

Rotenberger Wildlife Management Area Restoration Activities Update

Quarterly Communications Meeting on the
Long-Term Plan for Achieving Water Quality Goals for the
Everglades Protection Area Tributary Basins

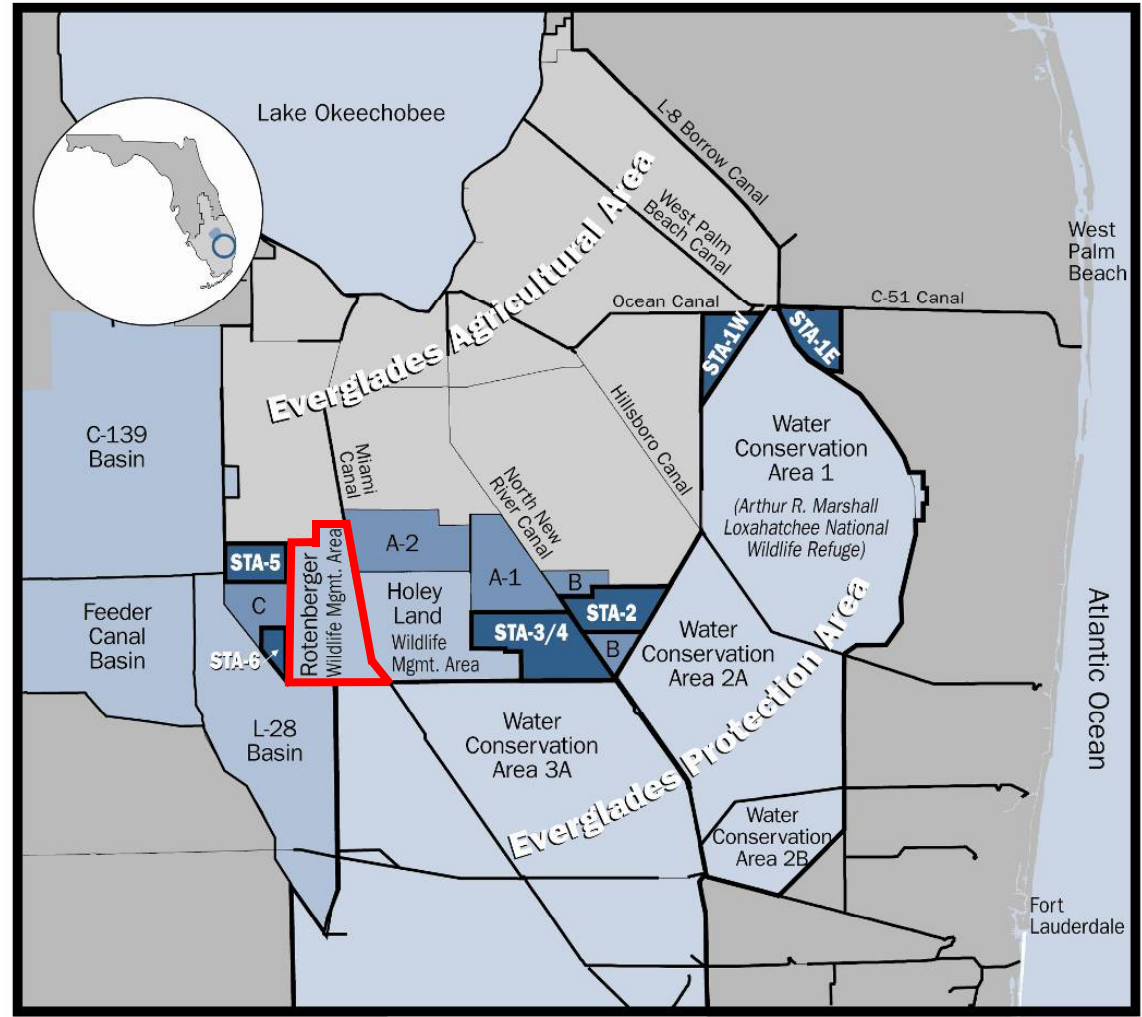
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Jeremy McBryan, PE
jmcbryan@sfwmd.gov

Brian Garrett
bgarret@sfwmd.gov

Rotenberger Wildlife Management Area

- Approx. 30,000 acres of extensively degraded Everglades landscape
- Outstanding Florida Water
- Located in southwest Palm Beach County



Rotenberger Wildlife Management Area

Background:

- Beginning in the 1950s, Rotenberger was cut off from surface water inflows and only received direct rainfall
- Result:
 - increased drainage
 - decreased hydroperiod
 - peat fires
 - increase and transition to upland vegetation species indicative of lower hydroperiods



Rotenberger Wildlife Management Area

Background (cont'd):

- Identified for hydropattern restoration in a 1983 Memorandum of Agreement between:
 - South Florida Water Management District (SFWMD)
 - Florida Department of Environmental Protection (FDEP)
 - Florida Fish and Wildlife Conservation Commission (FWC)
- In 1994, the Everglades Forever Act (EFA) called for the restoration of Rotenberger
- EFA and National Pollutant Discharge Elimination System (NPDES) Permits allow STA discharges to Rotenberger for hydrologic restoration



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Background (cont'd):

- In 2000, the design and construction of facilities to restore a more natural hydroperiod were completed:
 - inflow pump station (G410)
 - four outflow culverts (G402A-D)
- Preparation and implementation of an Operation Plan in 2001



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Recent Restoration Activities (FY2009):

- Completed brazilian pepper removal at eight tree islands (~19 acres) (SFWMD/FWC co-operative project)
- Completed aerial treatment of 100 acres of willow monocultures (*Salix caroliniana* and *Ludwigia peruviana*)
- Completed planting of 3,000 trees on eight tree islands
- Completed construction of a kiosk that will be used to educate the public about ongoing Rotenberger restoration activities
- Initiated tree island restoration evaluation



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Recent Restoration Activities (FY2009) (cont'd):

- Completed topographic survey
- Completed Operation Plan Update
- Started restoration of 1,800 acres of former farm and ranch land to more natural marsh community (FWC)
- Started design of supplemental inflow pump station



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Brazilian Pepper Removal



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Aerial Treatment of Willow



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Tree Island Planting



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Tree Island Planting



Rotenberger Wildlife Management Area

Tree Island Planting



Strangler fig



Pond apple

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



4/17/09



6/24/09



9/2/09

Photos provided by FWC

Rotenberger Wildlife Management Area

Kiosk for Restoration Information



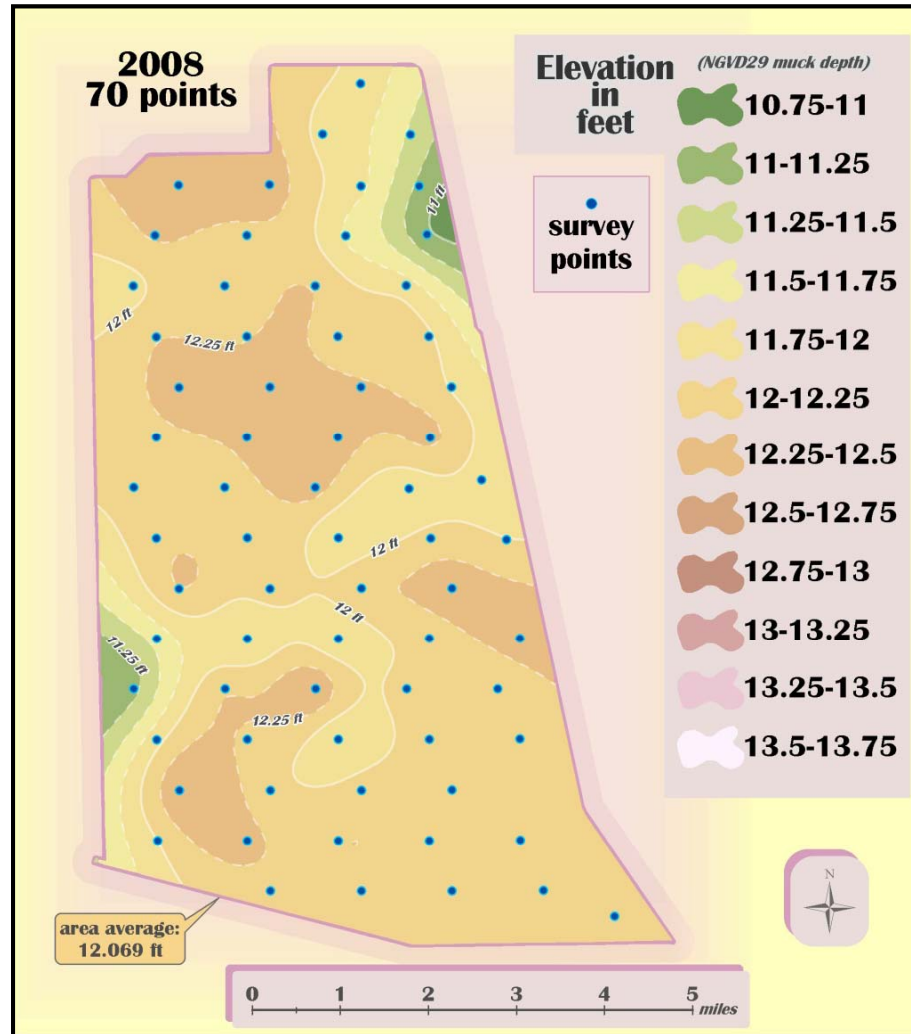
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Tree Island Restoration Evaluation



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Topographic Survey



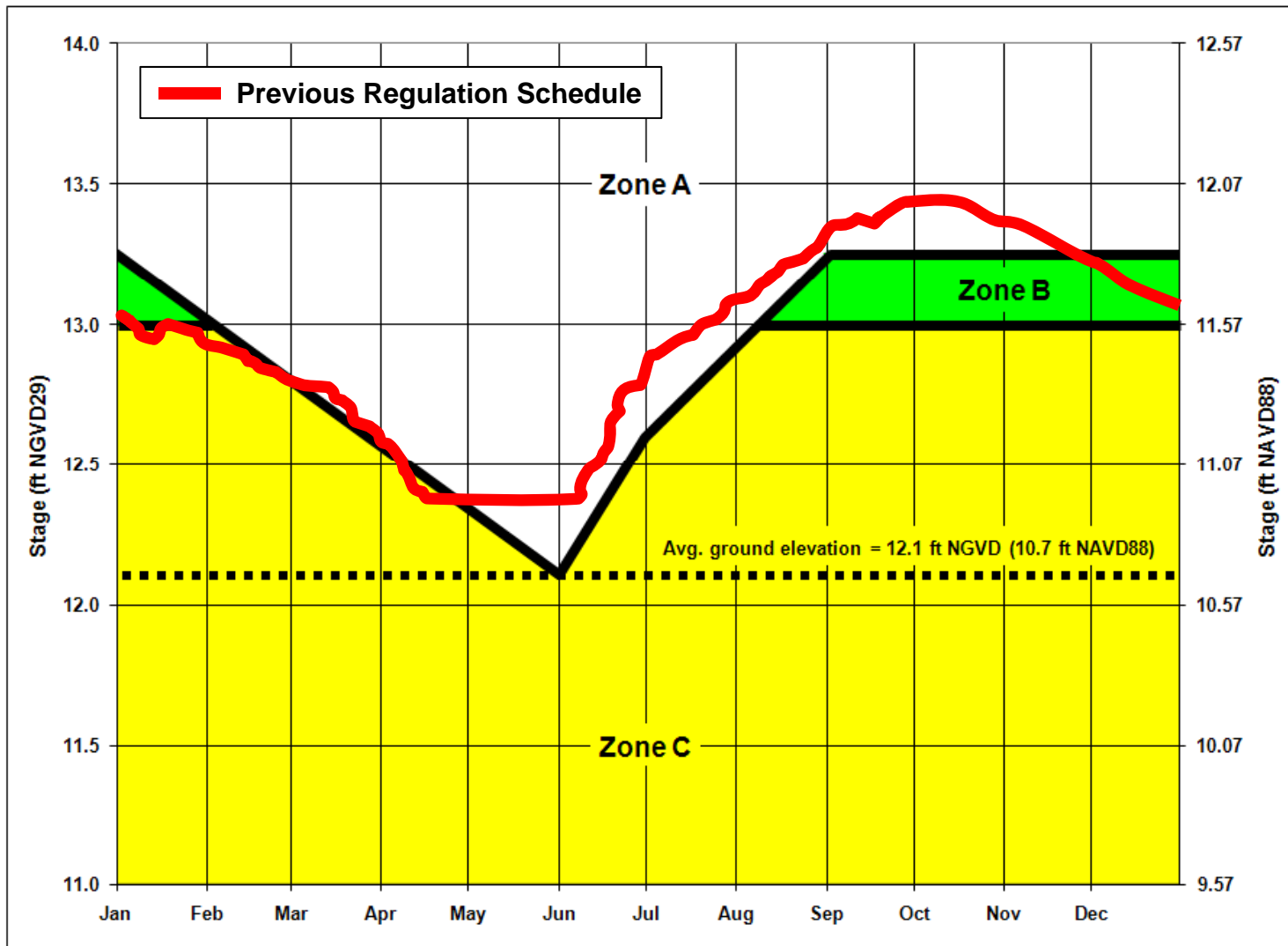
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Summary of 2009 Revisions to Operation Plan

- Added maximum TP target for inflows
- Included updated outflow culvert operational criteria
- Incorporated 2008 topography survey data
- Included modified interim regulation schedule developed to maintain the hydropattern restoration goals while:
 - addressing diverse biological needs, and
 - minimizing the risk of muck and/or peat fires
- Added pre-storm, drought and other non-routine operational guidance
- Provided elevations in both NGVD29 and NAVD88



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Farm / Ranch Restoration (FWC)



4/29/09



6/24/09



Rotenberger Wildlife Management Area

Supplemental Inflow Pump Station

- Purpose
 - Provide flexibility and ability to supplement existing inflow capacity (approx. 100-150 cfs)
 - Allow discharge of treated water from STA-6 and future Compartment C STA cells into Rotenberger
 - Part of the Compartment C Build-out mitigation proposal
- Status
 - Survey, geotechnical investigation and design started Fall 2009





Questions?