Greater Everglades Ecosystem Restoration (GEER)
April 18-20, 2017

Session 13

Modeling for Everglades Restoration

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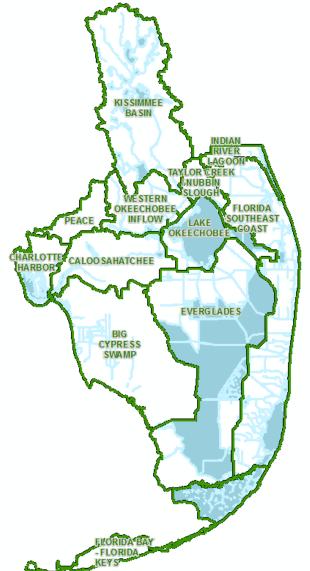sfwmd.gov

Everglades and Issues

- ❑ **Everglades is a series of sub-tropical wetlands with a rich diversity of plants, fish, birds and other animals.**

- ❑ **Issues of Everglade**

  - o **less water flows**

  - o **degraded water quality**
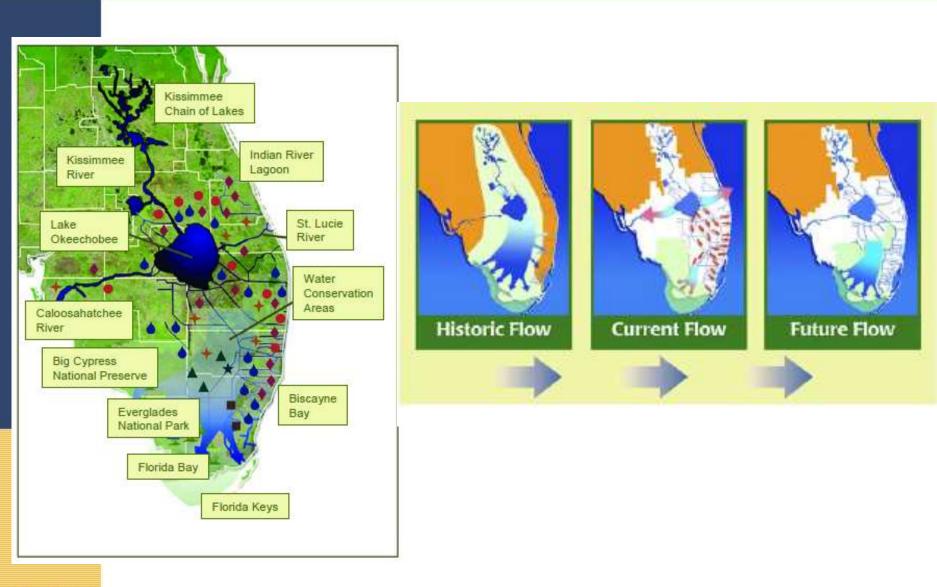
Everglades Restoration

❑ **Multi-agency efforts focusing on the restoration of the Everglades**

- ○ **South Florida Ecosystem Restoration (SFER)**

- ○ **Comprehensive Everglades Restoration Plan (CERP)**

- ○ **Central Everglades Planning Project (CEPP)**

Comprehensive Everglades Restoration Plan (CERP)

CERP and IMC

❑ **Modeling plays a key role to Everglades restoration effort such as CERP**

❑ **Interagency Modeling Center (IMC)**

• **IMC is responsible for modeling services of the CERP**

• **IMC provides or coordinate/oversee the modeling efforts**

Modeling for Restoration

Showcase few key modeling in support of restoration:

❑ **Natural System Modeling for restoration planning**

❑ **Modeling for CERP project**

❑ **Modeling to support on-going planning process such as MWD and C-111 South Dade Project**

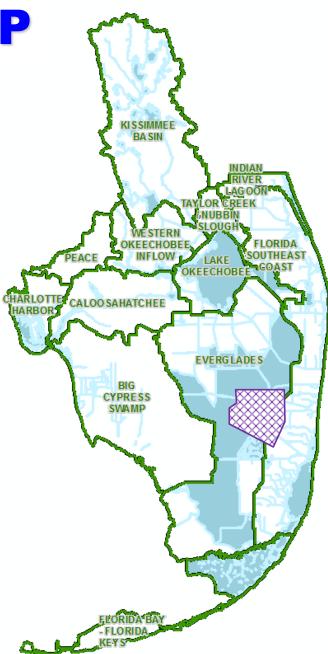❑ **Ecological modeling to see the response of habitats due to restoration**

Showcase 1: PSRP

Speakers:

Jaime Graulau-Santiago

Modeling of the PSRP South West Flood Protection Features in the Gridded Surface Subsurface Hydrologic Analysis Tool

**US Army Corps
of Engineers ®**
Jacksonville District

KISSIMMEE
BASIN

INDIAN
RIVER
LAGOON

TAYLOR CREEK
NUBBIN
SLOUGH

WESTERN
OKEECHOBEE
INFLOW

FLORIDA
SOUTHEAST
COAST

PEACE

LAKE
OKEECHOBEE

CHARLOTTE
HARBOR

CALOOSAHATCHEE

EVERGLADES

BIG
CYPRESS
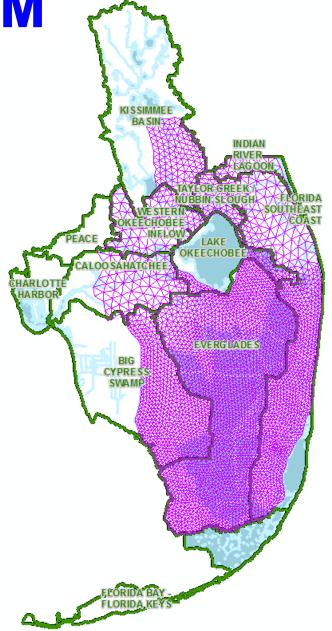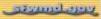SWAMP

FLORIDA BAY
- FLORIDA
KEYS

Showcase 2: NSRSM

Speakers:

Michael Clay Brown

Use of a Natural System Regional Simulation Model in Restoration Project Planning
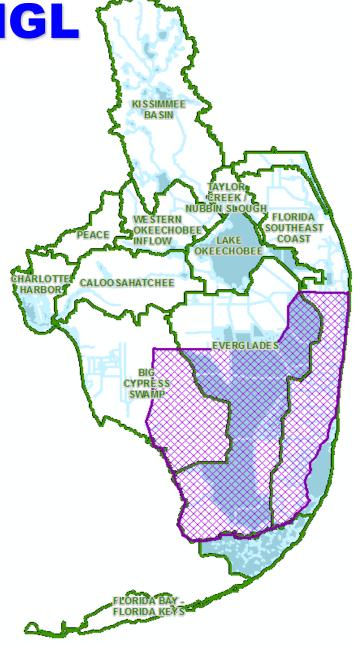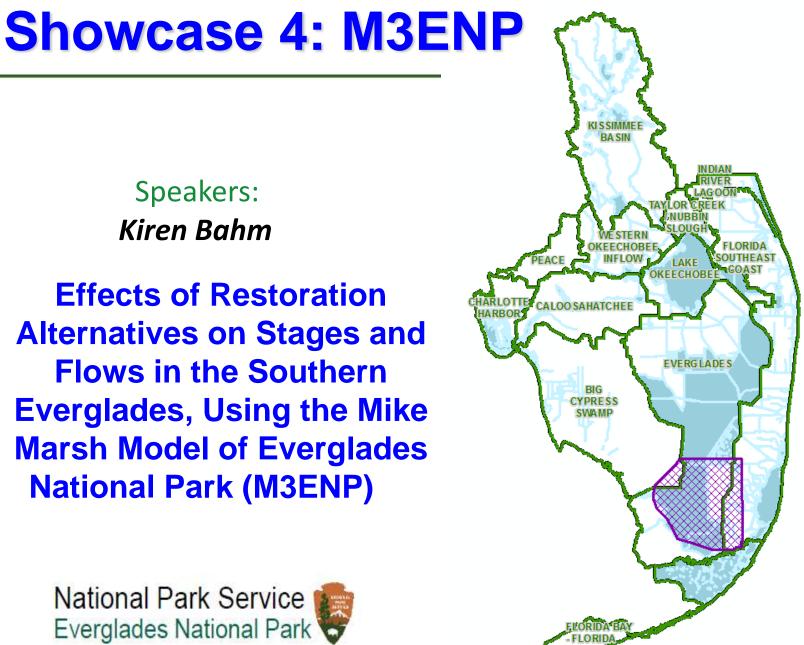
Showcase 3: RSMGL

Speakers:

Fahmida Khatun

Evaluation of Options for Sending More Water to Florida Bay via Taylor Slough Using Regional Simulation Model for the Everglades and Lower East Coast

Showcase 4: M3ENP

Speakers:

Kiren Bahm

Effects of Restoration Alternatives on Stages and Flows in the Southern Everglades, Using the Mike Marsh Model of Everglades National Park (M3ENP)

National Park Service
Everglades National Park

Showcase 5: OYSTER AND SEAGRASS MODELS

Speakers:

Christopher Buzzelli

Predicting the Responses of Seagrass and Oyster Habitats to Changes in Water Management