



Suncoast Connector Task Force Meeting #2

Avoidance & Minimization Considerations



October 23, 2019

Define

Avoidance & Minimization

1



Review

State & Federal Regulation & Laws

2



Identify

Environmental resources: natural, cultural,
social, & physical

3

Examples

Transportation & the environment

4



Create

Composite Map

5



Discuss

Questions & approach

6

“Altogether eliminating an adverse environmental impact from a transportation decision by not taking a certain action or parts of an action.”

Avoidance is the first step in the evaluation process

- Includes determining which environmental resource, at the **maximum extent possible**, cannot be impacted by transportation decisions

Avoidance alternatives

- Are those that entirely **avoid** the use of the environmental resource

Avoidance alternatives consider shifts

- Reduced footprints and other modifications in the project development to **preserve** and **protect** the environmental resource

“Reduce adverse impacts on the environment by a transportation decision by limiting the magnitude of the action and its implementation.”

If no feasible and prudent **avoidance** alternatives exist

- **Minimization** efforts should be pursued
- **Minimization** measures to reduce the impact to environmental resources

Evaluations based on availability, feasibility, viability, and cost

- Choosing the alternative that has **reduced** impacts

Considerations resulting in use of an environmental resource without a feasible and prudent **avoidance** alternative

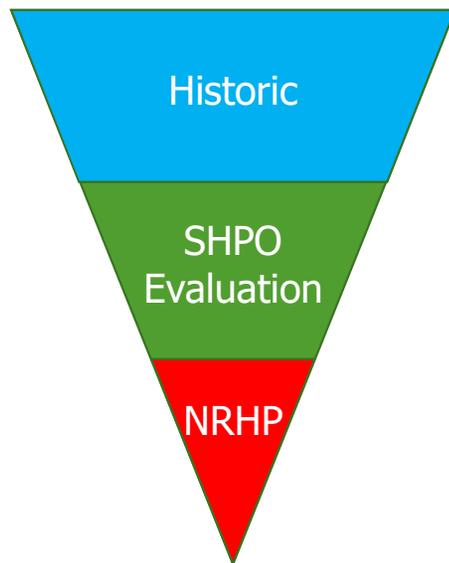
- The alternative that will cause the **least** overall impact (after factoring in mitigation measures) must be considered

- The **Clean Water Act** is a U.S. Federal law that regulates the discharge of pollutants into the nation's surface waters, including lakes, rivers, streams, wetlands, and coastal areas.
 - The **purpose** of the **Clean Water Act** is to *restore* and *maintain* clean and healthy waters.
 - It is administered by the U.S. Army Corps of Engineers (USACE) and overseen by the U.S. Environmental Protection Agency (EPA).
 - Proposed activities are regulated through a permitting process. An individual permit is required for potentially significant impacts.
- Prior to applying for a permit, the permittee must first show:
 - Steps have been taken to **avoid** impacts to wetlands, streams and other aquatic resources
 - Potential impacts have been **minimized**
 - A viable alternative **does not** exist that is less damaging to the aquatic environment
 - The nation's waters would **not** be significantly degraded
 - Compensation will be provided for all remaining unavoidable impacts



- The **purpose** of the **Endangered Species Act** is to *protect* and *recover* imperiled species and the ecosystems upon which they depend.
- It is administered by the U.S. Fish and Wildlife Service (USFWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service.
- The FWS maintains a list of endangered species, which include birds, insects, fish, reptiles, mammals, crustaceans, flowers, grasses, and trees.
- Under the Endangered Species Act, species may be listed as either **endangered** or **threatened**.
 - "**Endangered**" means a species is in danger of extinction throughout all, or a significant portion, of its range.
 - "**Threatened**" means a species is likely to become endangered within the foreseeable future.
- All species of plants and animals (except pest insects) are eligible for listing as endangered or threatened.

- **The National Historic Preservation Act of 1966**, was passed primarily to acknowledge the importance of protecting our nation's heritage by preserving historical and archaeological sites



All properties over 50 years old

State Historic Preservation Office (SHPO) Evaluation

Listed On National Registered of Historic Places (NRHP)
Meets one of the four criteria: be associated with a historical event or person, have distinctive architecture/construction or likely to yield information about history

- Administered by the State Historic Preservation Office (SHPO)
- The **purpose** of the National Historic Preservation Act is:
 - Set Federal Policy for preserving our Nation's Heritage
 - Establish a Federal-State and Federal-Tribal Partnership
 - Establish a National Register of Historic Places and Landmarks
 - Requires a Qualified State Historic Preservation Officer
 - Charges Federal Agencies with Responsible Stewardship

- Health of our groundwater
- Support entire ecosystems
- Offer recreational opportunities such as:
 - Swimming
 - Kayaking
 - Diving



Fanning Spring State Park, Levy County



Rock Bluff Springs, Gilchrist County

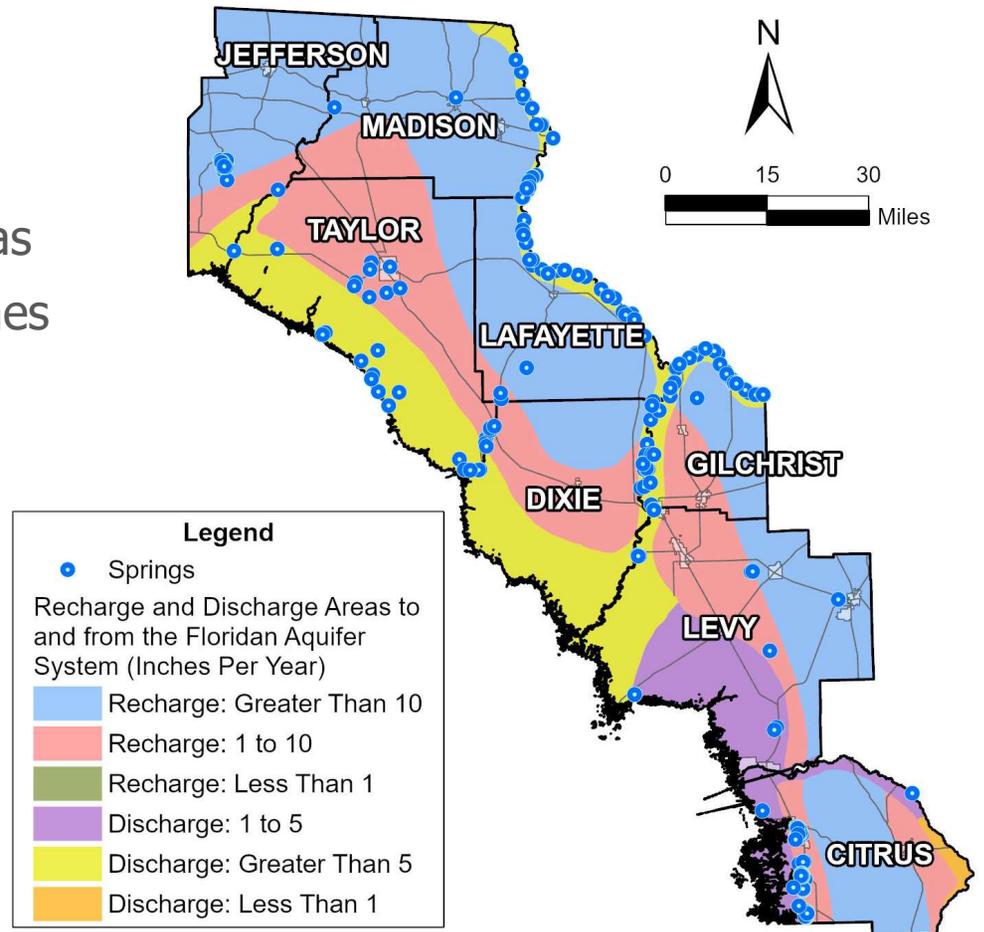


Three Sisters Springs, Citrus County

- **Avoid** spring heads completely
- **Conserve** conveyance to water bodies
- **Minimize** impacts to aquifer recharge areas
- **Minimize** impacts to spring protection zones



Gornto Springs, Dixie County



- Distinct ecosystem that is flooded by water, either permanently or seasonally
 - Four Categories:
 - ✓ Estuarine/Marine – wetlands associated with estuary/ocean
 - ✓ Lacustrine – wetlands associated with lakes
 - ✓ Riverine – wetlands associated with rivers (flowing water)
 - ✓ Palustrine – freshwater wetlands



Estuarine/Marine



Lacustrine

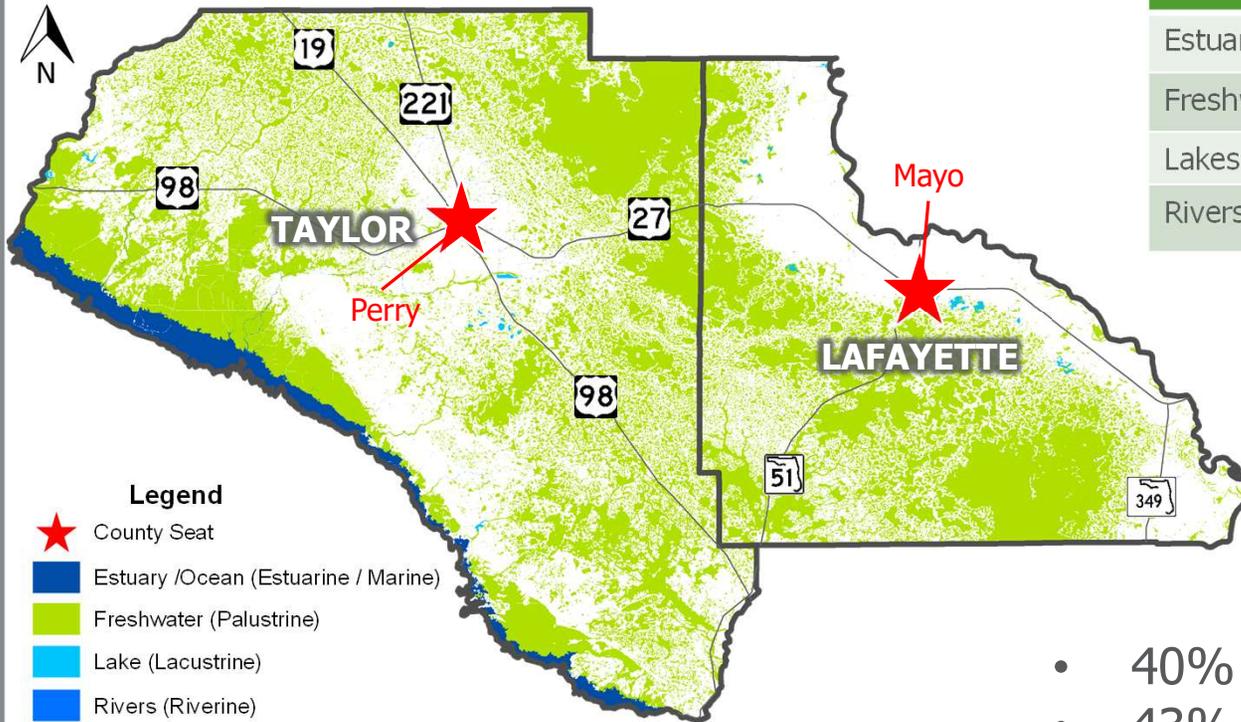


Riverine



Palustrine

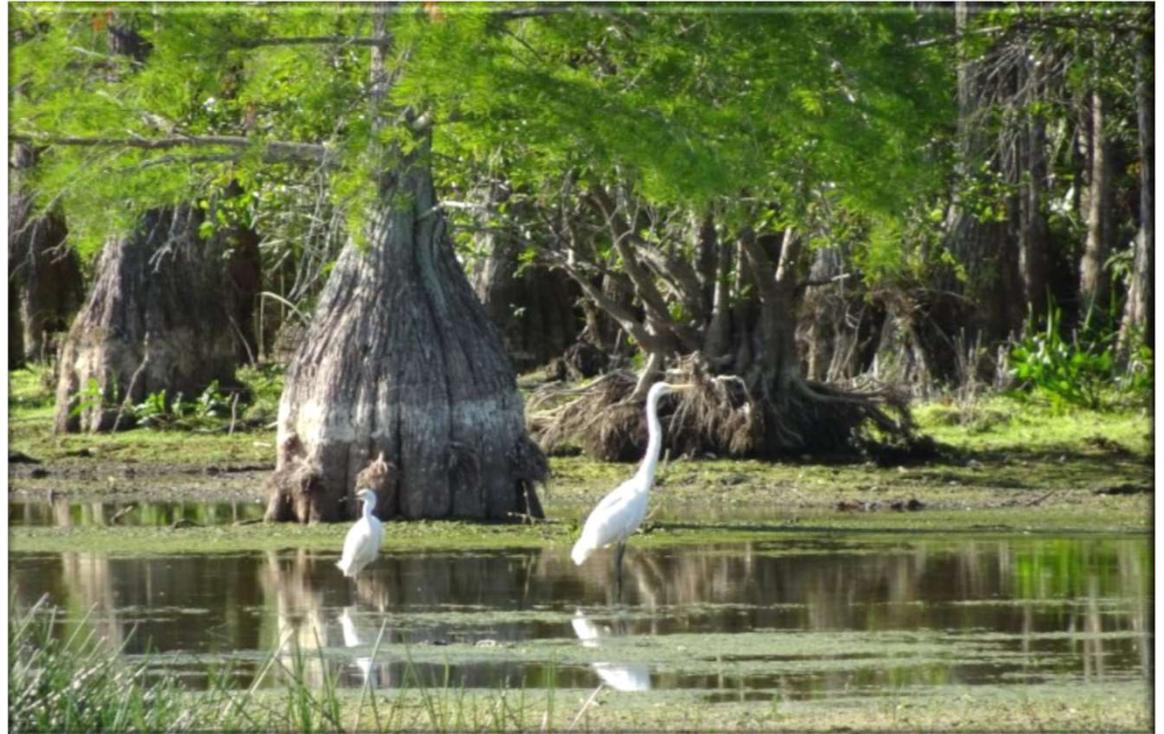
Taylor & Lafayette Counties



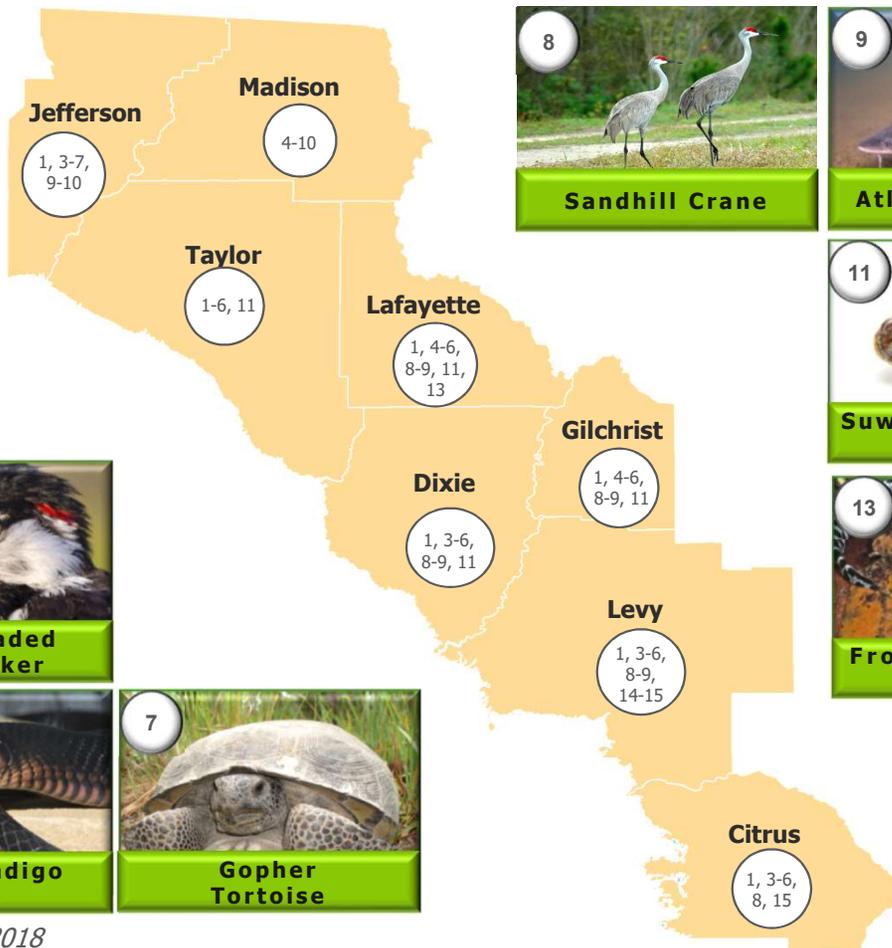
Wetland Type	Counties (acres)		Total (acres)
	Taylor	Lafayette	
Estuary/Ocean	27,766	0	27,766
Freshwater	284,875	149,751	434,626
Lakes	699	850	1,549
Rivers	812	1,215	2,027

- 40% of Taylor County is wetlands
- 43% of Lafayette County is wetlands

- Avoid wetland impacts, if possible
- If impacts are unavoidable, then impacts are minimized to the maximum extent feasible
- Wetland mitigation practices to be discussed at a later Task Force meeting



Threatened & Endangered Species



Source: US Fish & Wildlife Service, August 2018



Gopher Tortoise Relocation



Bald Eagle Nest

CAUTION: MANATEE HABITAT
 All project vessels
IDLE SPEED / NO WAKE
 When a manatee is within 50 feet of work
 all in-water activities must
SHUT DOWN
 Report any collision with or injury to a manatee:
 Wildlife Alert:
 1-888-404-FWCC(3922)
 cell *FWC or #FWC




Eastern Indigo Snake Detector Dogs

ATTENTION:
 THREATENED EASTERN INDIGO
 SNAKES MAY BE PRESENT ON
 THIS SITE!!!



Please read the following
 information provided by the
 U.S. Fish and Wildlife Service
 to become familiar with
 standard protection measures
 for the eastern indigo snake.



■ Jefferson County

■ 23 NRHP Sites

■ Madison County

■ 8 NRHP Sites



- **Avoid** historic cemeteries completely
- **Avoid** any resource that is on the National Register of Historic Places
- **Avoid** other historic bridges, structures, and buildings to the maximum extent feasible
- **Example: State Road 20 house relocation**
 - Relocated & refurbished



SR 20 Francis House, Putnam County



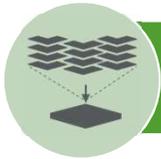
Avoidance & Minimization GIS Layers from S.B. 7068

Description	Source
Florida Forever Acquired Lands	Florida Natural Areas Inventory
Managed Conservation Lands	Florida Natural Areas Inventory
100 Year Floodplains	FEMA
Wetlands	Water Management Districts
Farmland Preservation Areas	Marion County
Agricultural Lands	Water Management Districts
Prime Farmland	Water Management Districts
Aquifer Recharge Areas	Saint John's River Water Management District
Spring Protection Zones and Spring Priority Focus Areas	Florida Department of Environmental Protection
Spring Locations	Florida Department of Environmental Protection
Outstanding Florida Waters	Florida Department of Environmental Protection
Aquatic Preserve Boundaries	Florida Department of Environmental Protection
Surface Waters	Water Management Districts
Florida Ecological Greenways Network	Florida Natural Areas Inventory
Critical Habitats	US Fish and Wildlife Services
Strategic Habitat Conservation Areas Priorities 1 and 2	Florida Natural Areas Inventory
Wildlife Refuges	US Fish and Wildlife Services
Wildlife Management Areas	Florida Fish and Wildlife Conservation Commission



Additional Avoidance & Minimization GIS Layers

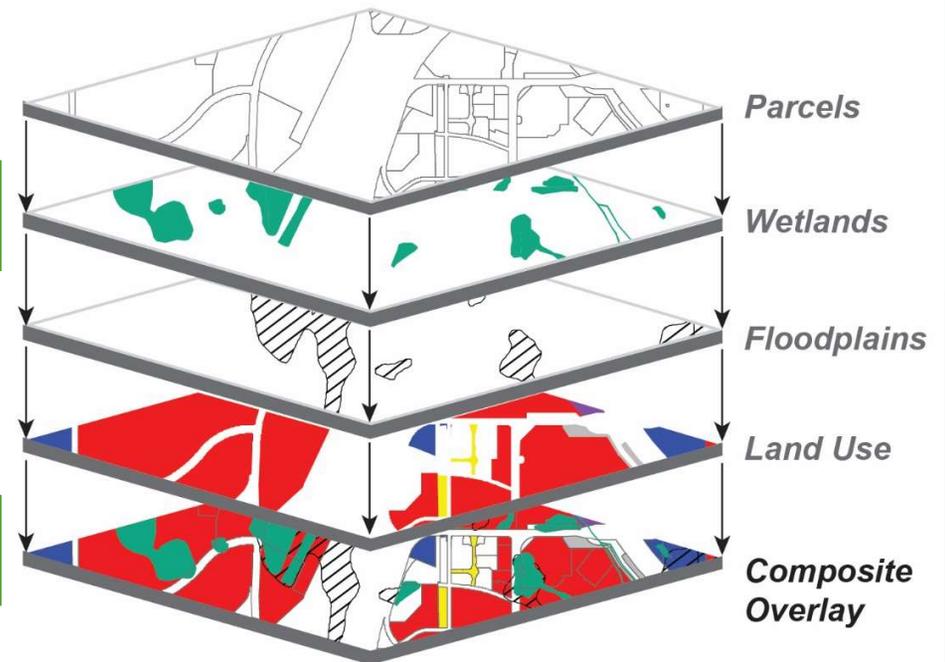
Description	Source
Eagle Nests	Florida Fish and Wildlife Conservation Commission
Mitigation Banks	Florida Department of Environmental Protection
Subsidence Incident Reports	Florida Department of Environmental Protection
Water Management District Lands	Water Management Districts
Florida Forever Targeted Property	Florida Natural Areas Inventory
Florida Wood Stork Core Foraging Areas	US Fish and Wildlife Services
Florida Wood Stork Nesting Colonies	US Fish and Wildlife Services
Statewide Protected Species Consultation Areas	US Fish and Wildlife Services
Historical Bridges	Bureau of Archaeological Research
Historical Cemeteries	Bureau of Archaeological Research
Historical Resources	Bureau of Archaeological Research
Historical Structures	Bureau of Archaeological Research
Native American Lands	University of Florida GeoPlan Center
Gopher Tortoise Relocation Permit Recipient Sites	Fish and Wildlife Research Institute
Wading Bird Rookery Surveys	Florida Fish and Wildlife Conservation Commission
Black Bear Ranges within the State of Florida	Florida Fish and Wildlife Conservation Commission
Florida's Statewide Seagrass	Florida Fish and Wildlife Conservation Commission
Gulf of Mexico Essential Fish Habitats	National Oceanic and Atmospheric Administration
Navigable Waterway Network in Florida	US Department of Transportation
Cemeteries	University of Florida GeoPlan Center



Overlay several layers on one map



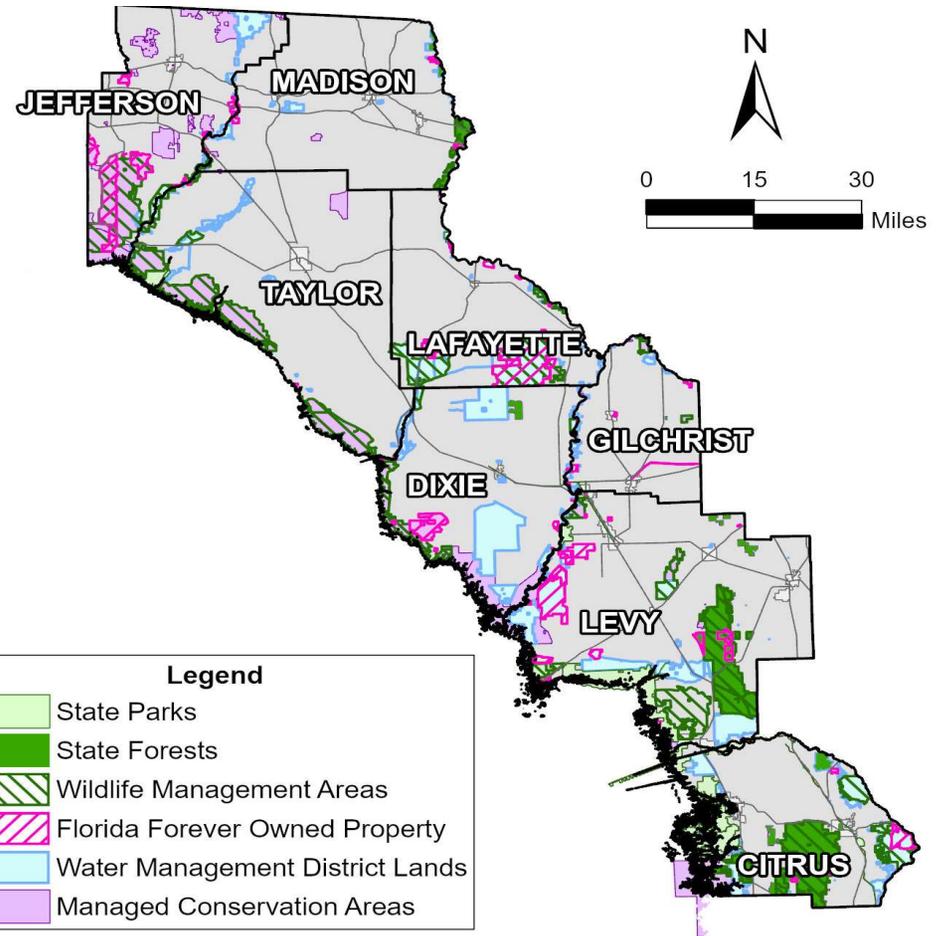
Identify opportunities & constraints



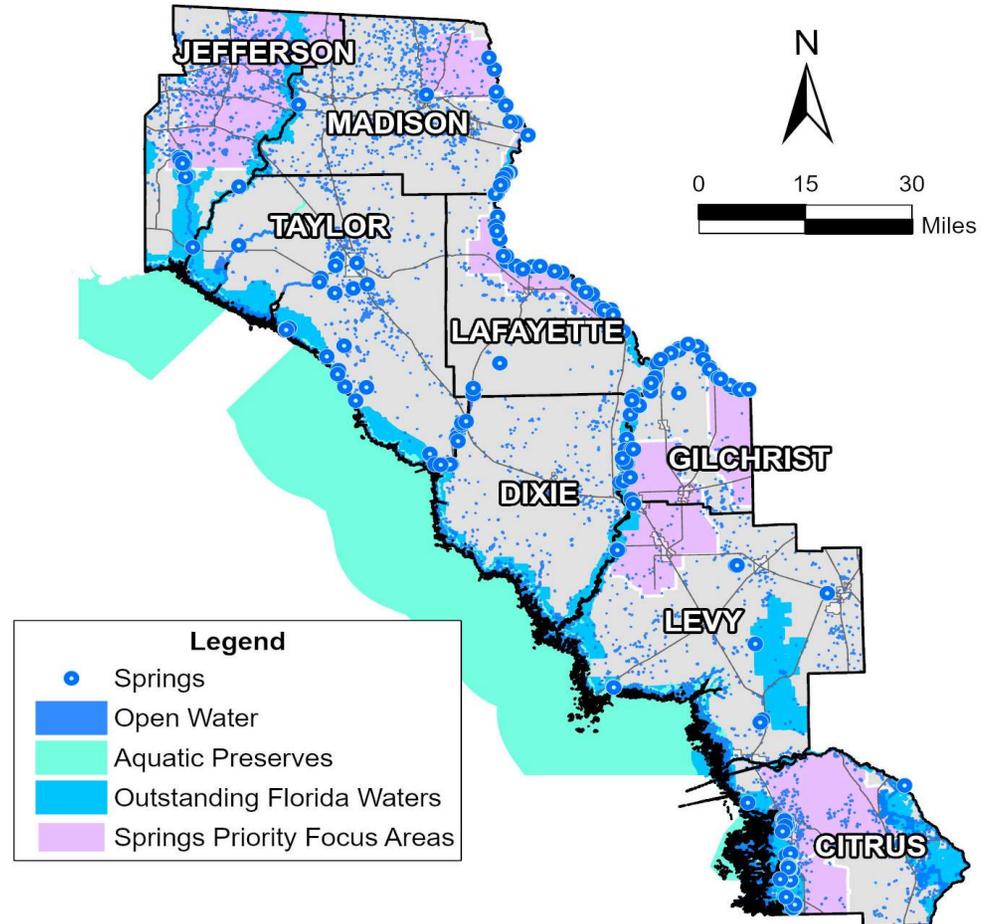
Managed Conservation Lands

- ▣ State Parks
- ▣ National Parks
- ▣ Water Management District Lands

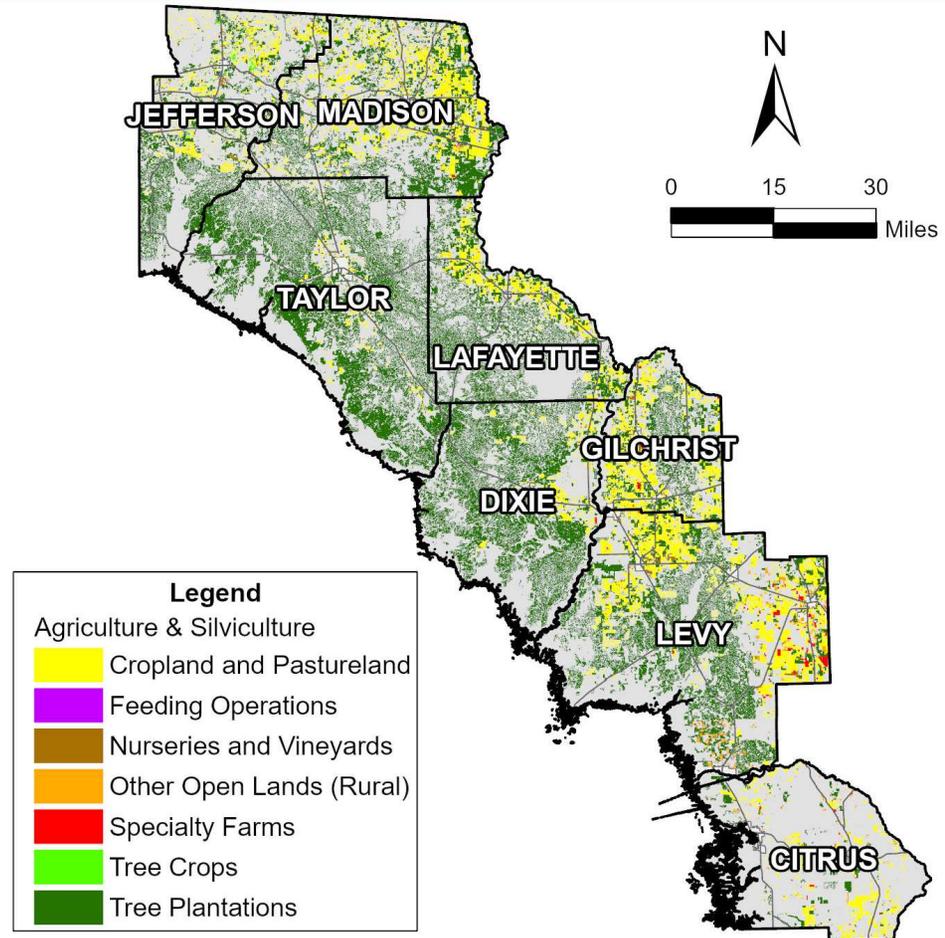
Florida Forever Lands



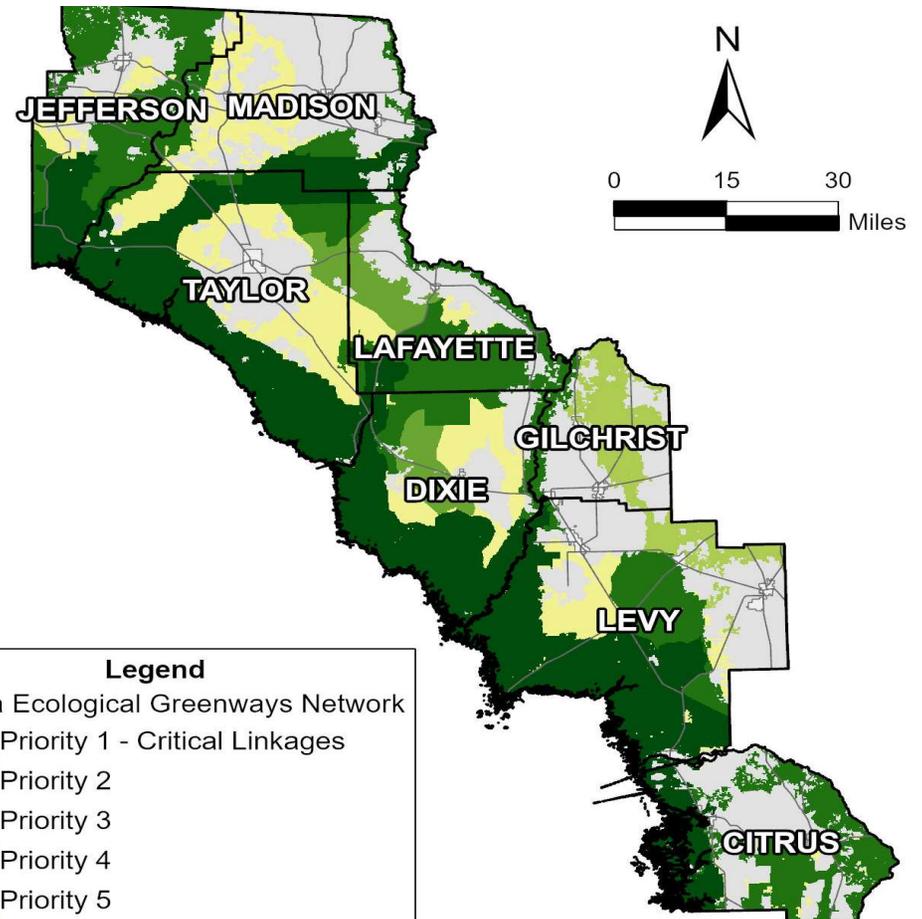
- Spring Locations
- Open Waters
- Spring Priority Focus Areas
- Aquatic Preserve Boundaries
- Outstanding Florida Waters



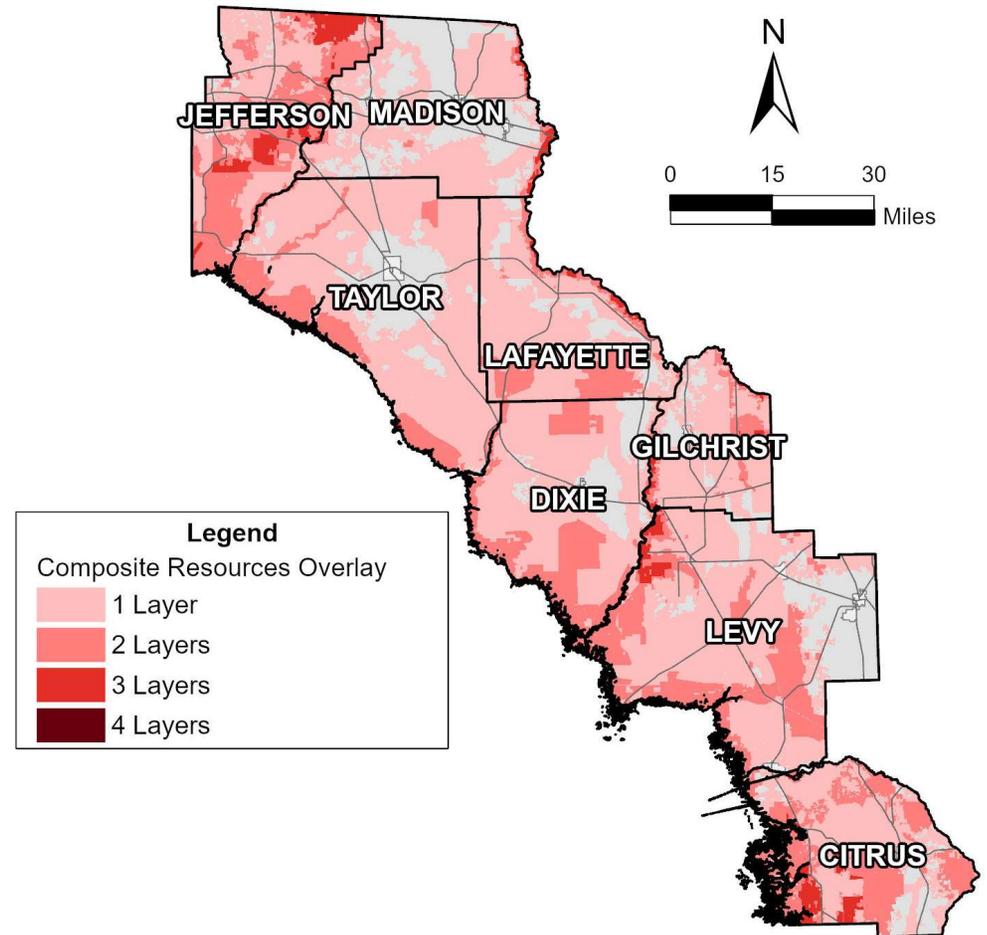
-  Prime Farmland
-  Agricultural Lands



 Florida Ecological Greenways Network



- Managed Conservation Lands
- Spring Priority Focus Areas
- Florida Ecological Greenways
- Critical Habitats
- Agricultural Lands



 m·cores



m·cores

MULTI-USE CORRIDORS OF REGIONAL ECONOMIC SIGNIFICANCE

FloridaMCORES.com