

# EPA's Amended Determination

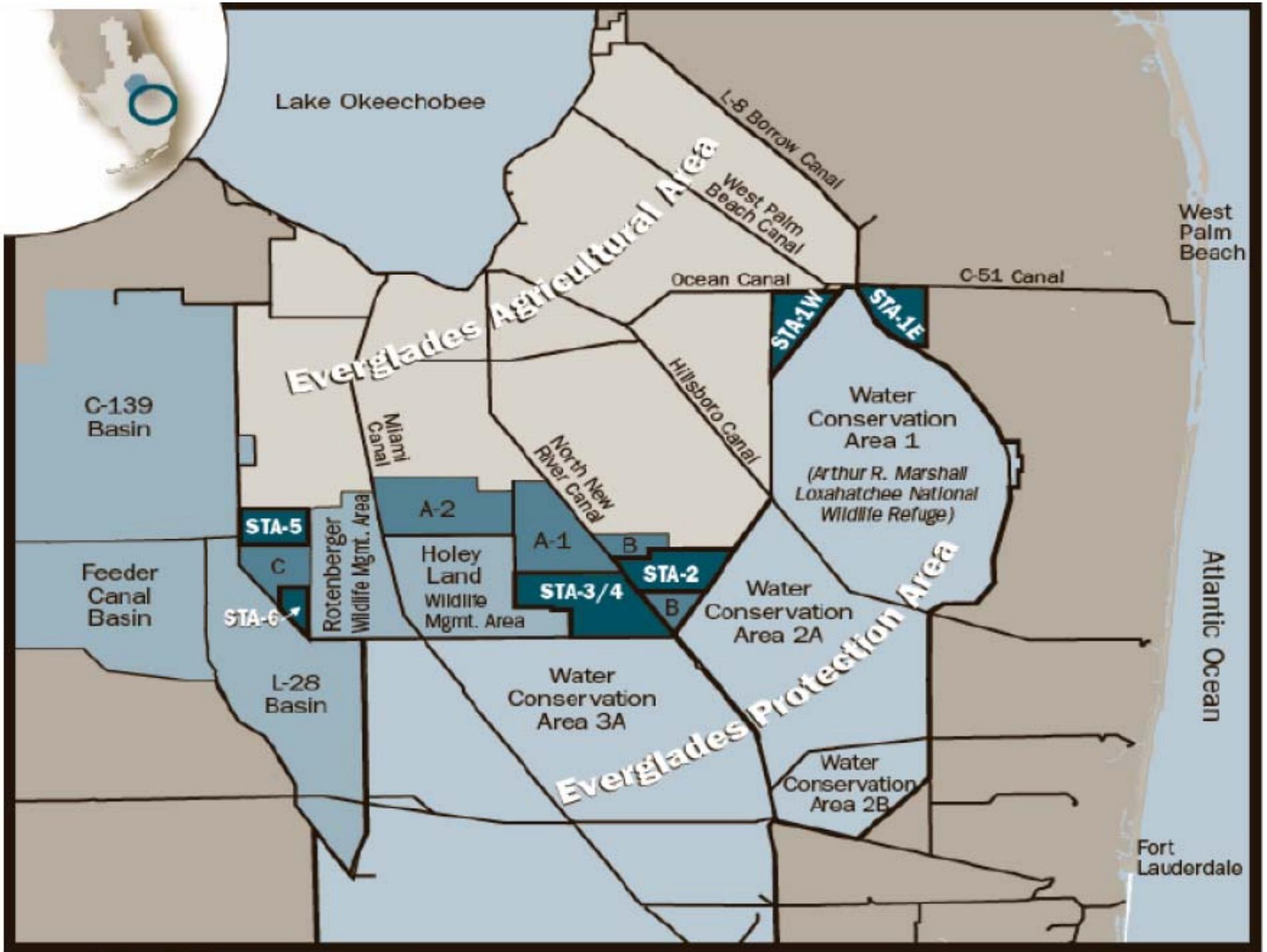
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Briefing for the South Florida Ecosystem  
Restoration Task Force  
October 28, 2010

# Today's Presentation

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- Key Provisions of EPA's September 3 Amended Determination
- WQBEL Summary
- Remedies and Milestones
- Next Steps



# Key Provisions of EPA's Amended Determination

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- AD directly addresses each point in the Gold April 2010 order.
- Directs FDEP to correct deficiencies in State WQS and EFA; directs FDEP to assess cumulative impacts of TP annually; tells FDEP Everglades does not currently meet TP criterion; and provides clear, specific, comprehensive instructions on how to meet the WQBEL.
- Specifies the necessary revisions to conform permits pursuant to Court's Order and WQBEL necessary to meet WQS. Attaches copies of each permit "conformed" and ready for State action.
- Identifies milestones and recommends remedial actions necessary to meet WQBEL, including the need for an additional 42,000 acres of constructed wetlands.
- Interim dates plus end dates based on specific information about each of the three Everglades flow paths. End dates range between December 2014 and May 2020.

# WQBEL

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- Water Quality Based Effluent Limit
  - Translates 10 ppb TP long-term geometric mean criterion into a NPDES permit discharge limit
- EPA's recommended WQBEL is:
  - Can not exceed 10 ppb as a geometric mean annual average in more than two consecutive years (incorporates WQ criterion)
  - 18 ppb annual maximum flow-weighted mean (accounts for loading)
- Implementation
  - Through “conformed” NPDES permits

# Remedy/Milestone Considerations & Assumptions

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- Modeled to 9.3 ppb TP target (rather than 10 ppb WQ criterion) to provide margin of safety to determine size of STA expansions
- Critical Path Milestones
  - Land acquisition – time varies on acreage needed and if there are willing sellers (1 month - western flowpath to 3 years -eastern flowpath; none needed in central flowpath, pending Moreno Court decision on A-1 reservoir)
  - Detailed Design – plans & specs for land leveling, sizing and location of levees, berms, canals, and pumps (assumed 1.5 years needed after land acquisition; assumes local, state, and federal permits obtained concurrently)
  - Construction – construction/installation of the levees, land leveling, pump stations (time allowed overlaps with design phase, assumed 2.8 years)
  - Flood STA expansion before construction is final (assumed 1.5 years for net reduction of TP to occur; assumed 3 years from flooding to achieving WQBEL\*)
  - Discharge from STA consistent with achieving the WQBEL

\*Existing STAs will need time to adjust to lower flows ('spindown') after expansions capable of accepting flows

## Summary of Remedy by Flow Path<sup>[1]</sup> for Meeting WQBEL at STA Discharges into the Everglades Protection Area

| Summary Facts   | Eastern Flow Path                                | Central Flow Path   | Western Flow Path  |
|---|--|---|--|
| <b>Additional STA/FEB/Water Storage acres</b>           | 15,000-acre STA                                  | 15,600-acre STA<br>15,000-acre A1 site serves first as interim shallow storage to be converted to a 15,000-acre STA plus 600-acre STA in the A2 site. | 7000-acre FEB<br>(12 feet deep)  |
| <b>10 % additional acres (berms, levees and canals)</b> | ~1500 acres                                      | ~1560 acres   | ~700 acres   |
| <b>Total land needed</b>                                | ~16,500 acres                                    | ~17,160 acres   | ~7700 acres  |
| <b>Newly-acquired land needed</b>                       | ~7600 acres                                      | 0 acres   | 0 acres  |
| <b>Dates to meet WQBEL</b>                              | <b>STA 1E     2019</b><br><b>STA 1W     2020</b> | <b>STA 3/4         2014</b><br><b>Comp B NBO     2014</b><br><b>STA 2             2018</b><br><b>Comp B SBO     2018</b>                              | <b>STA 5         2017</b><br><b>STA 6         2017</b><br><b>Comp C       2017</b> |

<sup>[1]</sup> USEPA refers to three distinct flow paths for runoff water from the EAA and the C-139 basin. These are the Eastern Flow Path that drains the urban and eastern basins of the EAA through STA 1E and STA 1W to the Refuge; the Central Flow Path that drains the central basins of the EAA through STA 2/Compartment B and STA 3/4 to WCA 2A and 3A; and the Western Flow Path that drains the C-139 Basin through the STA 5, STA 6, and Compartment C complex into WCA 3A.

# Key Issues for STA Expansion

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## STA 1E & 1W

- STA 1E ability to achieve WQBEL dependent on:
  - Schedule for correcting deficiencies in and making improvements to STA 1E
  - Diverting flows to STA 1W
- STA 1W ability to achieve WQBEL dependent on:
  - Exchanging U.S. Sugar purchase land for land adjacent to STA
  - Greater source controls and/or additional land purchase
  - Possible exercise of eminent domain authority
- Greater source controls or some water diversion

## STA 2

- Compartment B completion, structural modifications

## STA 3/4

- Availability of EAA A1 reservoir land (Judge Moreno decision pending)
- Ability to use all or portion of EAA A2 reservoir land (federal ownership)
- Ability to purchase additional land
- Greater source controls

## STA 5/6

- Use of U.S. Sugar purchase land in C139 Annex for STA expansion
- Resolving Tribal cultural resource issues

# Remedy Alternatives

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## Additional design possibilities

- Needed to identify, basin by basin, best mix of STAs, FEBs, and source controls
- Provide quickest, cost-effective remedy in the public interest

AD provides 60-days for SFWMD to recommend alternative remedies

- But must achieve WQBEL in same or shorter timeframe identified in the AD

# Next Steps

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- Conformed NPDES permits due from FDEP on Nov 2.
- Alternative remedies due from SFWMD on Nov 2.
- EPA has 45 days to make decision on alternative remedies (Dec 17).
- Hearing before Judge Gold when it is rescheduled.