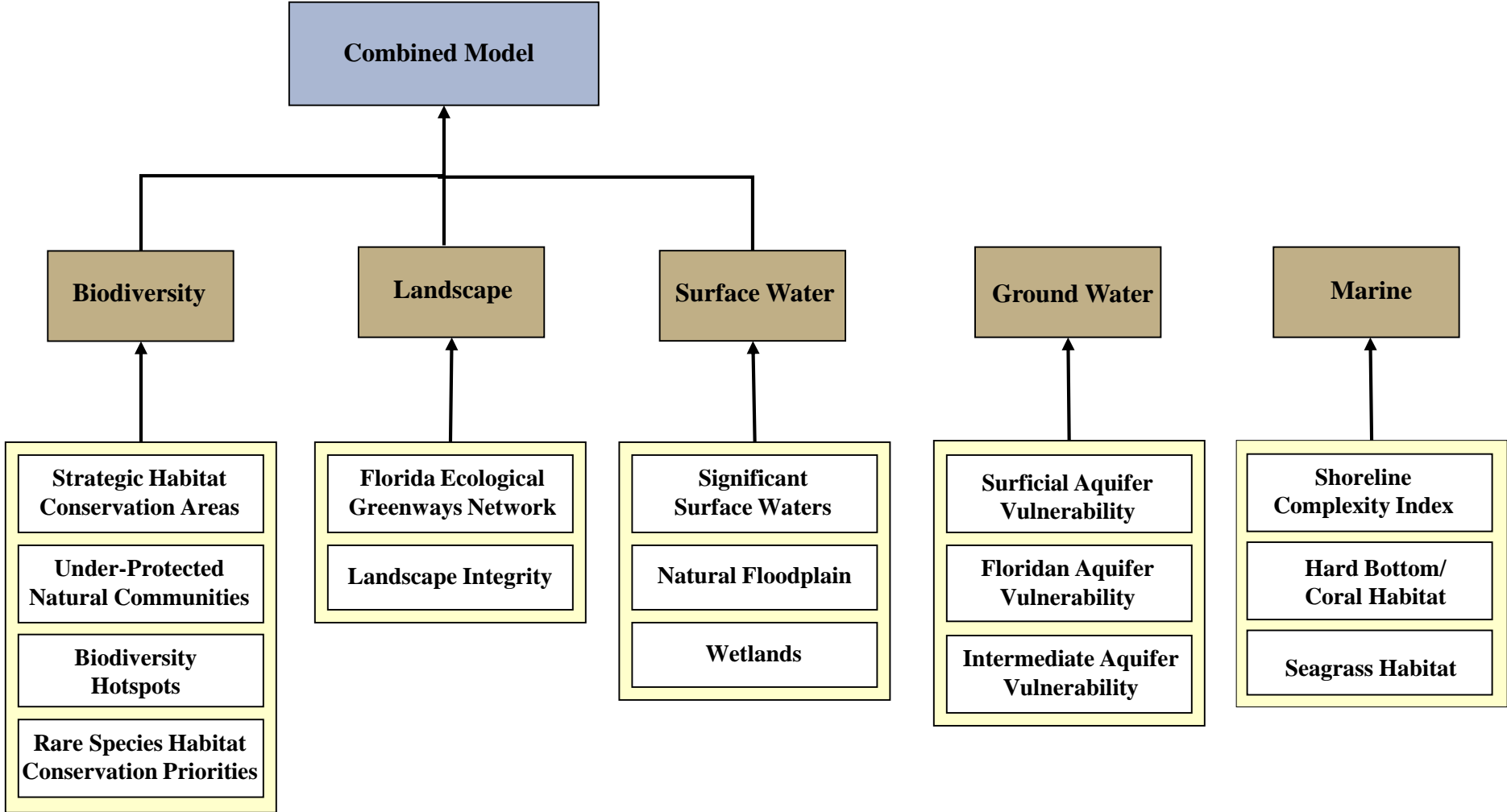
UCF

FSU

FDOT



CLIP Database Structure



Consensus Prioritization Example

Priority 1 Rules and Overlay

Biodiversity

SHCA: P1, P2

Hotspots: 8-13 species

FNAI Habitat: P1, P2

Natural Communities: S1, S2

Landscape

Greenways: Critical 1, Critical 2

Surface Waters

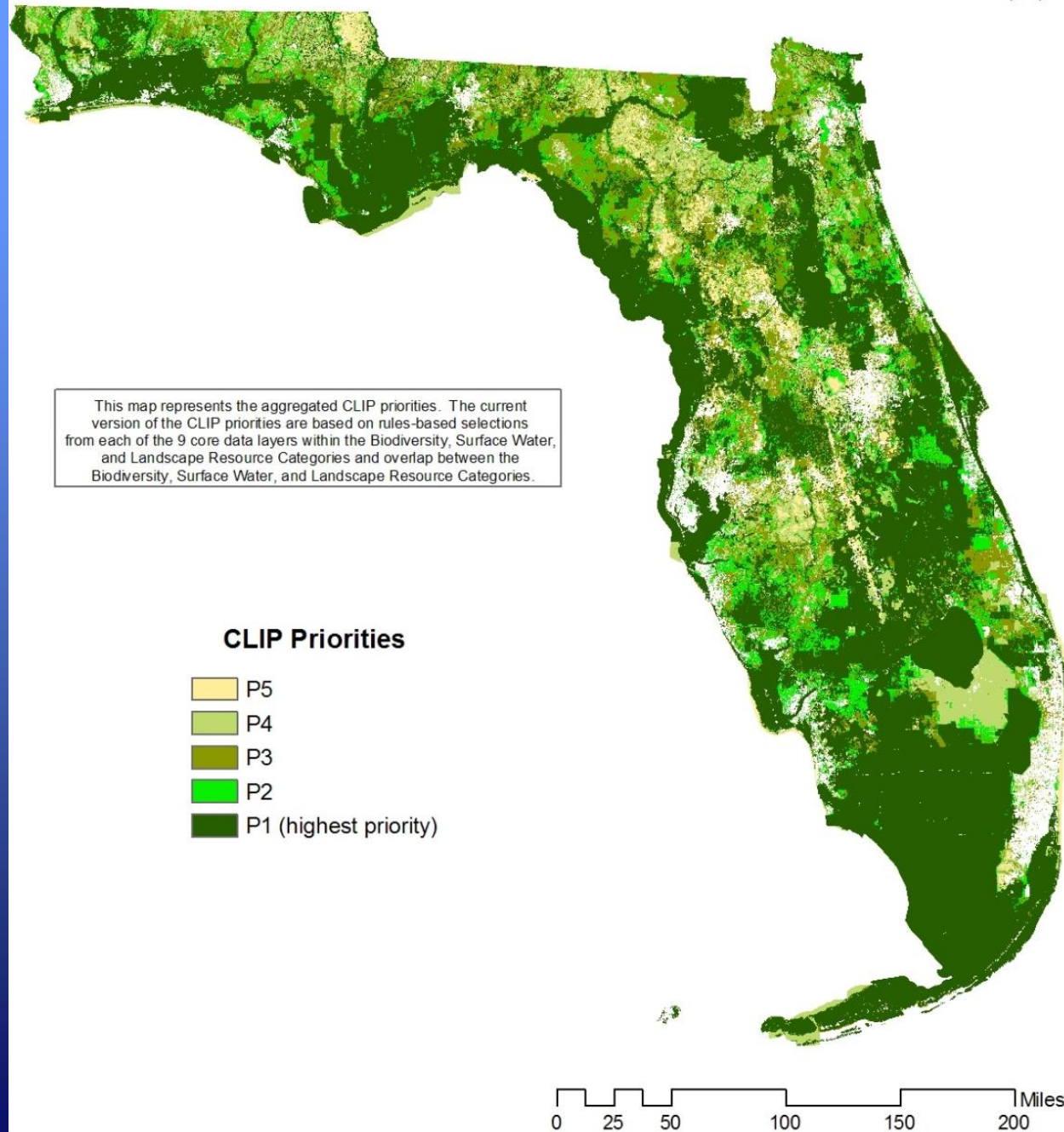
Surface Waters: P1

Floodplain: P1

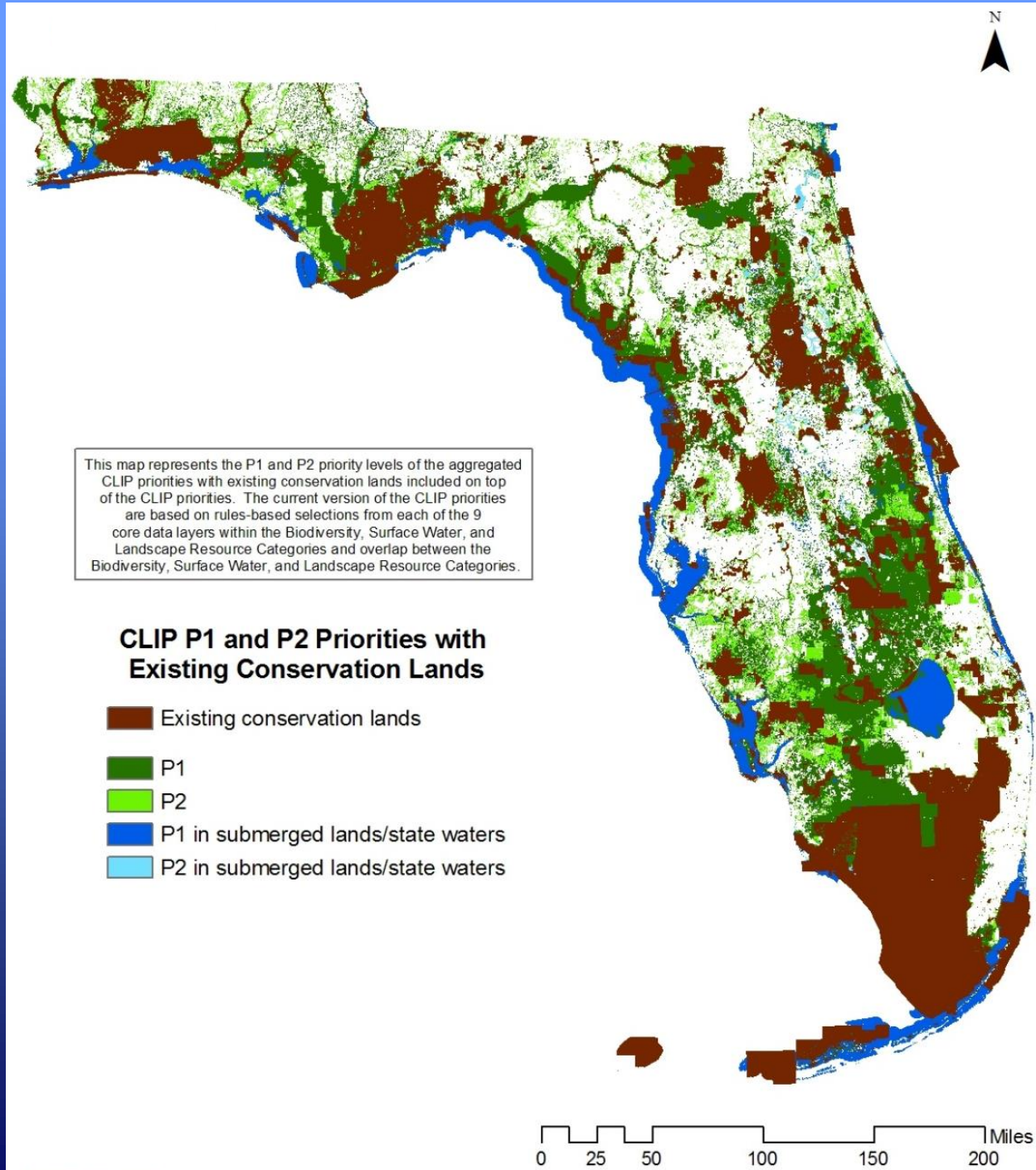
Wetlands: P1

Overlay: P2 for at least 2 of 3 resource categories

Consensus All CLIP Priorities



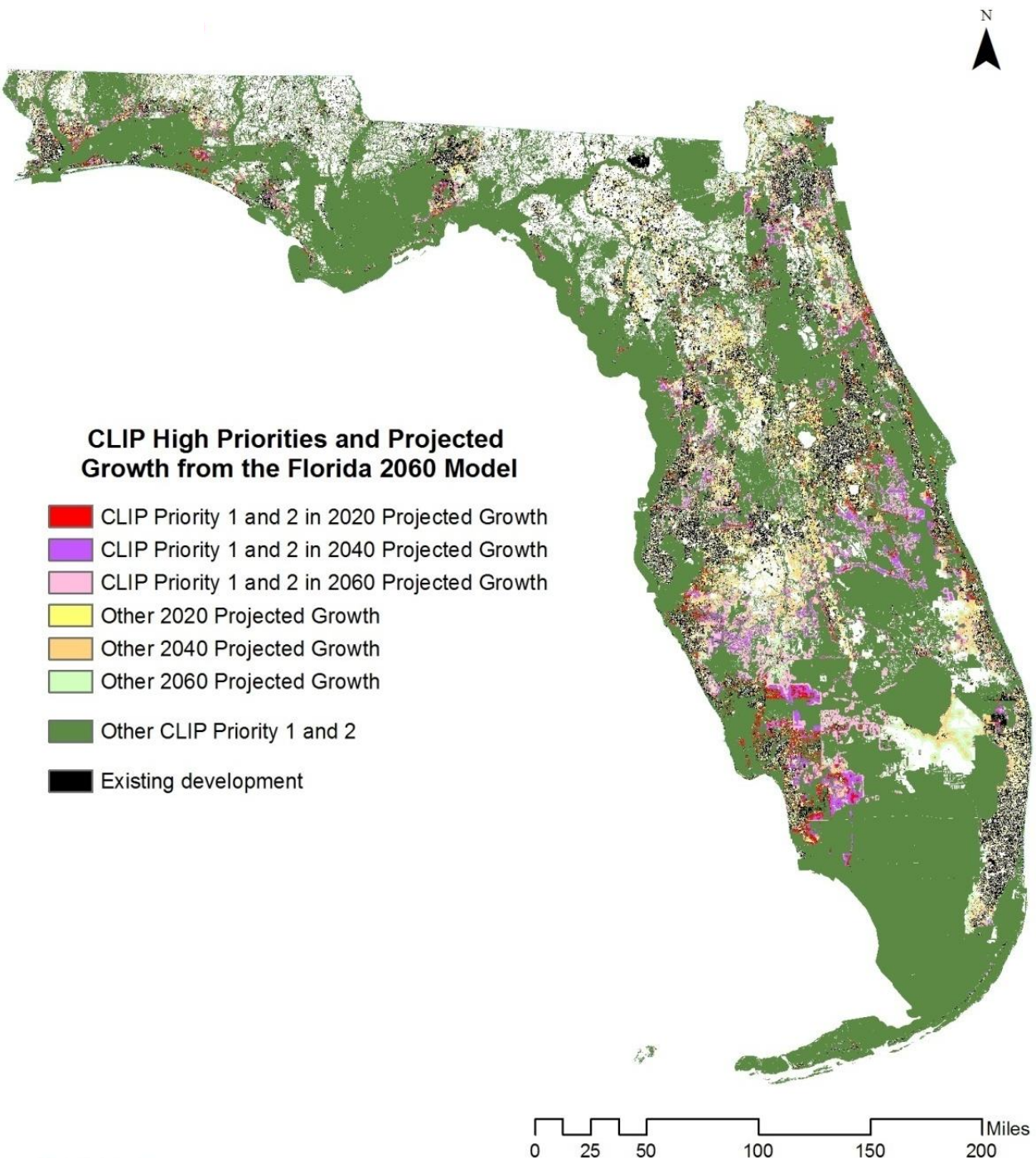
Consensus Priority 1 & 2 Terrestrial and Aquatic



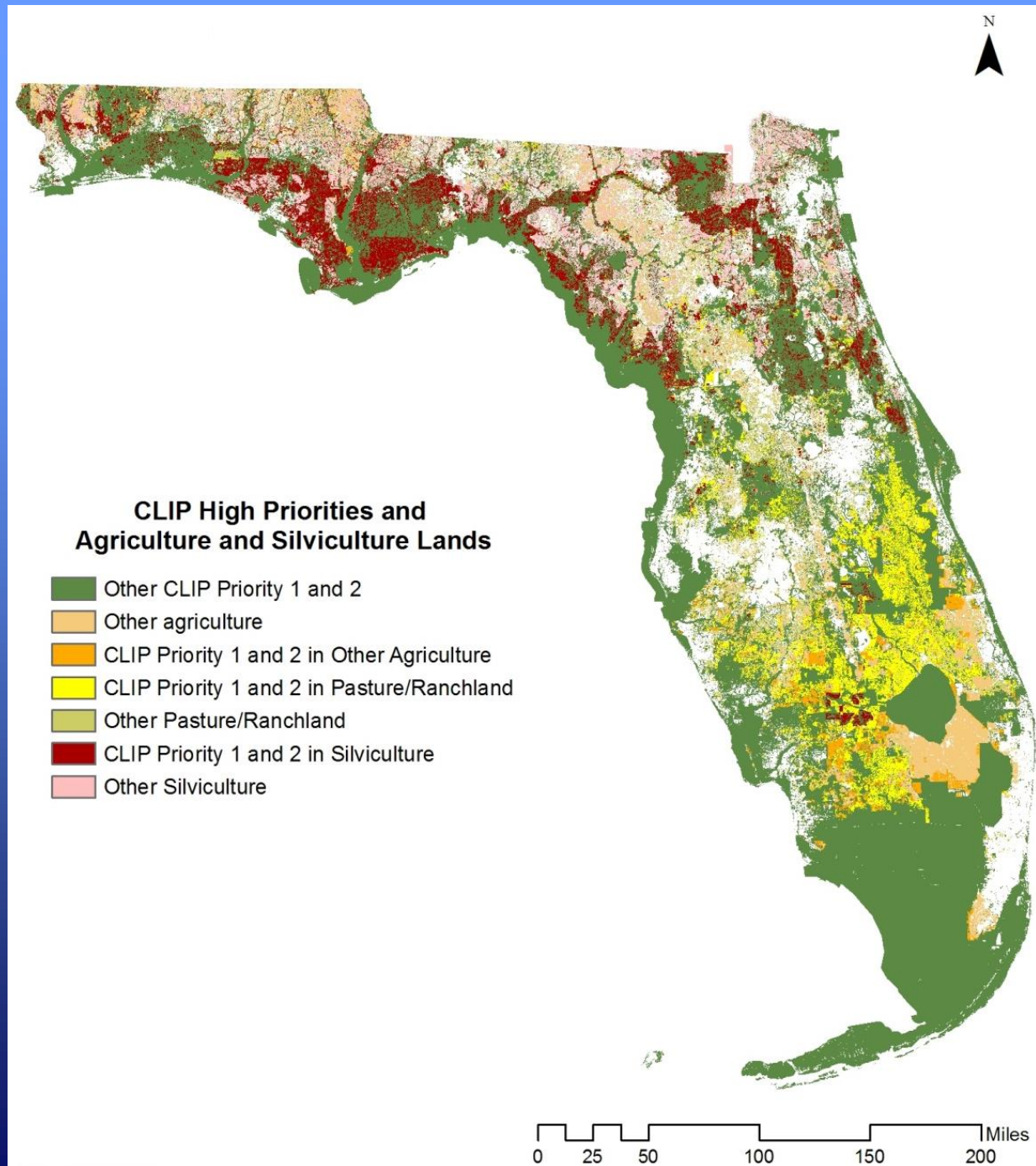
CLIP Report

- **CLIP Database**
- **Methods and Results**
- **Data Gaps/Additional Analyses Needs**
- **Recommendations for Maintaining CLIP**
- **Overlays**
 - **Agriculture/Silviculture**
 - **Population/Development Growth**
 - **Transportation Planning**

1 & 2 Priorities Overlay 2060 Growth Projection



1 & 2 Priorities Overlay Agriculture and Silviculture

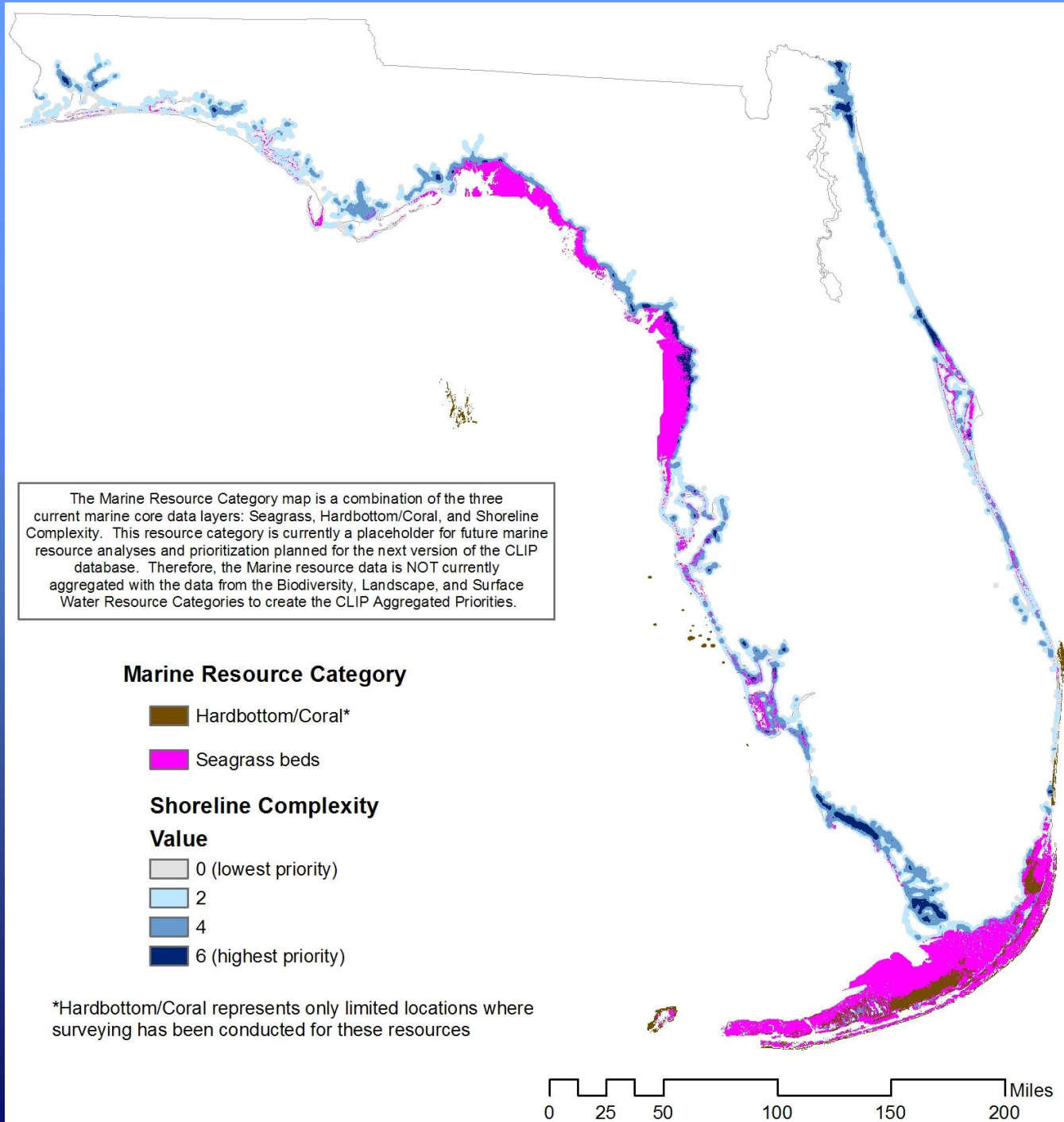


CLIP Future Database

- **Complete marine resource category**
- **Complete groundwater resource category**
- **Explore water resource restoration category**
- **Conduct landscape context analysis**
- **Develop additional information on ecological services and create value-added strategies**
- **Assess relationship with climate change**



Marine Resource Category Data

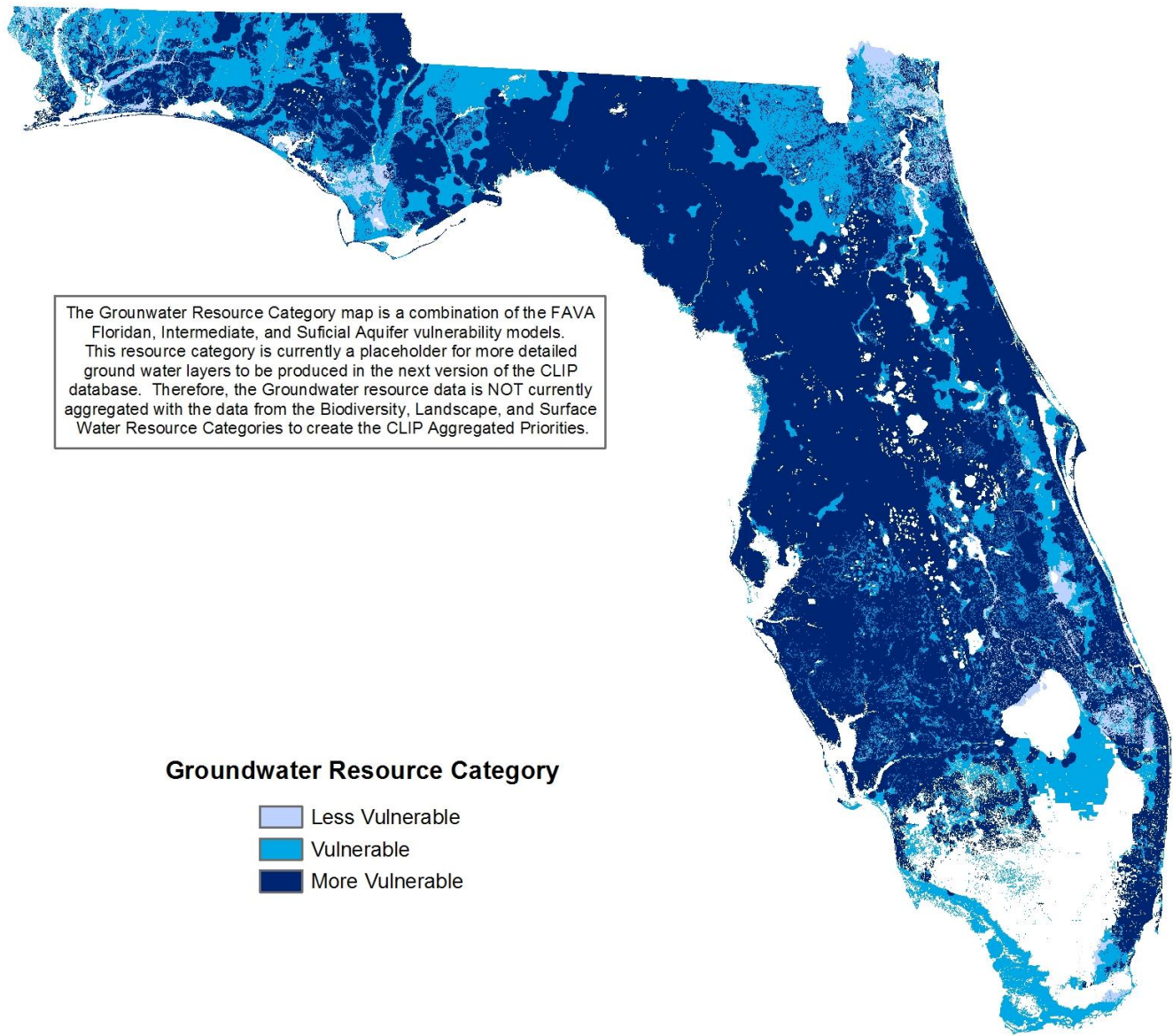
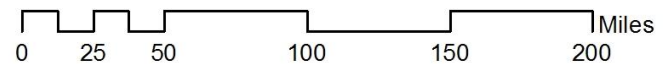


Ground Water Resource Category

The Grounwater Resource Category map is a combination of the FAVA Floridan, Intermediate, and Suficial Aquifer vulnerability models. This resource category is currently a placeholder for more detailed ground water layers to be produced in the next version of the CLIP database. Therefore, the Groundwater resource data is NOT currently aggregated with the data from the Biodiversity, Landscape, and Surface Water Resource Categories to create the CLIP Aggregated Priorities.

Groundwater Resource Category

- Less Vulnerable
- Vulnerable
- More Vulnerable



Water Restoration Category Example

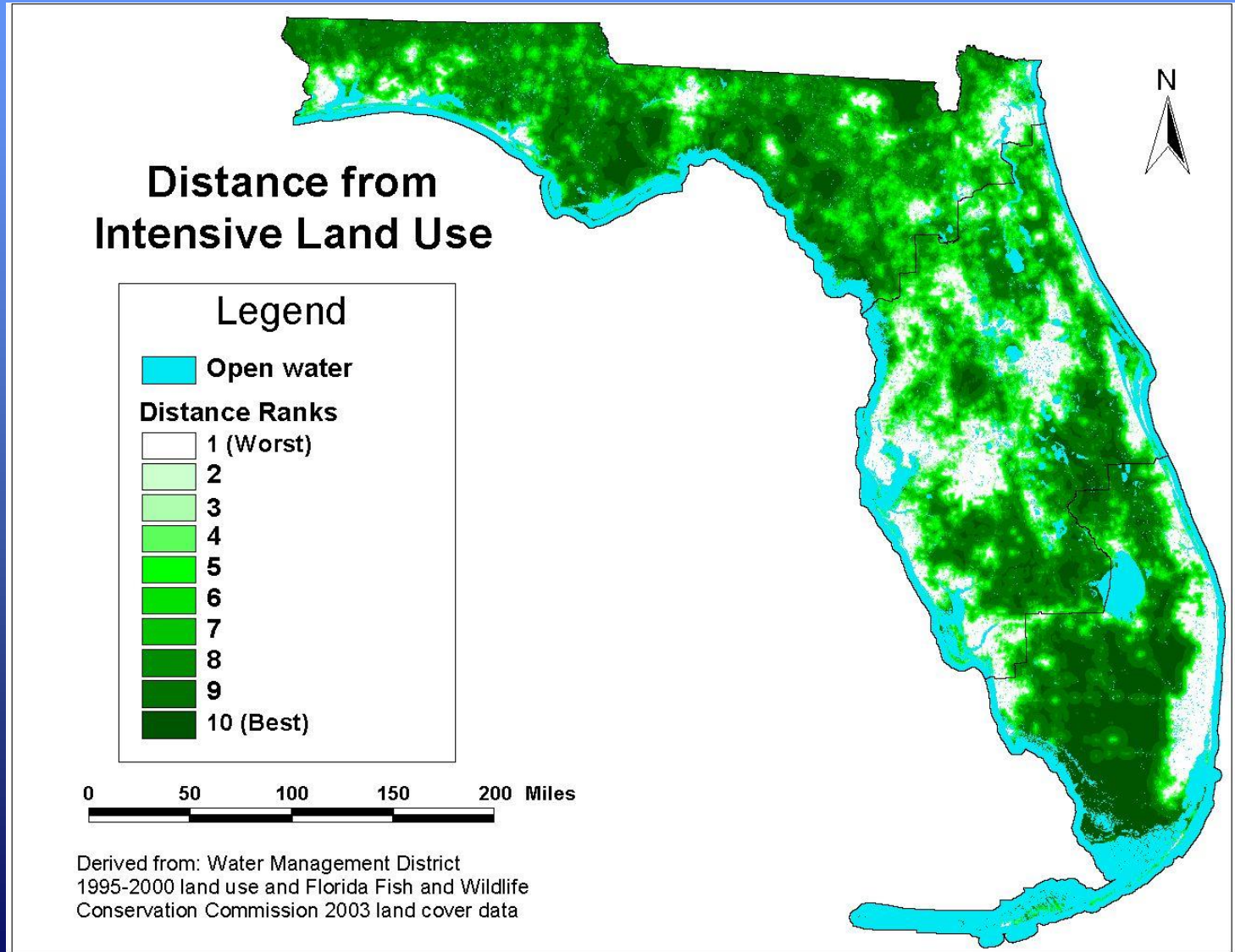


Turning the Kissimmee River
into the Kissimmee Canal (C-38)
Picture courtesy of
South Florida Water Management District



Kissimmee River Restoration (11-28-2001)
Photograph courtesy of Paul J. Whalen

Landscape Context Index Example

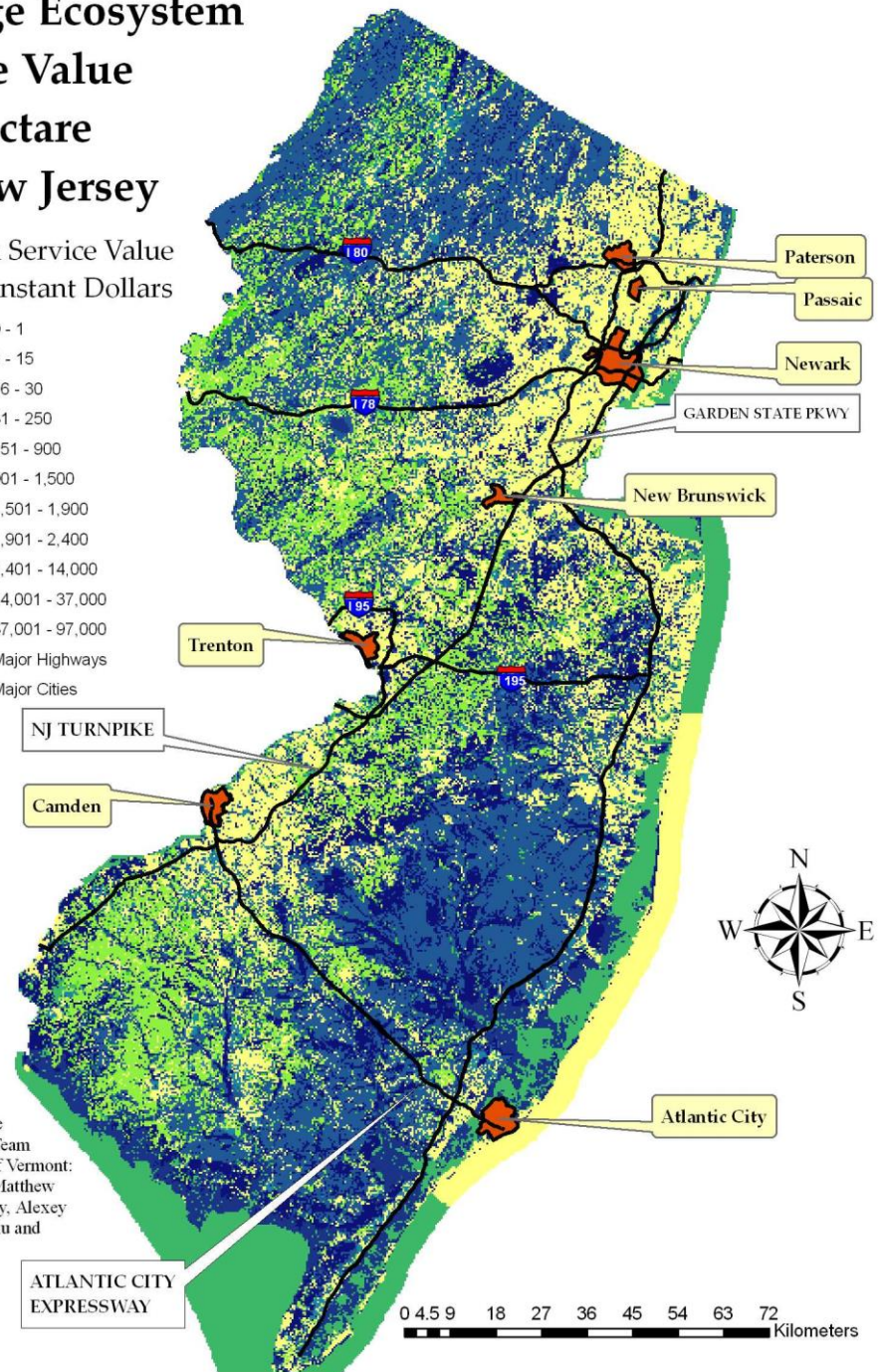


Ecosystem Service Example:

Valuation of New Jersey's Natural Capital and Ecosystem Services (From Costanza: <http://www.uvm.edu/gieel/>)

Average Ecosystem Service Value per Hectare for New Jersey

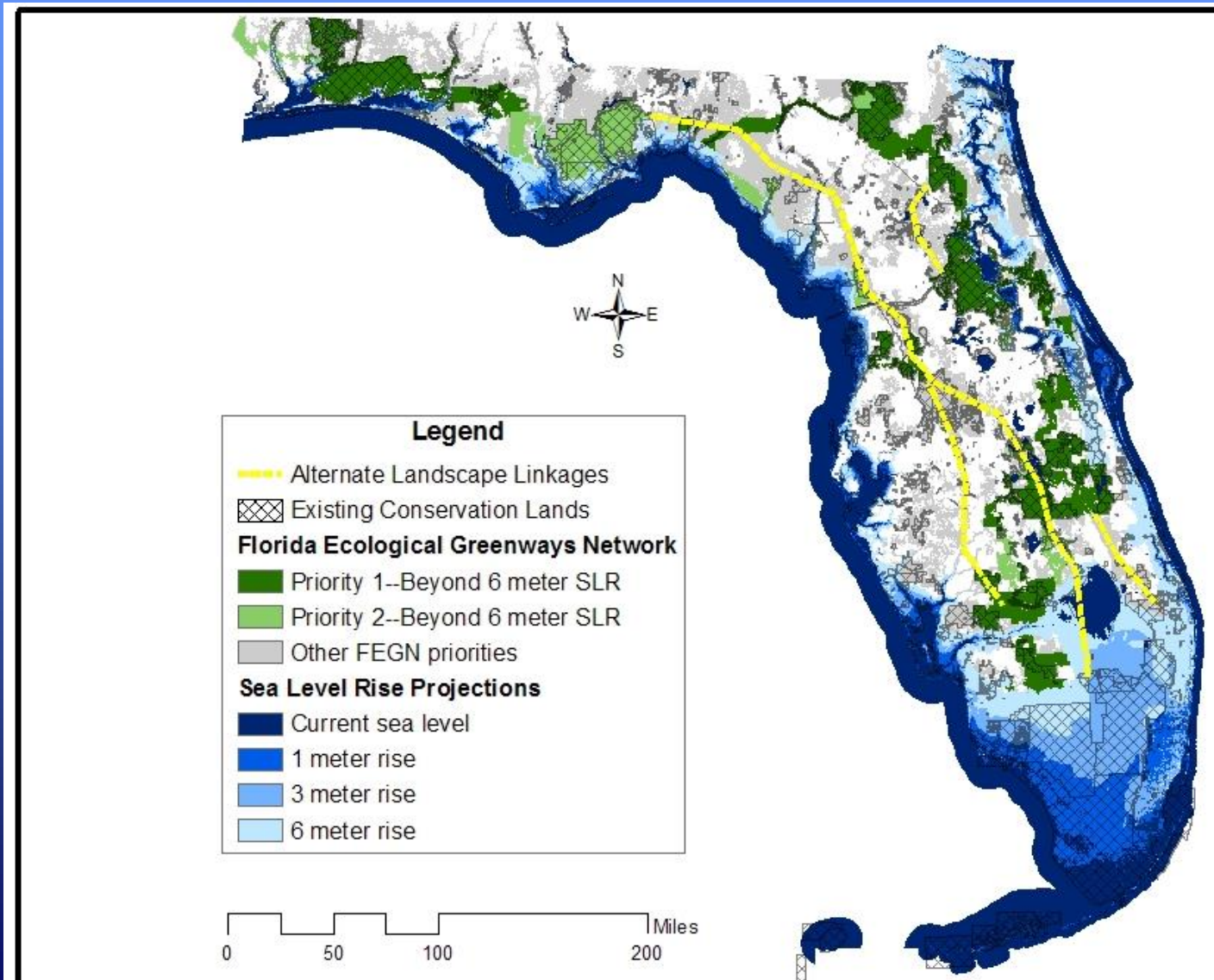
Ecosystem Service Value in 2001 Constant Dollars



The New Jersey Ecosystem Service Valuation Project Team at the University of Vermont: Robert Costanza, Matthew Wilson, Austin Troy, Alexey Voinov, Shuang Liu and John D'Agostino

Map Produced by Austin Troy and John D'Agostino

Florida Ecological Greenways Network and Sea Level Rise



CLIP Future Planning

- **Develop partnership and process for maintaining and enhancing CLIP (MOU)**
- **Establish a CLIP Inter-Agency Policy Advisory Committee (IPAC)**
- **Develop strategy for regular statewide updates to land use data**
- **Work with agencies and organizations at all scales to make CLIP a common foundation for conservation planning statewide**
- **Provide guide to using CLIP data and additional expertise to regional and local entities to facilitate regional visioning and conservation planning.**

CLIP for Conservation Planning

- **Much of CLIP derived from FL Forever Conservation Needs Assessment**
- **CLIP will feed back into planning for FF successor program measures**
- **CLIP is statewide in scope, but can be used for regional/local conservation planning**

CLIP Report, Database & Viewer

<http://www.centurycommission.org>



CLIP Next Steps

Cooperative Conservation Blueprint

CLIP is the first step

- Expert science product
- A unified GIS application
- Stands alone

Blueprint

- Builds on CLIP
- Cross links with social & economic priorities
- Creates GIS overlay

