

# National Research Council Second Biennial Report on Progress Toward Restoring the Everglades

*Water Resources Advisory Commission  
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[sfwmd.gov](http://sfwmd.gov)

# Background

- **Committee on Independent Scientific Review of Everglades Restoration Progress mandated in WRDA 2000**
- **Coordination with the Departments of Army and Interior, the State of Florida, in consultation with the South Florida Ecosystem Restoration Task Force**

# Background

- Committee established in 2004
- First biennial report in 2006
- Second biennial report 2008
  - Seven meetings over 18 months
  - Five meetings in Florida
  - Testimony from researchers, planners, decision makers associated with US Army Corps of Engineers (Corps) and South Florida Water Management District (SFWMD)
  - Stakeholder groups and private citizens

# Committee Members

- William L. Graf, University of South Carolina (Chair)
- Steven R. Beissinger, University of California,
- Linda K. Blum, University of Virginia
- Donald F. Boesch, University of Maryland
- Frank W. Davis, University of California
- Charles T. Driscoll, Syracuse University
- Joan G. Ehrenfeld, Rutgers University
- Chris T. Hendrickson, Carnegie Mellon U.
- William P. Horn, Birch, Horton, Bittner, & Cherot
- Wayne C. Huber, Oregon State University
- David H. Moreau, University of North Carolina
- Jean-Yves Parlange, Cornell University
- K. Ramesh Reddy, University of Florida

# Report Contents

- Summary
- Introduction
- Restoration in Context
- Project Planning and Implementation
- Modified Water Deliveries to Everglades National Park (Mod Waters)
- Lake Okeechobee....
- Building the Foundation for Adaptive Management
- Synthesis of CERP progress

## Report Content:

# Project Planning & Implementation

- Too early to judge restoration progress
- State commended on land acquisition and should continue
- Complex Federal project planning and approval process has caused major delays
  - Justifying projects as “stand alone” features is problematic in ‘Next Added Increment’ context
- Funding may become the new delay
- Prioritize projects by critical restoration benefits rather than stakeholder support

## Report Content:

# Project Planning & Implementation

- Federal government should examine departure from traditional project-by-project review, authorization, and yearly funding to benefit both the CERP and other multi-component ecosystem restoration projects
  - different approach that provides assured funding over multi-year periods
- Endangered species Act has been implemented with a single-species focus, need multi-species approach
- Program needs federal guidance on trade-offs between species and different parts of system

## Report Content:

### Mod Waters

#### (NAS Conclusions and Recommendations)

- “The history of Mod Waters project is one of the most discouraging stories in Everglades Restoration”
  - 19 years since authorization
- “Without completion of Mod Waters, central components of the CERP cannot proceed and ecological conditions in the Everglades ecosystem will continue to deteriorate”

## **Report Content:**

### **Mod Waters**

#### **(NAS Conclusions and Recommendations)**

- **“Strong leadership focused on building and maintaining support among stakeholders and overcoming conflicts is essential for Everglades restoration projects to achieve their restoration goals”**
- **“The reduced scope of Mod Waters attainable with the 2008 recommended plan for modifying Tamiami Trail provides some environmental benefits but shifts increased responsibility (and cost) to the CERP to achieve authorized Mod Waters goals”**

# Report Content: Lake Okeechobee

- System-wide accounting is lacking for phosphorus, sulfur, mercury, and nitrogen in basin soil, sediment, water, and vegetation
- May take decades to reach 40 ppb total phosphorus in lake and 140 metric ton annual load
- Given Aquifer Storage and Recovery concerns, storage challenges, and repairs to Herbert Hoover Dike, the Lake should not be dismissed as a part of the storage solution

# Report Content:

## Adaptive Management

- Key documents are complete: Monitoring & Assessment Plan (MAP), Performance Measures, Quality Assurance requirements, Conceptual ecological models, and first System Status Report
- Ecological monitoring should remain a priority of the program
- The first System Status Report achieved its objectives to test the MAP and to capture natural variance of CERP performance measures
- CERP information and data management provides excellent collaborative environment
- Integrated hydrologic, ecologic and water quality models are needed to help decision making

# **Report Content: Synthesis of CERP Progress**

- Everglades declining
- Federal planning and approval process complex and slow
- Federal funding lacks consistency
- Opportunities for meaningful restoration may be lost without more rapid implementation of projects

**Questions?**