

RECOVER SCIENCE MEETING

March 1-2, 2016

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RECOVER Project Managers



Welcome and Introductions

- **Science Coordination Group**
- **RECOVER Leadership Group:**
 - Representatives from 10 agencies and 2 tribes
- **RECOVER Executive Committee:**
- **Regional Coordinators:**
 - Northern Estuaries, Lake Okeechobee, Greater Everglades Southern Coastal Systems
- **Principle Investigators under contract to RECOVER from a number of different universities and agencies**
- **Other Science programs that contribute to the overall South Florida Ecosystem knowledge base**



RECOVER – What we do...

- **The science behind the Comprehensive Everglades Restoration Plan (CERP)**
- **Provides system-wide science perspective for planning and implementation of CERP projects**
- **Conducts system-wide monitoring and assessment**
- **Compiles new knowledge gained**
- **Provides scientific input to CERP projects**



PURPOSE of the Meeting

- **Provide a forum for the scientific community to discuss RECOVER restoration science in support of the CERP program and foster discussions to improve communication and collaboration with the active CERP projects as well as share new and currently hot topics in South Florida science.**



KISSIMMEE RIVER RESTORATION

Restores critical floodplain habitat and timing of flows to Lake Okeechobee

LAKE OKEECHOBEE WATERSHED AND ASR

Provide water storage and treatment to regulate extreme lake levels; reduce phosphorus loading to lake; and reduce freshwater discharges to the east and west coast estuaries

CALOOSAHATCHEE C-43 RESERVOIR

Helps to restore the natural flow of water to the Caloosahatchee River

EAA STORAGE, ASR AND DECOMPARTMENTALIZATION 2

The next increment of storage and treatment to reduce freshwater discharges to east and west coast estuaries; and increase water availability for irrigation, the Everglades, and Florida Bay

SEMINOLE BIG CYPRESS CRITICAL PROJECT

Rehydrate wetlands, improve water quality, and provide stormwater attenuation on the Seminole Tribe of Florida's Big Cypress Basin Reservation

WESTERN EVERGLADES RESTORATION

Alleviate over-drainage; improve water storage and distribution to natural areas; and improve quality of water entering the central Everglades

PICAYUNE STRAND

55,000-acre habitat restoration in the Western Everglades

TAMIAMI TRAIL BRIDGING

Bridging and roadway modifications to improve water flow to Everglades National Park

MODIFIED WATER DELIVERIES TO EVERGLADES NATIONAL PARK

Restores water deliveries to Northeast Shark River Slough in Everglades National Park

C-111 SPREADER CANAL WESTERN PROJECT

Reduces water loss from Taylor Slough and increases freshwater flow to Florida Bay

LEGEND

- Non-CERP & Foundation Projects
- CERP Generation 1 (Authorized, PPA Executed)
- CERP Generation 2 (Authorized, PPA Needed)
- CERP Generation 3 (Requires Authorization)
- Planning Phase

HERBERT HOOVER DIKE REHABILITATION

Rehabilitation of the dike to reduce the risk of failure of aging structure

LAKE OKEECHOBEE REGULATION SCHEDULE REVISION

Revision to the lake schedule once sufficient rehabilitation of the dike has been completed to support moving water south

INDIAN RIVER LAGOON (IRL)-SOUTH

Reduces and cleans freshwater discharges from the watershed to the St. Lucie Estuary

LOXAHATCHEE RIVER WATERSHED RESTORATION

Re-connect and restore natural areas in the headwaters and improve water flow to the river

SITE 1

Reduces seepage from Loxahatchee Refuge

BROWARD WATER PRESERVE AREAS

Improves water quality; reduces seepage loss from central Everglades; increases water supply; and reduces saltwater intrusion

CENTRAL EVERGLADES PLANNING PROJECT

Reduces freshwater flow to the east and west coast estuaries, and restores habitat and water flow to the Everglades and Florida Bay

BISCAYNE BAY COASTAL WETLANDS PROJECT PHASE 1

Restores the natural pattern of freshwater inflows to Biscayne Bay

C-111 SOUTH DADE

Reduces water losses from ENP and improves freshwater flow to Taylor Slough and Florida Bay



C-111 SPREADER CANAL EASTERN AND BISCAYNE BAY COASTAL WETLANDS PHASE 2

The next phase of restoration to increase water flows to Biscayne Bay,



RECOVER: Preparing for the Future

- **5-year Plan Purpose:**
 - **Comprehensive and forward-thinking effort to look at the restoration plans for the next 5-10 years and determine the science needed in response.**
 - **6 sub-teams to develop components of the plan**
- **Development Progress:**
 - **January – February: Sub-Teams formed to determine scope**
 - **March-May: Building out the plans and gathering information.**



RECOVER: 5-Year Plan Components

1. Integrate and Synthesize RECOVER's Science:

- Update the 2005 conceptual ecological models and Monitoring and Assessment Plan (MAP) hypothesis clusters**
- Identify areas and ecological components and processes that are most vulnerable and the ability of restoration actions to mitigate.**
- Review the ecological indicators and performance measures and update the suite to best inform Adaptive Management.**
- Evaluate sufficiency of monitoring for next fifteen years.**



RECOVER: 5-Year Plan Components

2. Interim Goals

- Evaluate the Interim Goals as written in 2006 for ecological indicators and identify updates needed to the Interim Goals.**
- Building from the 2015 Report to Congress interim goals assessment pulled from the monitoring, identify what needs to be measured and reported on next.**



RECOVER: 5-Year Plan Components

3. Interim Targets

- Relates to water supply and flood control in CERP with the built system**
- Team will evaluate tools, determine reporting needs, and timeline expectations.**



RECOVER: 5-Year Plan Components

4. Adaptive Management

- Using the Programmatic Adaptive Management Plan and other available information to assess areas of the highest need and ecological vulnerability.**
- Develop demonstrations, pilot tests, or management actions in response to these vulnerabilities or to better understand these uncertainties.**



RECOVER: 5-Year Plan Components

5. RECOVER's Role in Project Implementation

- Identify how and when RECOVER support project teams with information during project phases beyond Planning.**
- Communicate the project implementation schedule and design features with RECOVER PI's to focus data gathering for best available feedback at the appropriate scale.**



RECOVER: 5-Year Plan Components

6. Communication

- Develop a communication strategy and timeline.**
- Identify science-based actions and products to communicate RECOVER to a variety of CERP audiences.**



THANK YOU
ENJOY THE MEETING!!

