C-139 Annex Restoration Project

Project Overview
Long Term Plan Communications Meeting
February 26, 2014

Terrie Bates, Director
Water Resources Division
Restoration Strategies

- **WCA-1**
  - Loxahatchee National Wildlife Refuge
- **Central Flowpath**
  - Lake Okeechobee
  - Sub-Regional Source Controls
  - Eastern Flowpath
  - Western Flowpath
- **STA**
  - STA-1
  - STA-2
  - STA-3/4
  - STA-5/6
- **FEB**
  - FEB ~45,000 ac-ft
  - FEB ~11,000 ac-ft
  - FEB ~54,000 ac-ft
- **STA Earthwork**
  - ~800 ac
- **Replacement Features**
- **C-139 Annex Restoration**
C-139 Annex Restoration Project

C-139 Annex Restoration Project
14,437 acres

Flow Equalization Basin
2,875.03 Acres
C-139 Annex Restoration Project Goals

- Restore historic Everglades hydrologic conditions to +14,000 acres of former citrus grove
- Contribute to the improvement of water quality in the Everglades
- Restore historic wetlands and upland habitat
- Expand habitat area for listed plant and animal species
- Promote the restoration of a self-sustaining ecosystem
- Maintain the current level of flood protection for surrounding properties
Project Summary – Restoration Plan

- Total Area = 14,437 acres
  - Includes groves, disturbed natural areas, and infrastructure
- Phase 1 Area = 3,400 acres
Project Summary – Restoration Components

- Remove buildings, tanks, solid waste & abandon wells
- Clear citrus trees & level planting beds
Project Summary – Restoration Components

- Remove exotic & nuisance vegetation
- Microtopography earthwork interconnecting wetlands
- Backfill canals & degrade roads & levees to restore sheetflow
Project Summary – Restoration Components

- Replanting using harvested material from donor site
- Follow-up exotic species treatments
Phased Lease Termination

- 2014 - Take down 3,400 acres Phase 1 tracts and ~1,995 acres in the Flow Equalization Basin (FEB) tract

- 2018 – Take down remaining 10,700 acres for Phase 2 and ~1,000 acres of FEB
Restoration Progress - Detailed Site Assessment

- Site survey
- Geotechnical borings & evaluation
- Groundwater monitoring well installation
- Environmental assessment
- Collaboration with Seminole Tribe of Florida
Establishment of a 20-acre Donor Crop / Nursery site underway in the future FEB

Donor crop will be expanded in future years to 300-acres

Vegetation established in this expanding crop will propagate Phase 1 beginning 2015
Restoration Progress – Design

- Comprehensive design efforts will begin February 2014
- Design will be completed by in-house staff with 30%, 90% and Final submittal milestones
- Permit applications will begin after completion of 30% design package
- Site clearing for each phase will commence upon release of the respective area
FPL corridor assessment report (completed 5/16/13). No environmental issues documented within the onsite transmission corridor.

Vertical delineation of copper completed. Copper impacts are limited to 0-12 inches.

Copper pilot study to assess remediation options is underway.

Corrective action associated with Tractor Shed No. 2 underway.

8 Point source locations onsite.

1 Point source is located within Phase I.
Copper Remediation Pilot Study underway

Site clearing of vegetation, herbicide application and burning

Removal of tree roots

Disking 6” of surface soils

Removal/scraping of surface soil

Cap impacted soil within swale

Site leveling/disking

Remediation confirmation sampling
Restoration Progress - Facilities

- Existing houses on-site will be minimally reconditioned
- Houses will be used as Field Offices for Land and Construction Management activities
- Post project completion, these houses can be used for continued Land Management activities and potential FWC Officer housing
Restoration Project Funding

Land Acquisition - $114 Million*
Restoration & Land Mgmt - $36 Million

- Restoration anticipated to result in +/- 10,000 mitigation credits \(\text{(subject to ACOE & DEP permit determinations)}\)

- Lake Belt Mitigation Committee has conceptually approved $81 million over 20 years to fund restoration project and +/- 4,000 mitigation credits \(\text{(full cost accounting)}\)

- Restoration costs “front-loaded”; land cost reimbursement in out-years

- Remainder mitigation for District works

\(^{*}\ 14,437\text{ acres & associated costs)\)
## Restoration Project Schedule

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
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<tbody>
<tr>
<td>REVISED FEASIBILITY STUDY REPORT</td>
<td>78 days</td>
<td>Fri 8/17/12</td>
<td>Tue 12/4/12</td>
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<tr>
<td>PROJECT DEFINITION REPORT &amp; SAP FS PROJECT CREATION</td>
<td>45 days</td>
<td>Thu 12/6/12</td>
<td>Wed 2/6/13</td>
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<tr>
<td>SITE INVESTIGATIONS &amp; ANALYSIS</td>
<td>1715 days</td>
<td>Thu 2/7/13</td>
<td>Wed 9/4/15</td>
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<tr>
<td>PRELIMINARY (50%) DESIGN</td>
<td>157 days</td>
<td>Fri 11/1/12</td>
<td>Mon 6/9/14</td>
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<td>FINAL (90%) DESIGN</td>
<td>175 days</td>
<td>Tue 6/10/14</td>
<td>Mon 2/9/15</td>
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<td>CORRECTED FINAL (100%) DESIGN</td>
<td>10 days</td>
<td>Tue 6/10/14</td>
<td>Mon 3/9/15</td>
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<tr>
<td>LAND MANAGEMENT PRIOR TO PHASE I CONSTRUCTION</td>
<td>545 days</td>
<td>Wed 5/1/13</td>
<td>Tue 6/8/15</td>
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<tr>
<td>PHASE I - PROCUREMENT &amp; CONSTRUCTION</td>
<td>476 days</td>
<td>Tue 2/24/15</td>
<td>Tue 12/30/16</td>
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<tr>
<td>PPL Transmission Line Pad / Pole Modifications</td>
<td>365 days</td>
<td>Wed 12/21/16</td>
<td>Tue 5/15/18</td>
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<tr>
<td>PHASE II LEASE ENDS</td>
<td>1 day</td>
<td>Mon 7/2/16</td>
<td>Mon 7/2/16</td>
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<td>LAND NGMT. WORK BEGINNING IMMEDIATELY AFTER END OF PHASE II LEASE</td>
<td>220 days</td>
<td>Thu 7/3/16</td>
<td>Mon 3/6/13</td>
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<td>PHASE II - PROCUREMENT &amp; CONSTRUCTION</td>
<td>641 days</td>
<td>Mon 12/5/16</td>
<td>Mon 3/22/21</td>
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<td>LAND NGMT. &amp; MONITORING AFTER CONSTRUCTION</td>
<td>3163 days</td>
<td>Mon 1/3/11</td>
<td>Wed 11/13/21</td>
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</table>
Seminole Tribe of Florida asked to name the project

- Sam Jones / Abiaki was a medicine man and powerful spiritual leader of the Seminole Tribe
- He was a major force of resistance against the U.S. during the Seminole wars of the 1800’s; answering no flag of truce, no offer of compromise, no demand of surrender
- When fighting concluded, he was the only major Seminole leader to remain in Florida
- His final camp was in Big Cypress Swamp, not far from the Tribe’s Big Cypress Reservation today