SOUTH FLORIDA WATER MANAGEMENT DISTRICT

National Conference on Ecological Restoration (NCER)

April 18-22, 2016

Session 18

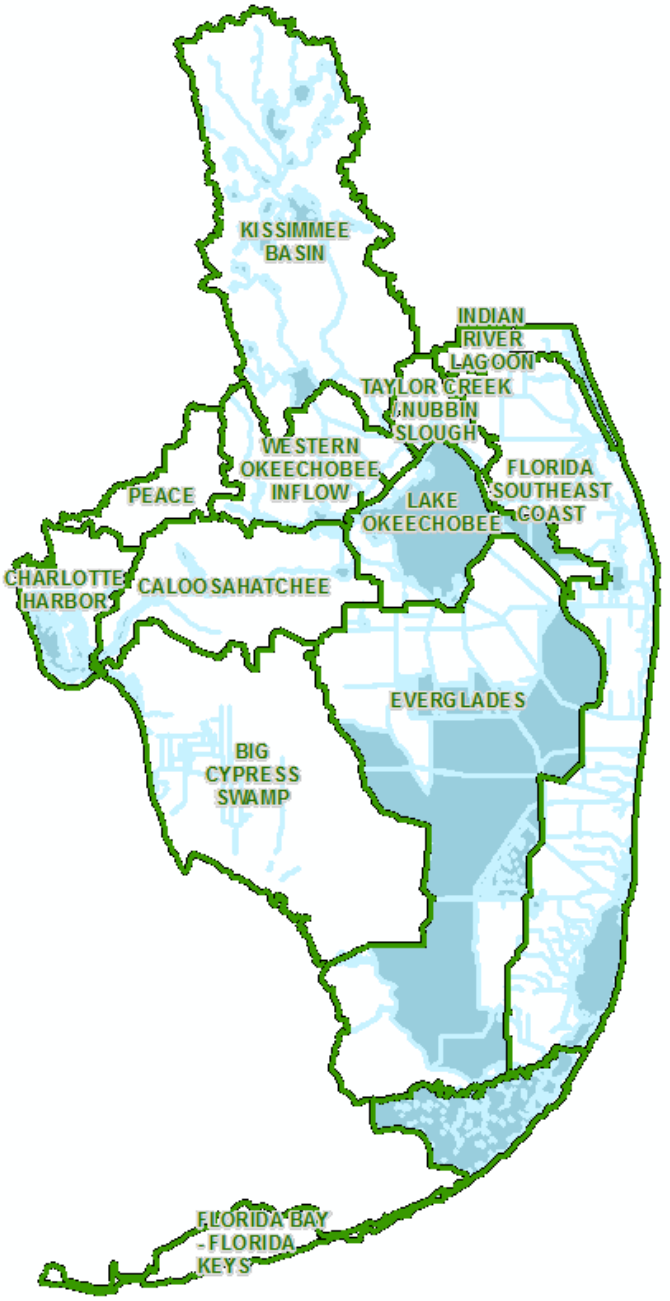
Ecological Restoration Implementation in South Florida using Regional and Sub-regional Modeling Tools

Fahmida Khatun, PE

sfwmd.gov

Ecological Restoration

- Everglades: Kissimmee River to FL Bay
  - Northern Everglades
  - Southern Everglades or Everglades
- Everglades is a series of sub-tropical wetlands with a rich diversity of plants, fish, birds and other animals.
- Serious disruptions to its natural hydrology caused by
  - less water flows through the ecosystem
  - degraded water quality in estuaries and bays
- Multi-agency efforts focusing on ecological restoration of the Everglades



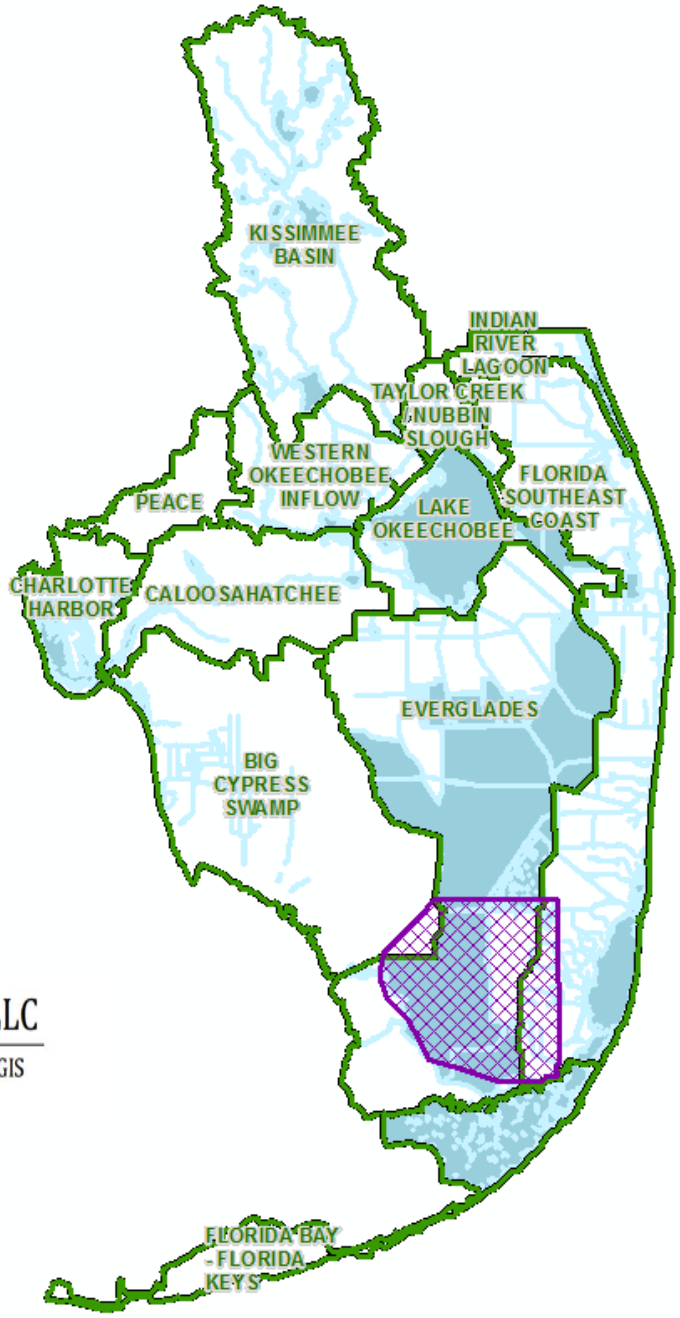
Modeling to Support Restoration in South Florida

- Modeling is very important to this restoration effort.
- Main purpose of the session: **showcase** various regional and sub-regional **modeling tools to evaluate or restore South Florida's ecosystem**.

Showcase 1: M3ENP

Speakers: ***Kiren Bahm*** *and* ***Amy Cook***

Application of the MIKE Marsh Model of Everglades National Park (M3ENP) to Evaluate Restoration Alternatives



National Park Service
Everglades National Park

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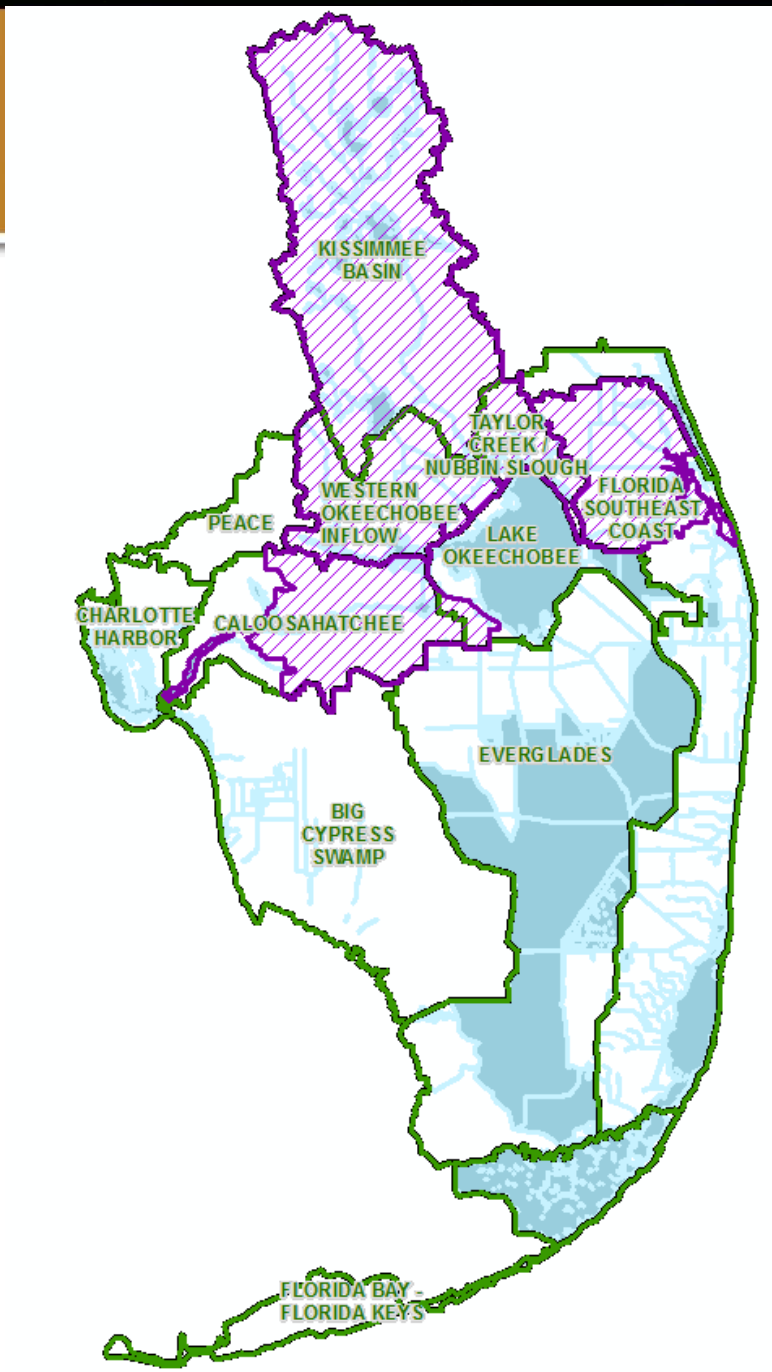
Showcase 2: NERSM

Speakers: ***Sandeep Dabral***

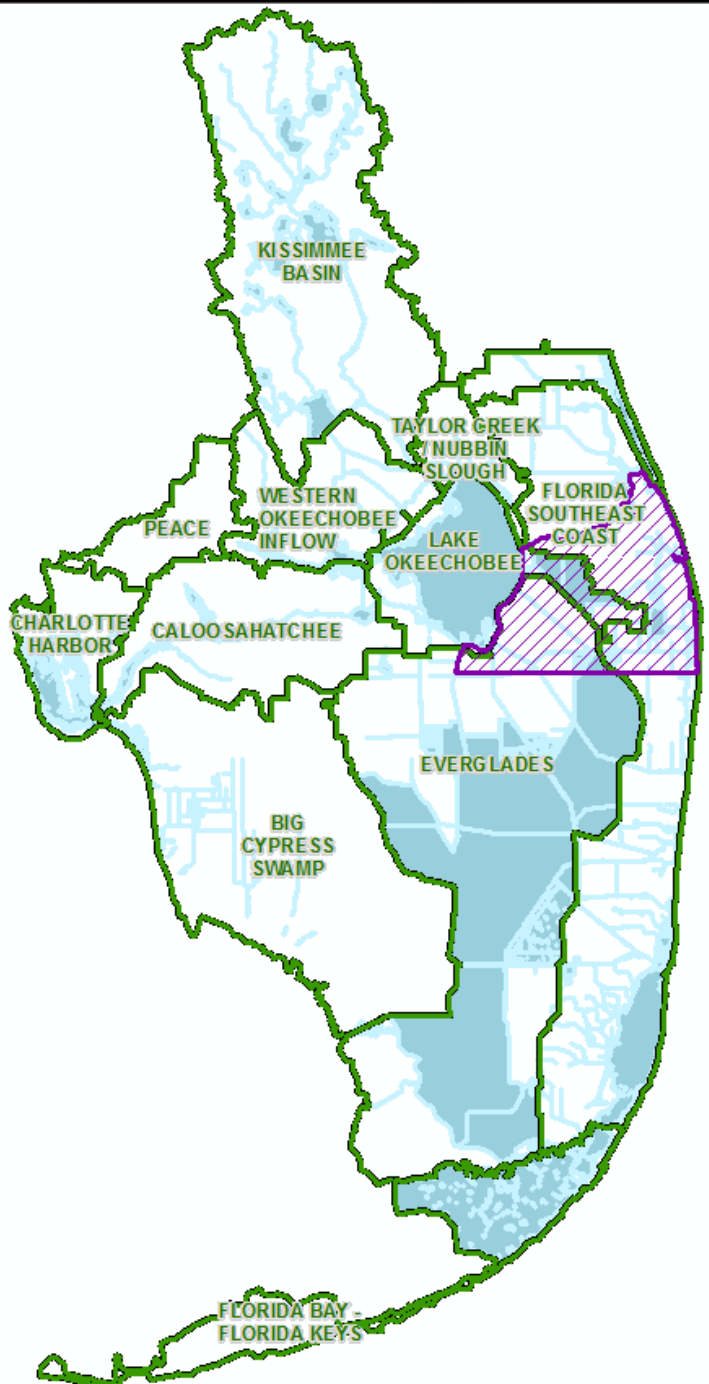
An application of the Northern Everglades Regional Simulation Model (NERSM) to the St. Lucie and Caloosahatchee river watersheds for improving hydrology and water quality



Showcase 3: LECSR-NP

Speakers: ***Angela Montoya***

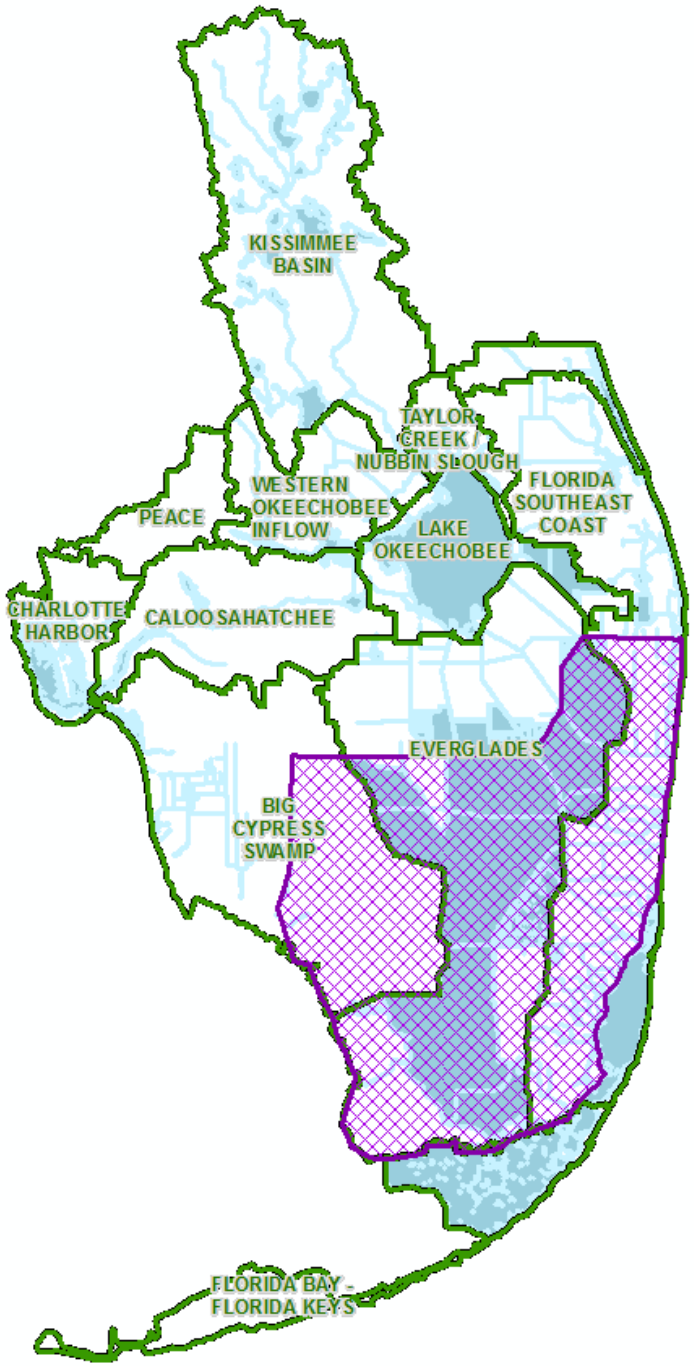
Application of a Hydrologic Model (LECSR-NP) to Determine Interim Restoration Benefits for the Northwest Fork of the Loxahatchee River



Showcase 4: RSMGL

Speakers: ***Fahmida Khatun***

An Application of the Regional Simulation Model to the Everglades and Lower East Coast for the Modified Water Deliveries and C-111 South Dade Projects



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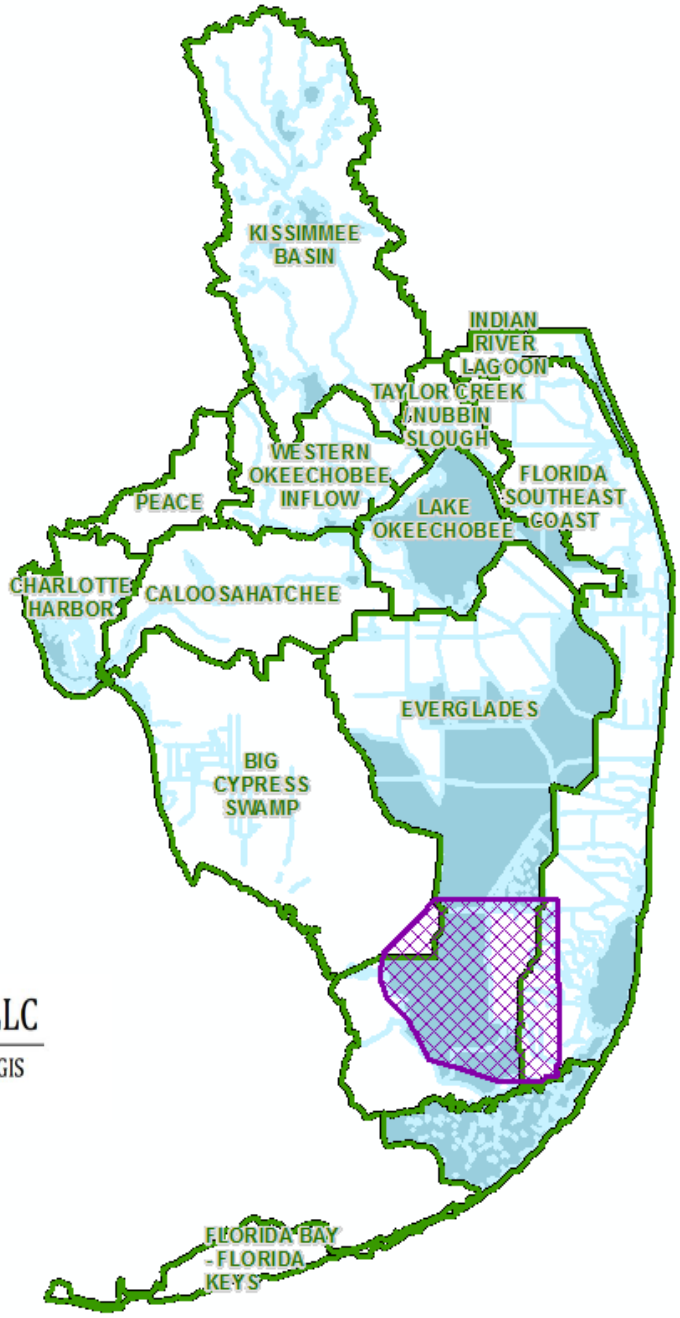

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