Restoration Strategies Update

South Florida Ecosystem Restoration Task Force Meeting

December 17, 2013

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Restoration Strategies – Projects

- Lake Okeechobee
- Sub-Regional Source Controls
- STA-1W expansion ~6,500 ac
- STA-5/6 Earthwork ~800 ac
- C-139 Annexe Restoration
- C-139 FEB ~11,000 ac-ft
- WCA-1 Loxahatchee National Wildlife Refuge
- WCA-2A
- WCA-3A
- STA-2
- STA-3/4
- A-1 FEB ~60,000 ac-ft
- L8 FEB ~45,000 ac-ft
- Replacement Storage

sfwmd.gov Restoration Strategies for clean water for the Everglades
A-1 Flow Equalization Basin (FEB)
Central Flowpath

- **Purpose**: Attenuate peak storm water flows to improve STA treatment performance
- **Status**:
  - Design complete July 2013
  - Construction has initiated
  - Ahead of consent order milestone schedule
- **Look ahead**: Completion of construction July 2016
L-8 Flow Equalization Basin (FEB) Eastern Flowpath

- **Purpose**: Attenuate peak storm water flows to improve STA treatment performance
- **Status**:
  - Pump station and inflow work designs are complete
  - Reservoir and the pump station construction underway
  - Ahead of consent order milestone schedule
- **Look Ahead**:
  - Completion of Construction December 2016
L-8 Divide Structure
Eastern Flowpath

- **Purpose** – Conveyance feature to assist L8 FEB
- **Status:**
  - In design phase
  - Undergoing concurrent Federal 408 review
  - Ahead of consent order milestone schedule
- **Look Ahead:**
  - Design complete September 2014
  - Construction complete September 2018
S-5AS Conveyance Structure
Eastern Flowpath

• **Purpose** – Conveyance feature to assist sending water to the L8 FEB

• **Status:**
  – In design phase
  – Ahead of consent order milestone schedule

• **Look Ahead:**
  – Complete design September 2014
  – Complete construction September 2016
S-375 Structure Expansion Eastern Flowpath

• **Purpose** – Increase conveyance to accommodate increased flows

• **Status:**
  – In Design phase
  – Ahead of consent order milestone schedule

• **Look Ahead:**
  – Complete design July 2015
  – Complete construction December 2018
Stormwater Treatment Area 1W Expansion Eastern Flowpath

- **Purpose** – Expand the existing STA-1W to increase treatment capacity
- **Status:**
  - Conceptual design is underway
  - Non-binding letter of intent approved to pursue a final land exchange contract
- **Look Ahead:**
  - Anticipate final land contract approval in early 2014
  - Continue with detailed design
Sub-Regional Source Controls

- Three areas identified in the Eastern flowpath for sub-regional source controls
- Project funding begins in fiscal year 2015
- Early start on two projects:
  - Lease restrictions
  - Cooperative agreement in June 2013 with a local water control district for a demonstration project
- Conceptual project planning is underway
Science Plan

- Developed collaboratively and in consultation with State and Federal parties
- Final plan published in June 2013
- Project funding spans 10 years from Fiscal year 2013 - 2022
- Initial eight studies underway focused on improving STA treatment performance
Science Plan Projects

1) PSTA Technology Performance, Design, and Operational Factors (STA-3/4 PSTA)

2) Operational Guidance for FEBs and STAs and a Regional Operation Plan

4) STA Water Budget Improvements

5) Phosphorus Sources, Forms, Flux, and Transformation Processes in STAs

6) Influence of Canal Sediment on STA Inflow and Outflow Phosphorus Concentrations

7) Impacts of Deep Water Inundation Pulses on Cattail Sustainability

8) Sampling Methodologies for Total Phosphorus

9) Soil Management/Amendments to Control P Flux
Questions?

www.sfwmd.gov/restorationstrategies