



# U.S. Fish and Wildlife Service Science Information Needs

South Florida Caribbean Cooperative  
Ecosystems Studies Unit Annual Meeting  
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# U.S. Fish and Wildlife Service

- A Bureau within the Department of Interior
- National Office (Washington, DC)
- Eight Regional Offices



- Mission:

***Working with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.***

# U.S. Fish and Wildlife Service

- Manage the National Wildlife Refuge System
  - Over 560 Refuges (>150 million acres)
  - Thousands of wetland and other management units
- Operate:
  - 70 national Fish Hatcheries
  - 65 fishery resource offices
  - 86 ecological services field stations

# U.S. Fish and Wildlife Service

- Enforce federal wildlife laws
- Protect threatened and endangered species
- Manage migratory birds
- Manage and restore nationally significant fisheries
- Conserve and restore wildlife habitat such as wetlands
- Help foreign governments with their international conservation efforts
- Distribute hundreds of millions of dollars to State fish and wildlife agencies.

# Region 4 (Southeast) Priority Science Information Needs Themes

- Monitoring and evaluation of *management actions* to determine if we are achieving our desired biological objectives and test assumptions.
- Evaluation of aquatic resource needs and aquatic *ecosystem responses* to changes in water quality, quantity, timing and distribution.
- Integration of biological objectives, habitat assessments, and monitoring data through coordinated data sharing and information management.
- Life history, status, and population trends for at-risk species, threatened and endangered species, and surrogate species (indicators).
- Social sciences/human dimensions to ensure that we keep ourselves relevant
- *Decision analysis* to assist us in determining where we can best move the conservation needle
- Determination of integrated biological objectives at national/regional/field scales.

# Loxahatchee National Wildlife Refuge Example

## – Environmental Assessments Needed for:

- Bicycle race in/around the Refuge
- Public use of Strazulla Tract
- Deer/Hog hunting on Strazulla Tract

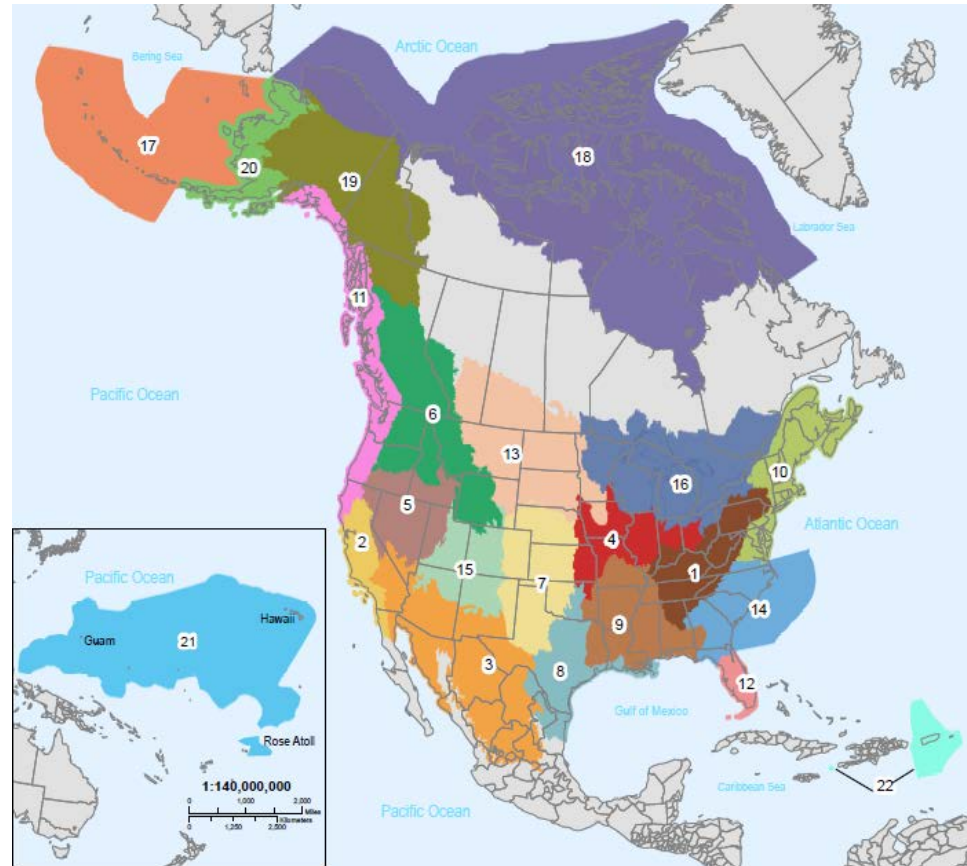


An *Environmental Assessment* is a study required to establish all the impacts either positive or negative about one particular project



LANDSCAPE  
CONSERVATION  
COOPERATIVES

- 22 conservation partnerships
  - State Fish & Wildlife Agencies
  - Federal Resource Agencies
  - Tribes
  - Conservation NGOs & Partnerships
  - Universities
  - Private entities & landowners
- Self-directed
- Non-regulatory
- Vision
  - Landscapes capable of sustaining natural and cultural resources for current and future generations



# LCC Science Information Needs

- Modeling landscape level species, habitats for priority resources/conservation targets.
- Ecosystem Services analyses
- Unique conservation incentives and future projections of those incentives
- Climate change impacts on species/habitats especially related to temperature and precipitation scenarios
- Ecosystem resilience modeling/mapping
- Scenario planning
- Conservation planning and design
- Human dimensions
- Decision support



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