The Great Northern Everglades Debate

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Historical Problems Leading to Construction of C&SF Project

- Hurricanes in 1926 and 1928 resulted in failure of the levee around Lake Okeechobee
- Hurricane in 1947 resulted in wide-spread flooding throughout South Florida
- State of Florida requested Federal assistance in 1947
- Congress authorized the C&SF Project in 1948
South Florida

- SFWMD lands stretch 240 miles from Orlando to the Keys
- 18,000 sq. miles, encompassing one of the most diverse ecosystems in the world
- ~2,000 miles of canals
- ~2,800 miles of levees
- More than 650 water control structures and 700 project culverts
- Nearly 70 pump stations
- 8.1 million residents
- More than 3 million acres of agriculture
- Florida’s commitment: Protected/Managed natural areas
Changes in Hydrology
The Need for Increased Flows to South
Lake Okeechobee Design Discharge Capacities

Lake Okeechobee Structure Capacity

- INFLOW: 50000 cfs
- OUTFLOW: 30000 cfs

Lake Okeechobee Outflow Capacity

- East & West: 86%
- South: 14%

Lake Okeechobee outlet structures managed by the USACE (red○) and the SFWMD (blue △)

S-308: Port Mayaca Lock & Dam
S-77: Moore Haven Lock & Dam
C-10A
S-352
S-351
S-354
South Bay
Indiantown
Clewiston
Port Mayaca
Canal Point
Lake Okeechobee
L-3 Canal
Unintended Consequences
Lake Okeechobee
Unintended Consequences - Estuaries
Solutions
Short-term/Emergency Measures
Maximizing Storage on Public and Private Lands

Public
- Interim Lands

Private
- Emergency Agreements
- Stormwater Treatment Areas (STAs)
- EAA Fallow Fields
Near-Term Restoration Projects

C-44 Reservoir and STA

Central and Southern Projects
C-111 South Dade / Mod Waters

Tamiami Trail Bridging

Funding for an additional 2.6 miles

Construction complete

Northeast Shark River Slough
Everglades National Park
Long-Term Restoration Projects

Northern Everglades & Estuaries Protection Program

- Kissimmee River Restoration
- Lake Okeechobee Watershed

- IRL-S Project
- St. Lucie Watershed

- C-43 West Basin Storage Reservoir
- Caloosahatchee Watershed

- Central Everglades Planning Project
Kissimmee River Restoration

- **Lower Basin Construction Project**
  - Three construction phases complete, two remaining
  - Last backfill phase will store an additional 20,000 ac-ft of water in floodplain

- **Upper Basin (Headwaters)**
  - Restoration construction substantially complete; 97% land acquired
  - Provides up to 100,000 ac-ft of storage
Indian River Lagoon – South

Authorized Components:
- C-44 Reservoir & STA
  - 3,400 acre reservoir – 50,600 acre feet
  - 6,300 acre STA (6 cells)
- C-23/24 Reservoirs & STA
  - N/S Reservoirs - ~100,000 acre feet
  - 2,500 acre STA – 4 cells
- C-25 Reservoir/STA
  - 741 acre Reservoir – 5,900 acre feet
  - 163 acre STA
- ~ 90,000 acres Natural Water Storage & Treatment Area (NWSTA)
  - Allapattah - C-23 Basin
  - Palmar/SouthFork – C-44 Basin
  - Cypress Creek/Trail Ridge – C-23/24 Basin
C-43 Projects

West Basin Reservoir
- Capacity – 170,000 ac/ft
- Authorized in WRRDA 2014; Pending Federal appropriations

Interim Storage
- Provides temporary shallow storage to help mitigate the impact of excessive flows to the Caloosahatchee Estuary
  - 9,000 ac-ft of storage
  - $18M in state funding in FY15
Restoration Strategies

RESTORATION STRATEGIES
for Clean Water for the Everglades

A-1 Flow Equalization Basin
- Under construction ahead of schedule

L-8 Flow Equalization Basin
- Under construction ahead of schedule

Stormwater Treatment Area 1 West Expansion
- Conceptual design underway

Loxahatchee River Restoration
- Land acquired for shallow storage

Reducing Pollution at the Source
- Early start on 2 source control projects

Science Plan
- 8 key studies underway to further improve STA performance

Additional Conveyance Features
- Detailed design underway ahead of schedule
Central Everglades Planning Project

- Increases storage, treatment and conveyance of water south of Lake Okeechobee
  - Sends ~200,000 ac-ft of water south from the Lake
- Removes and/or plugs canals and levees within the central Everglades
- Improves hydroperiod and flow through Everglades National Park while protecting urban and agricultural areas to the east from flooding