# South Florida Ecosystem Restoration Task Force

**Priority Invasive Species and Recommendations** 

**Prevention** 

### **WHAT:** The Water Resource Development Act of 2020 (WRDA 2020)

Directed the South Florida Ecosystem Restoration Task Force (Task Force) to develop:

- A list of priority invasive species and
- Recommendations to protect the South Florida Ecosystem.

## WHY: The Everglades is uniquely vulnerable to invasive species...

and the threats posed by these invasive species—to native habitats and species, the region's economy, and the South Florida Ecosystem restoration effort—are growing.

## **HOW:** Building Coordination and Expertise from the "Ground Up"

An advisory body of experts was created representing federal, state, Tribal, and local governments, academia, and regional Cooperative Invasive Species Management Areas (CISMAs). Beginning with Prevention on the Invasion Curve, the group identified 19 species not yet in South Florida that ranked high in likelihood for arrival, establishment, and adverse impacts to native species and habitats (next page) and developed a suite of recommendations (below).

PREVENTION RECOMMENDATIONS

**Regulations and Policies: Identify Opportunities and Gaps** 

Research and Preparation: Support Research on Prevention Species &

Bolster Detection Monitoring and Response Teams in Advance

Outreach and Education: Involve Stakeholders, Inspection Agents, Experts, and the Public

**Equipment Decontamination: Review Policies & Protocols to Prevent Spread** 

ADVISORY GROUP ORGANIZATIONS\* City of Sanibel Natural Resource Department | Everglades Cooperative Invasive Species Management Area | Florida Department of Agriculture and Consumer Services | Florida Fish and Wildlife Conservation Commission | Miami-Dade County Department of Environmental Resource Management | Miccosukee Tribe of Indians of Florida | National Oceanic and Atmospheric Administration | National Park Service | Office of Everglades Restoration Initiatives | Palm Beach County Environmental Resource Management | South Florida Water Management District | Southwest Florida Cooperative Invasive Species Management Area | Treasure Coast Cooperative Invasive Species Management Area | U.S. Army Corps of Engineers | U.S. Department of Agriculture | U.S. Fish and Wildlife Service | U.S. Geological Survey | University of Florida \*Additional organizations participated during Task Force, Working Group, and Science Coordination meetings.

**Special Recognition:** The advisory body identified prevention lists created through a horizon scan process for Florida (Lieurance et al., in press) as the starting point to prioritizing a list of high-risk species. Horizon scanning combines risk screening and consensus building to prioritize invasive species threats based on arrival likelihood and negative ecological and socioeconomic impacts.

PREVENTION ERADICATION CONTAINMENT LONG-TERM MANAGEMENT

## **Priority Prevention Species**

#### **Invertebrates**

Golden Mussel Red Swamp Crayfish

#### **Fresh Water Vertebrates**

Marsh Frog
Stone Moroko
Redbelly Tilapia
African Clawed Frog

#### **Marine Species**

Agar-agar
Halophila Stipulacea Seagrass
Orange Keyhole Sponge

#### **Terrestrial Plants**

Reed Canary Grass

Marsh Pepper Knotweed

Nipa Palm, Mangrove Palm

Asian Mangrove in the family

Rhizophoraceae\*

Indo-West Pacific Mangrove\*

#### **Terrestrial Vertebrates**

Red-vented Bulbul
Village Weaver Bird
Crab-eating Macaque
Asian House Rat
Mangrove Monitor, Western Pacific
Monitor Lizard

\*Includes all species in genus

#### **Next Steps: Prioritizing Invasive Species on the Landscape**

The Office of Everglades Restoration Initiatives (OERI) has contracted with the University of Florida and the U.S. Geological Survey to develop a science-based process for prioritizing non-native species along the Invasion Curve and evaluating the potential risks to the South Florida Ecosystem.

#### 2024 Workshops: Goals

- Develop an assessment process to prioritize invasive species along the next phases of the Invasion Curve (Eradication, Containment, and Long-term Management).
- Evaluate potential effects on indicator species used to measure restoration success.
- Provide a broad base of support and knowledge by expanding participation from invasive species experts and stakeholders.

#### **Continuing WRDA 2020 Implementation**

As the prioritization process is underway, communication with agencies, stakeholders, Florida-based invasive species teams, and the public will continue.

Using this "ground up" and inclusive approach, future work to implement WRDA 2020 will include identifying innovative technologies and approaches that build upon our ability to detect and respond to nonnative species and reduce their impacts on native wildlife and habitats.





Pictured above is an example species from each taxonomic group from the "Priority Prevention Species" list. From left to right: Reed Canary Grass, Red-vented Bulbul, African Clawed Frog, Golden Mussel, and Orange Keyhole Sponge.



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