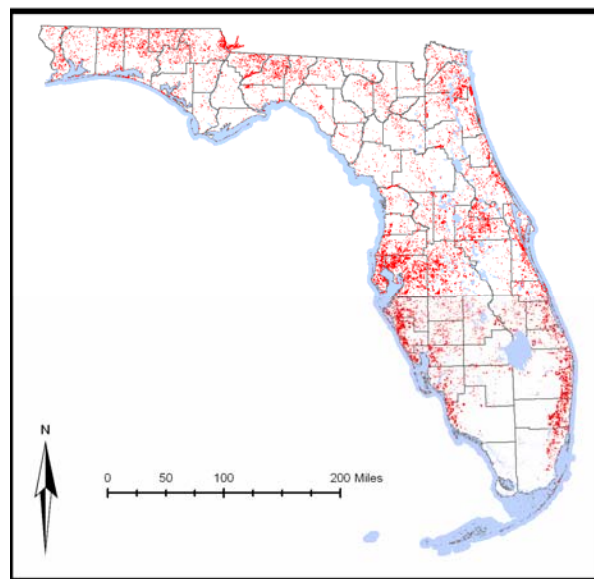


Reservoir/Managed Lake



Status

Current condition: Poor and declining. According to the best available GIS information at this time (see Appendix D. GIS Data Tables), 601,902 acres (243,581 ha) of Reservoir/Managed Lake habitat exist.



Some habitat distributions or locations may be misrepresented on this map due to size, resolution and insufficient data sources.

Habitat Description

FNAI type: None

This habitat category consists exclusively of man-made standing water bodies, each created by the damming of a flowing stream or excavation within a terrestrial habitat. These landscape features range from farm ponds and borrow pits of less than one acre (0.4 ha) to municipal reservoirs of more than 30,000 acres (12,141 ha). Reservoir/Managed Lake habitats are essentially permanent, although some of them dry completely during droughts.

Associated Species of Greatest Conservation Need

Mammals

- *Eumops floridanus* Florida Bonneted Bat
- *Myotis austroriparius* Southeastern Bat
- *Myotis grisescens* Gray Bat
- *Lasiurus borealis* Eastern Red Bat
- *Lasiurus seminolus* Seminole Bat
- *Lasiurus intermedius* Northern Yellow Bat
- *Lasiurus cinereus* Hoary Bat

- *Corynorhinus rafinesquii* Rafinesque's Big-eared Bat
- *Eptesicus fuscus* Big Brown Bat
- *Pipistrellus subflavus* Eastern Pipistrelle
- *Lutra canadensis lataxina* River Otter
- *Trichechus manatus latirostris* Florida Manatee

Birds

- *Anas fulvigula fulvigula* Florida Mottled Duck
- *Anas acuta* Northern Pintail
- *Aythya affinis* Lesser Scaup
- *Gavia immer* Common Loon
- *Pelecanus occidentalis* Brown Pelican
- *Botaurus lentiginosus* American Bittern
- *Ixobrychus exilis* Least Bittern
- *Egretta thula* Snowy Egret
- *Egretta caerulea* Little Blue Heron
- *Egretta tricolor* Tricolored Heron
- *Egretta rufescens* Reddish Egret
- *Nycticorax nycticorax* Black-crowned Night-Heron
- *Nyctanassa violacea* Yellow-crowned Night-Heron
- *Ajaja ajaja* Roseate Spoonbill
- *Eudocimus albus* White Ibis
- *Plegadis falcinellus* Glossy Ibis
- *Mycteria americana* Wood Stork
- *Rostrhamus sociabilis plumbeus* Snail Kite
- *Haliaeetus leucocephalus* Bald Eagle
- *Falco columbarius* Merlin
- *Falco peregrinus* Peregrine Falcon
- *Rallus elegans elegans* King Rail
- *Aramus guaranauna* Limpkin
- *Grus canadensis pratensis* Florida Sandhill Crane
- *Grus americana* Whooping Crane
- *Recurvirostra americana* American Avocet
- *Sterna caspia* Caspian Tern
- *Sterna antillarum* Least Tern

Reptiles

- *Macrochelys temminckii* Alligator Snapping Turtle
- *Graptemys barbouri* Barbour's Map Turtle
- *Pseudemys concinna suwanniensis* Suwannee Cooter
- *Nerodia cyclopion* Mississippi Green Water Snake
- *Farancia erytrogramma* Rainbow Snake

Invertebrates

- *Anodonta heardi* Apalachicola Floater
- *Anodonta suborbiculata* Flat Floater
- *Utterbackia peggyae* Florida Floater
- *Utterbackia peninsularis* Peninsular Floater
- *Villosa amygdala* Florida Rainbow
- *Procambarus latipleurum* A Crayfish
- *Oxyethira elerobi* Elerob's (Cream and Brown Mottled) Microcaddisfly

- *Oxyethira kelleyi* Kelley's Cream and Brown Mottled Microcaddisfly
- *Oxyethira novasota* Novasota Oxyethiran Microcaddisfly

Conservation Threats

Threats to the Reservoir/Managed Lake habitat that were also identified for multiple other habitats are addressed in the Chapter Multiple Habitat Threats and Conservation Actions. These threats include:

- Chemicals and toxins
- Incompatible forestry practices
- Incompatible recreational activities
- Invasive animals
- Invasive plants
- Nutrient loads–agriculture
- Nutrient loads–urban

Threats specific to Reservoir/Managed Lake, as well as other habitats, include runoff from chemicals and toxins. Reservoirs are created for multiple purposes, some of which may be incompatible with their role as wildlife habitat. At the same time, reservoirs, especially instream impoundments, were themselves identified as important sources of fragmentation, altered hydrology, and other stresses to river and stream habitats.

The following stresses and sources of stress threaten this habitat:

| Stresses | | Habitat Stress Rank |
|-----------------|---|----------------------------|
| A | Altered species composition/dominance | High |
| B | Altered water quality of surface water or aquifer: contaminants | High |
| C | Erosion/sedimentation | High |
| D | Altered water quality of surface water or aquifer: nutrients | High |

The sources of stress, or threats, were used to generate conservation actions.

| Sources of Stress | | Habitat Source Rank | Related Stresses (see above) |
|---|--------------------------------------|----------------------------|--|
| 1 | Nutrient loads–urban | High | A, D |
| 2 | Invasive animals | High | A |
| 3 | Incompatible recreational activities | High | A, B, C, D |
| 4 | Invasive plants | High | A |
| 5 | Incompatible construction practices | Medium | C, D |
| 6 | Nutrient loads–agriculture | Medium | A, D |
| 7 | Chemicals and toxins | Medium | B |
| 8 | Incompatible agricultural practices | Medium | B, C |
| 9 | Incompatible forestry practices | Low | C |
| Statewide Threat Rank of Habitat | | High | |

Conservation Actions

Actions to abate the threats to Reservoir/Managed Lake habitats that were also identified as statewide threats (Nutrient loads–urban, Invasive animals, Incompatible recreational activities, Invasive plants, Nutrient loads–agriculture, Chemicals and toxins, Incompatible forestry practices) are in the Chapter Multiple Habitat Threats and Conservation Actions.

Several of the actions developed for a statewide threat were only applicable to Reservoir/Managed Lake and a few other habitats (i.e., Aquatic Cave, Calcareous Stream, Cypress Swamp, Freshwater Marsh and Wet Prairie, Natural Lake, Seepage/Steephead Stream, Softwater Stream, Spring and Spring Run, Terrestrial Cave, and Coastal Tidal River or Stream) and are listed below. Additional actions were developed to address threats specific to this habitat. These actions are intended to prevent degradation of water quality in reservoirs, prevent excessive withdrawal of water from reservoirs that would exacerbate the downstream hydrologic alteration caused by the dam, prevent reservoirs from becoming points of introduction or refugia for invasive species, operate dams such that the timing, frequency, duration, and magnitude of releases are compatible with the hydrologic needs of downstream aquatic habitat, operate and/or retrofit dams and other structures to facilitate movement of anadromous fishes through and upstream of reservoirs.

Chemicals and Toxins

| Overall Rank | Planning and Standards | <i>Feasibility</i> | <i>Benefits</i> | Cost |
|---------------------|---|--------------------|-----------------|-------------|
| L | Develop and encourage use of recommendations for private landowners that minimize runoff of chemicals and toxins into wetlands and aquatic systems. | H | L | M |
| L | Develop management techniques and design protocols to minimize exposure of wading birds and other wetland wildlife to contaminants. | H | L | M |
| Overall Rank | Research | <i>Feasibility</i> | <i>Benefits</i> | Cost |
| M | Evaluate cumulative impacts of small rural impoundments on fish and wildlife. | M | M | M |
| L | Conduct research defining appropriate sediment quality standards for the various aquatic and marine systems. Fund research defining the relationship between sediment contamination (individually and in chemical interactions) and key biological indicators of degradation in different aquatic and marine systems. | M | L | H |
| L | Conduct research defining standards for persistent organic contaminants for the various aquatic and marine systems. Fund research defining the relationship between contamination from organics (individually and in chemical interactions) and key biological indicators of degradation in different aquatic and marine systems. | M | L | H |