



# REstoration, COordination, VERification (RECOVER)

## Performance Measure Overview

Working Group/Science  
Coordination Group Meeting  
March 20, 2024

Laura Brandt, Ph.D.  
RECOVER Executive Committee



# Presentation Outline

- RECOVER
- RECOVER's Applied Science Strategy
- Performance Measures
- Incorporating Indigenous Knowledge into Performance Measures
- Questions











# Applied Science Strategy

Conceptual Ecological  
Models

Monitoring and  
Assessment Plan

Adaptive Management

DRIVERS



STRESSORS



EFFECTS



ATTRIBUTES



CERP MONITORING AND ASSESSMENT PLAN



Restoration Coordination and VERification  
(RECOVER)



Comprehensive Everglades Restoration Plan

Central and Southern Florida Project

Revised  
December 2009

## Adaptive Management Integration Guide

The Comprehensive  
Everglades Restoration Plan

March 2011



# Applied Science Strategy

Conceptual  
Ecological  
Models





# Applied Science Strategy

## Conceptual Ecological Models

DRIVERS



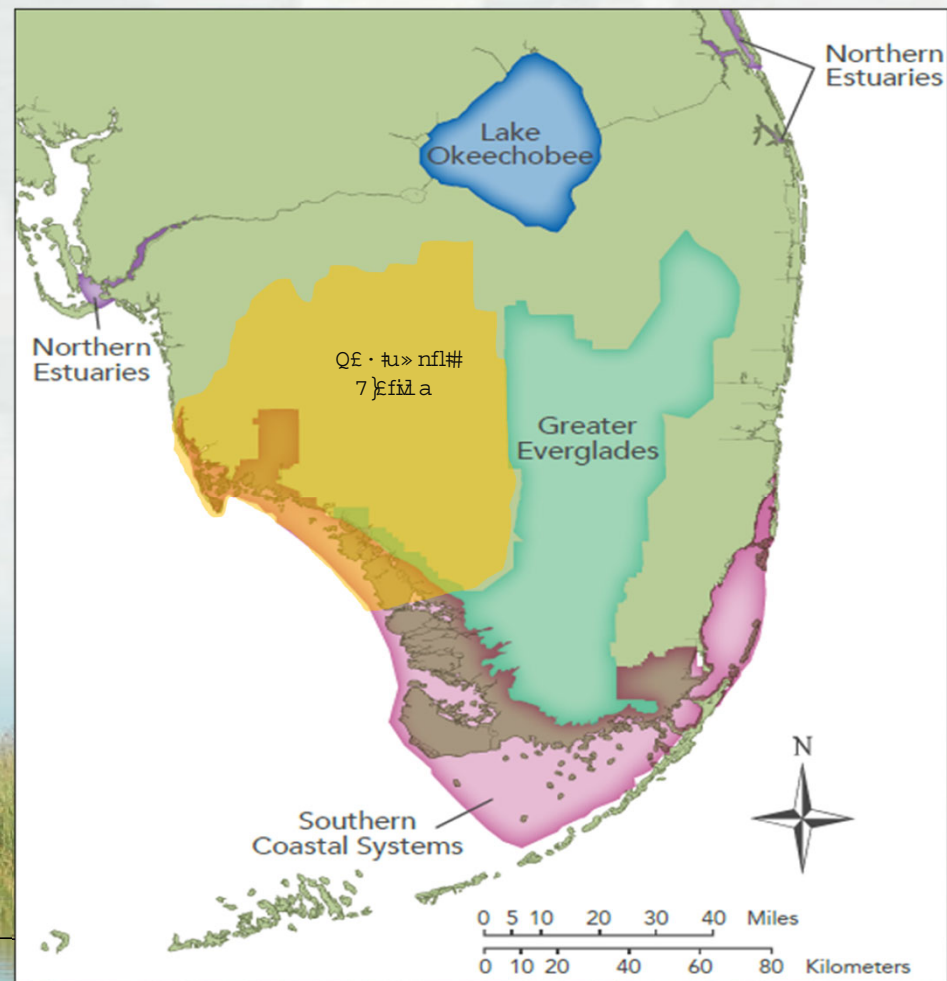
STRESSORS



EFFECTS



ATTRIBUTES





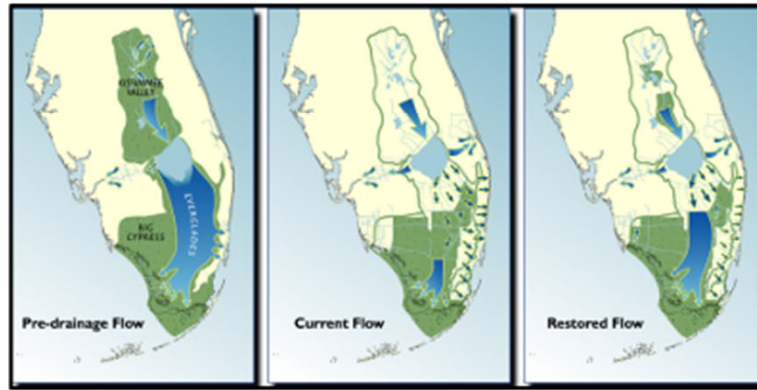




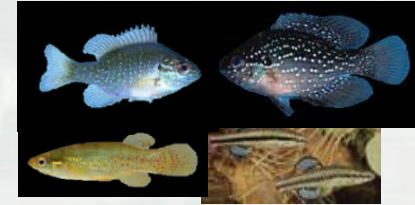
# 68 COMPONENTS FACTS



To achieve the vision of Everglades restoration, changes to the Southern Florida (C&SF) System are needed – meaning features and water management operations.





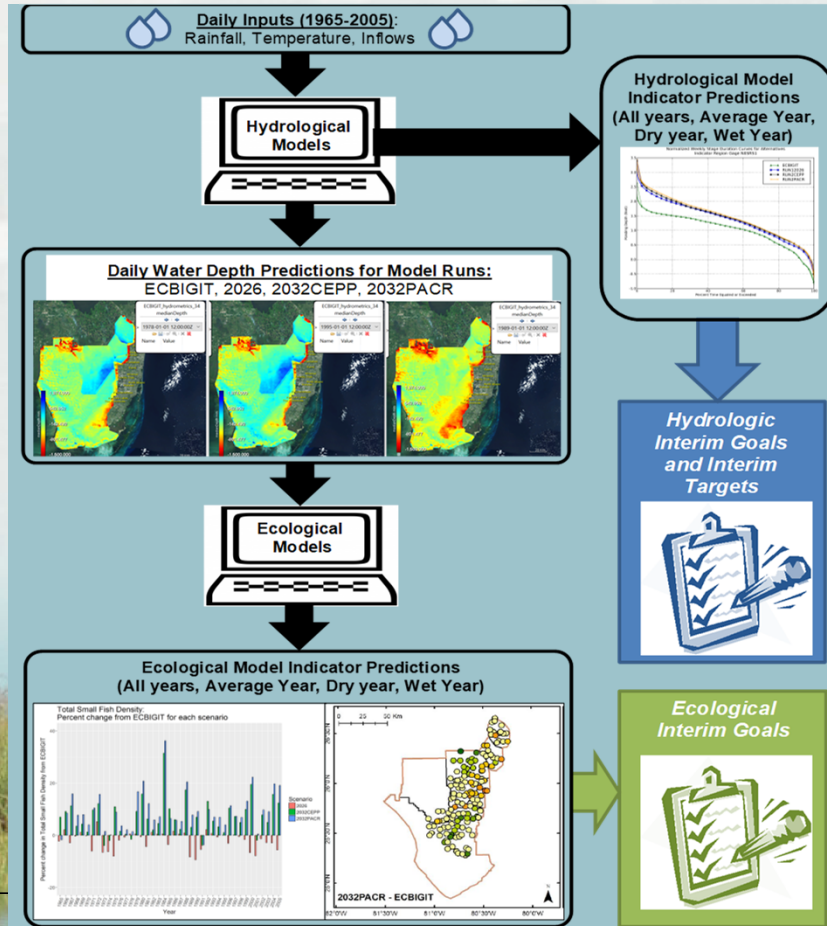




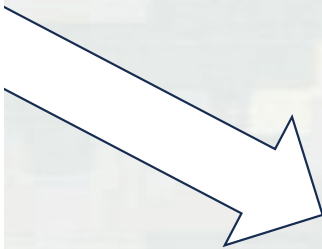
# Performance Measures

Evaluation/Model land

Assessment/Reality



# Performance Measures



[dreamstime.com](http://dreamstime.com)

ID 118751078 © Adempercem



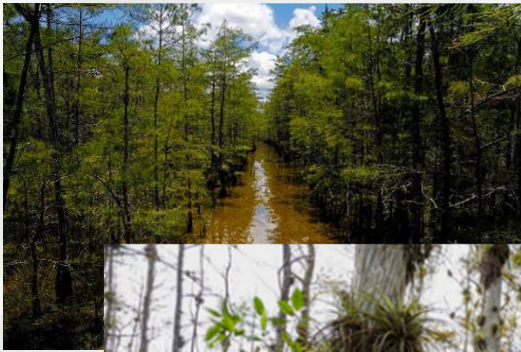


# Incorporation of Indigenous Knowledge



# Incorporation of Indigenous Knowledge

## Big Cypress Conceptual Ecological Model





# Incorporation of Indigenous Knowledge



## Miccosukee Tribe of Indians of Florida

### Business Council Members

Lucas K. Osceola, Assistant Chairman  
Kenneth H. Cypress, Treasurer

William J. Osceola, Secretary  
Pete Osceola, Jr., Lawmaker

January 25<sup>th</sup>, 2024

Martha Williams  
Director  
U.S. Fish and Wildlife Service  
1849 C St., NW  
Washington, DC 20240

Colonel James L. Booth  
United States Army Corps of Engineers  
Jacksonville District  
701 San Marco Boulevard  
Jacksonville, FL 32207

Drew Bartlett  
Executive Director  
South Florida Water Management District  
3301 Gun Club Road  
West Palm Beach, FL 33406

**SUBJECT: Statement of Indigenous Traditional Ecological Knowledge Regarding Historic Miccosukee Water Conservation Area 3-A Conditions**

The Miccosukee Tribe of Indians of Florida is a federally-recognized sovereign Native American Tribe, based in the Central and Western Everglades. The Everglades, and the Miccosukee people that live within it, have suffered from water mismanagement. In our last statement of Indigenous Traditional Ecological Knowledge (sent March 24<sup>th</sup>, 2023) prepared in collaboration with our Everglades Advisory Committee, we highlighted the impacts of seasonal closures of the S-12 A & B flow gates, specifically as it relates to the negative impacts of water depth, the negative impacts of impeded water flow, the specific impacts of engineered floods on tree islands and wading birds, and the need for holistic – rather than single-species – ecosystem management in the Everglades. This statement follows our prior statement, building on further interviews with our Everglades Advisory Committee, and focuses on historic water depths and

### RECOVER & Miccosukee Tribe of Indians of Florida (MTIF) Field Visit Field Visit Summary November 18<sup>th</sup> 2022

WebEx Meeting Location: <https://usace1.webex.com/join/rodigo.sedeno>

Join by Phone:

USA Toll Free: 1-844-800-2712

**Attendees:** Craig van der Heiden (MTIF), Gina Ralph (USACE), Jenna May (USACE), Marcel Bozas (MTIF), Phyllis Klarmann (SFWMD), Rodrigo Sedeno (USACE)

**Site Visit Purpose:**  
-A general tour of the Miccosukee Reservation  
-Discuss Everglades Restoration and learn from each other's perspectives.

**Objectives:**  
- Learn and understand the challenges facing the MTIF Natural Resource Program  
- Discuss various components of Indigenous Traditional Ecological Knowledge (ITEK)  
- Provide MTIF information on RECOVER mission and processes.  
- Identify paths for future collaboration.

#### Field Visit Summary:

#### 1. Introduction

#### Miccosukee Tribe Reservation – Field Visit (November 18, 2022)



**MTIF:**  
-Craig van der Heiden (Natural Resources Director)  
-Marcel Bozas (Wildlife Biologist)



**RECOVER:**  
-Gina Ralph (USACE)  
-Jenna May (USACE)  
-Phyllis Klarmann (SFWMD)  
-Rodrigo Sedeno (USACE)



# Incorporation of Indigenous Knowledge

## Development of Tree Island Performance Measure





# Questions?

