



Historic Overview of Lake Okeechobee Restoration

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Image from:
http://pillar.saj.usace.army.mil/cco/images/FeaturedStoryImages/20080501_LakeOkeechobee.JPG

Evolution of Restoration

Current Concept



Photos from:

http://funnies.com/newjunefunnypics/Redneck_Boat.jpg

<http://www.blog.thesietch.org/wp-content/uploads/2007/02/earthraceboat.jpg>

Inception of Restoration - 1971

- ◆ **Governor Askew – Conference on Water Management in S. Florida**
- ◆ **Leading experts on resource management**
- ◆ **Affirmed & emphasized importance of:**
 - **Water conservation**
 - **Protection of water quality**



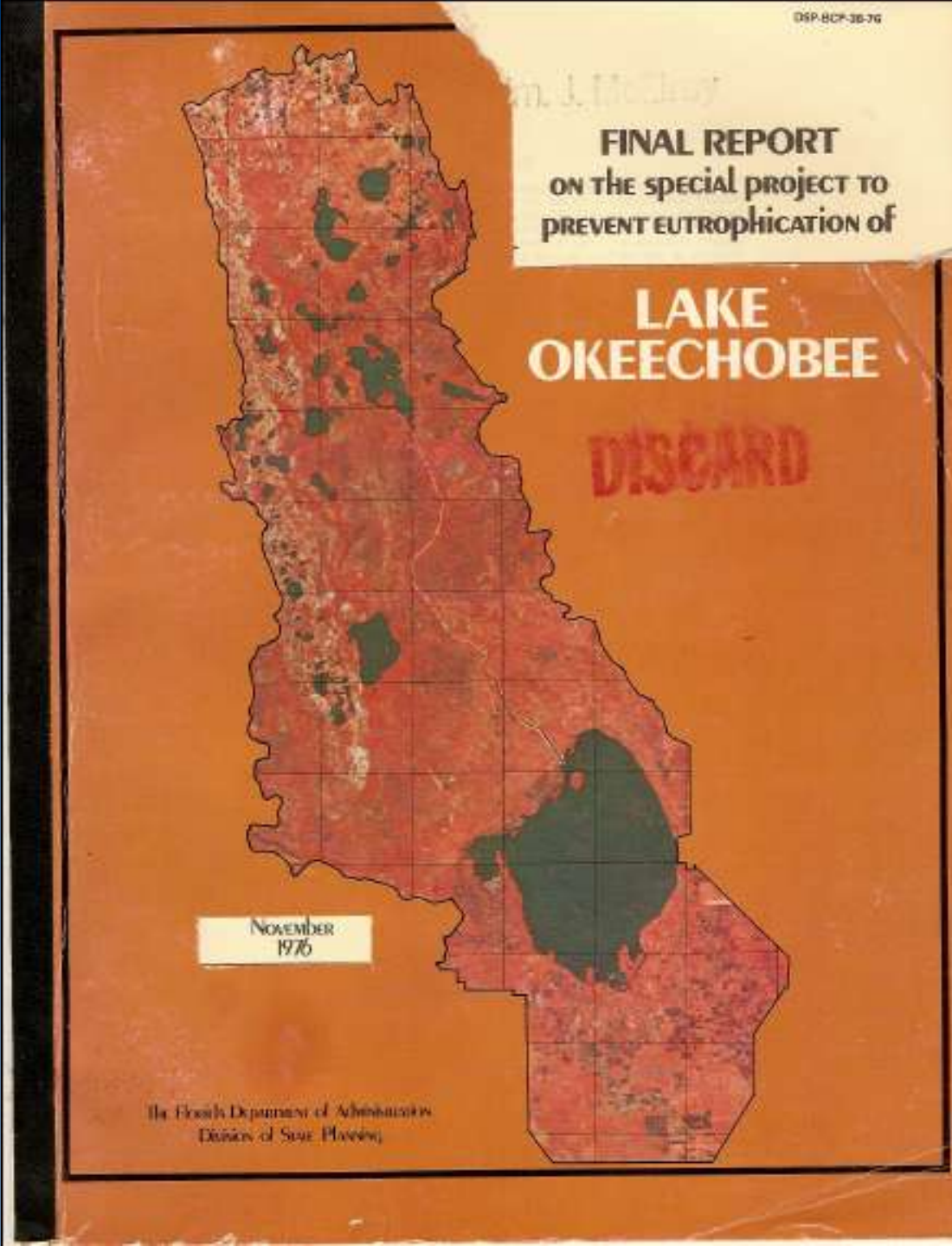
Photo from:

<http://fpc.dos.state.fl.us/reference/gv24136.jpg>

Florida Water Resources Act - 1972

- ◆ Established form of administrative water law that brought all waters of the state under regulatory control
 - ◆ Established five Water Management Districts – encompassing entire state
 - ◆ Statewide authority for water resource management vested in Department of Environmental Regulation (now DEP)
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- ◆ Public Hearing
– 1972
- ◆ Florida legislature established & funded Special Project
– 1973



Major Findings

1. H₂O - single most important resource management priority for S. FL
2. Detention of rainwater in wetlands & shallow aquifer
3. Reflood publicly owned lands
4. Improved farming/ranching techniques
5. Cease backpumping
6. Recycle drainage water in EAA

1985

- ◆ Governor Graham directs FDER to conduct study of conditions affecting Lake Okeechobee
- ◆ FDEP formed Lake Okeechobee Technical Advisory Committee
- ◆ Included SFWMD, key agencies, ag and conservation groups



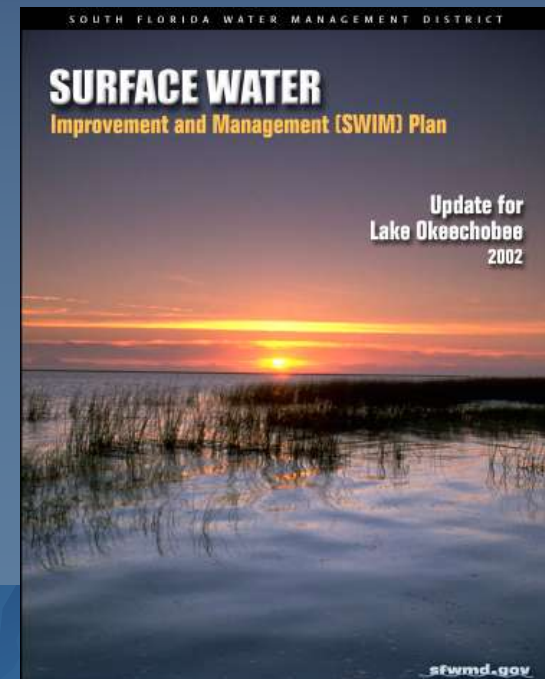
Image from:
<http://www.pbase.com/donboyd/image/56287246>

LOTAC Report Conclusions – 8/86

- ◆ P is key nutrient to control
 - ◆ P load reduced by at least 40%
 - ◆ Priority Basins – TC/NS, LKR, FC, HP/IP, EAA
 - ◆ Significant % of reductions through diversion & BMPs
 - ◆ Actions will reduce water supply capabilities
 - ◆ Time is essential
 - ◆ Need for research & monitoring
 - ◆ Need for long-term management plan
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Interim Lake Okeechobee SWIM Plan (1989)

- ◆ 1987 Surface Water Improvement Management Act (S. 373.451 - .459, F.S.)
- ◆ LOTAC II (reauthorization)
- ◆ LO SWIM Plan - sets forth concrete mechanisms for achieving P loads reductions across watershed:
 - Inflow P – 180 ppb
 - Assimilative capacity
 - Performance standards
 - Permits
 - Enforcement
 - Technical assistance
 - Public information
 - Funding



FDEP Dairy Rule (1987)

- ◆ Chapter 62-670.500, F.A.C.
- ◆ Dairies in TC/NS & LKR basins – implement BMPs – retain runoff for 25-year, 24-hr storm
- ◆ 49 dairies came under rule
- ◆ Buyout program – 17 dairies
- ◆ “Companion Rule” to SFWMD 40E-61 Lake Okeechobee Regulatory Phosphorus Nutrient Control Program

Special Drainage District Diversions



- ◆ 1994 EFA (S. 373.4592, F.S.)
- ◆ Includes diversion of 4 Chapter 298 Special Drainage Districts & 1 state lease (Closter Farms)
- ◆ All diversions now constructed & operational

TMDL History

- ◆ **Section 303(d) CWA – requires states to submit list of waters not meeting WQS – develop TMDLs**
 - ◆ **TMDL – maximum amount of pollutant that a surface water can absorb & still meet WQS**
 - ◆ **1998 – Lake O listed as impaired under Section 303(d) of the CWA**
 - ◆ **1999 – Florida Watershed Restoration Act (Section 403.067)**
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Lake Okeechobee TMDL

- ◆ **TMDL development initiated in 1999**
- ◆ **Calculated using computer models developed with guidance from Technical Advisory Committee**
- ◆ **Adopted by rule in May, 2001**
- ◆ **Annual TP load of 140 MT to achieve in-lake target of 40 ppb**

Lake Okeechobee Protection Act (2000)

1. Lake Okeechobee Protection Plan (LOPP)
2. Lake Okeechobee Construction Project
3. Watershed Phosphorus Control Program
4. Research & Water Quality Monitoring Program
5. Internal Phosphorus Management Program
6. Exotic Species Control Plan
7. Annual Progress Report



LAKE OKEECHOBEE PROTECTION PROGRAM

January 1, 2004

Lake Okeechobee Protection Plan



South Florida Water
Management District

Florida Department of
Environmental Protection

Florida Department of Agriculture
and Consumer Services



LAKE OKEECHOBEE PROTECTION PROGRAM

February 23, 2007

Lake Okeechobee Protection Plan Evaluation Report



South Florida Water
Management District

Florida Department of
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Florida Department of Agriculture
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Urban Turf Fertilizer Rule (2007)

- ◆ FDEP provides assistance & recommendations to FDACS in adopting final rule
- ◆ Limits amount of N & P in fertilizers for urban turf & lawns

Northern Everglades Legislation



- ◆ Provides a dedicated state funding source for Northern Everglades restoration
 - Expands use of the Save Our Everglades Trust Fund to include Lake Okeechobee Watershed Protection Plan & River Watershed Protection Plans for the Caloosahatchee & St. Lucie
- ◆ Extends the state's commitment to provide funding for CERP & Northern Everglades through the year 2020



Accomplishments

- ◆ Invested > \$1.3B since 2000
- ◆ 1.6 M acres BMPs
- ◆ Biosolids regulation
- ◆ 3 regional STAs
- ◆ 6 HWTs
- ◆ FRESP/NE-PES
- ◆ 138 K acre-feet storage
- ◆ 1.9 M cubic yards muck removed
- ◆ Completed 3 phases of Kissimmee R restoration

How DEAR Functions

Develop & Adopt Water Quality Standards to protect Florida waters

WQS consist of:

Use WQS to determine if meeting

1. Designated Uses

2. Narrative & numeric

Designated Uses:

If determined

- Class I – Drinking water

- Class II – Shellfish harvesting

- Class III – Fishable, swimmable

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- Class III Ltd. – Limited aquatic life

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- Class IV – Agricultural

- Class V – Industrial



It's QUESTION TIME !!