

CERP Monitoring and Assessment Plan:
Role in Decision Making and
Communicating the Health of the
Ecosystem

Task Force Briefing
Science Coordination Group
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What is the CERP Monitoring and Assessment Plan?



Primary tool for assessing performance of CERP Systemwide

- Measurement of ECOSYSTEM RESPONSES to assess management and how well restoration goals and objectives are being addressed
- Enables ADAPTIVE MANAGEMENT for updating and improving CERP as required by authorizing legislation and regs
- WHAT is happening (status, trends, SHIFTING BASELINES)
- CONNECTIONS between habitats and levels of food web
- SELECTED eco-performance measures, keystone species that together help define ecosystem health (eg. birds, gators)
- Elements with SHORT and LONG TERM responses

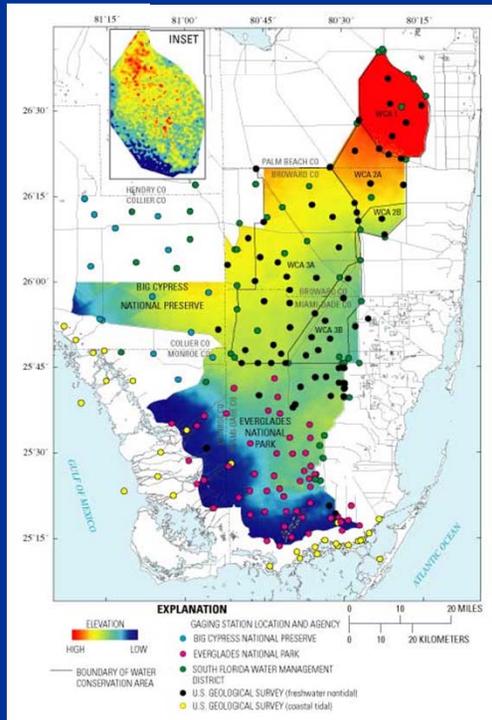
Based from the outset on OPTIMIZING and PRIORITIZING

- Inter-agency collaborative plan
- Integrated with non-RECOVER funded efforts to avoid duplication and reduce costs
- Leveraged other monitoring to provide information
- Repeatedly refined to incorporate learning, emerging issues, and changes in project sequencing





What MAP Reveals about the Greater Everglades



- EDEN** - Network combines water level and topography to estimate water depth
- Multiple Users and Contributors
 - Assessment in WCA3 and ENP - informs operations that affect birds, tree islands, etc.
 - Used to develop wading bird habitat index (prey more readily available in drying pools)
 - Seepage barrier pilot - Limestone Products Association

Oysters and SAV in Caloosahatchee

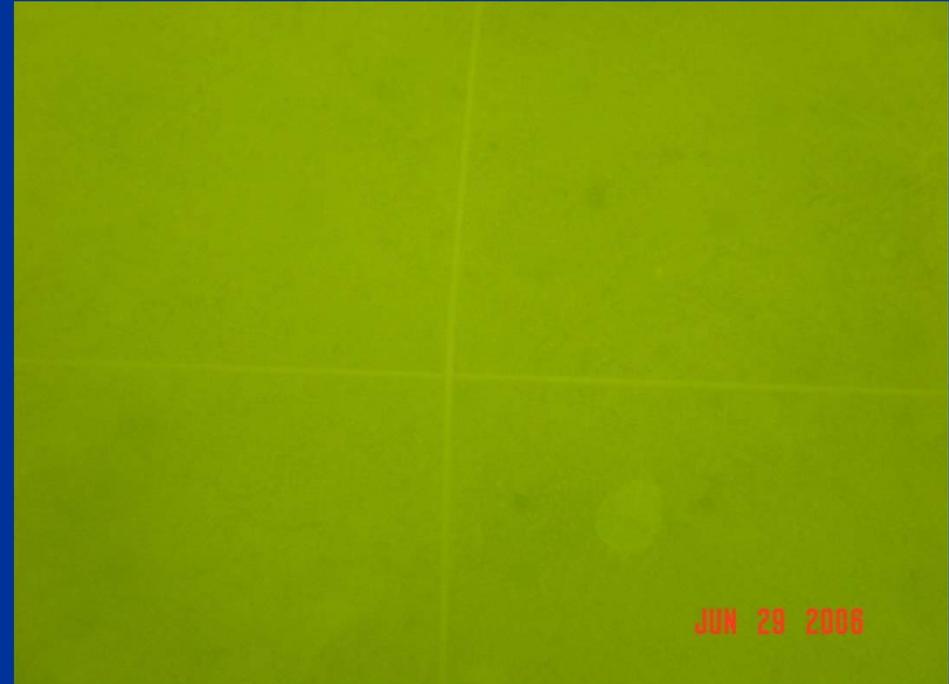
- Oyster habitat, SAV and salinity info already guides decisions about releases to the estuary

Wading Birds and prey

- MAP results for birds, prey, and habitat already guide decisions about releases from the lower C-111 to Taylor Slough/Florida Bay



What MAP reveals coastal systems: spatial patterns, changes over time



- NE FL Bay and southern BB bloom
- Robust monitoring ID'd contributing causes: hurricanes, runoff, construction
- SAV monitoring helped define linkages
- “Baseline” moving in sensitive estuaries



What MAP reveals
About Biscayne Bay:
Spatial patterns, changes
over time



Nearshore
macroalgal
bloom in
Biscayne Bay



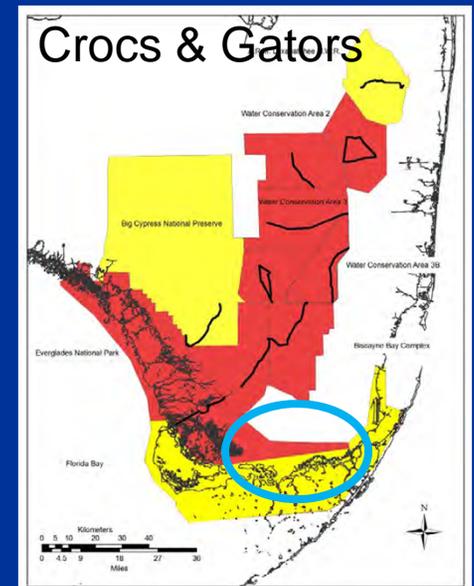
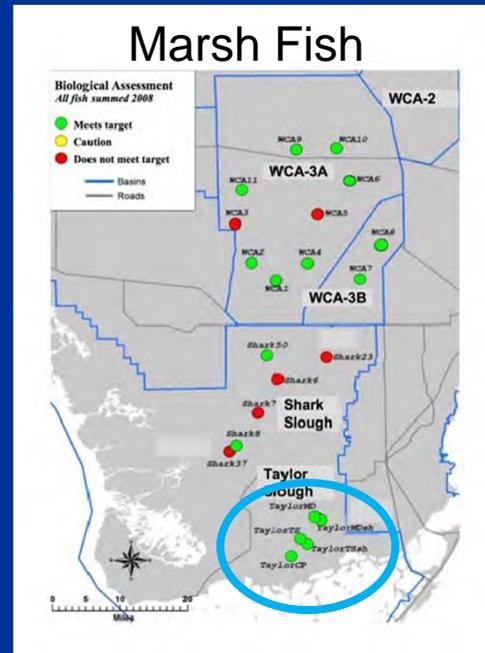
TF's System Wide Indicators/Stoplight Report

Assess ecosystem health and provide a means to track ecological response to restoration

- Across habitats
- Short – long term responses
- Collaborative, peer reviewed process

Task Force Communication tool

- Use in reports to Congress, SSR
- Consistent and easily understood symbols



TF Stoplight Indicators Supported by MAP

FY 12



- Oysters (CRE) **-20%**
- Periphyton-Epiphyton **-43%**
- Wading Birds (Wood Stork and White Ibis) **-24%**
- Wading Birds (Spoonbill) **-36%**
- Fish and Macroinvertebrates
 - Wet Season **-43%**
 - Dry Season **-40%**
- **Crocodilians** **-100%**
- Florida Bay SAV **-36%**
- **Juvenile Pink Shrimp** **-100%**
- **Florida Bay Algal Blooms** **-100%**

- Indicators Not Part of MAP:
 - Lake Okeechobee Nearshore
 - Invasive Exotic Plants

RECOMMENDATIONS

- Direct the SCG to assess the loss of system-wide ecological indicators and provide recommendations on how to best retain their intended purpose.
- Direct the SCG and WG to work with RECOVER to review the MAP to ensure it is positioned to support the Everglades next step planning process, evaluate ongoing projects, and continue an adaptive management approach to restoration.