## May 2010 Update on STA Performance and Ongoing Enhancement Efforts

Technical Oversight Committee Quarterly Meeting May 18, 2010

> Lou Toth Chief Scientist Vegetation Management Division













STA-2

**STA-3/4** 

STA-5



STA-6

simulary

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STA-1E

STA-1W

### SOUTH FLORIDA WATER MANAGEMENT DISTRICT Short-circuit through hydrilla and vegetation strips in Cell 1B of STA5









## Short circuit along western side of Cell 5 in STA 1E







## Bioengineering







### Cattail bales across hydraulic short circuit in Cell 5 of STA 1E













### SOUTH FLORIDA WATER MANAGEMENT DISTRICT Bulrush transplanted in short circuit in Cell 5 of STA1E – downstream of cattail bales





## Degradation of berm along outflow canal of Cell 5 of STA 1E







#### Uprooted hydrilla accumulation at outflow structure - Cell 6

11/19/2009

## Transplanted bulrush and cattail in gaps of vegetation strip in Cell 6 of STA1E







#### SOUTH FLORIDA WATER MANAGEMENT DISTRICT







# Initiation of Collaborative Study with Renowned Treatment Wetland Ecologist (Dr. William J. Mitsch)

Objective: Minimize outflow phosphorus concentrations from STAs with new treatment pathways for removing recalcitrant (dissolved organic and particulate) phosphorus fractions











## Ongoing STA Enhancement Measures

• Pilot bioengineering project to block short-circuit in Cell 5 of STA 1E

• Bulrush planting in short-circuit in Cell 5 of STA 1E, in vegetation strips in Cell 1B of STA 5 and Cell 6 of STA 1E, and in open areas in Cell 1A of STA 5 and Cell 1A of STA 3/4



