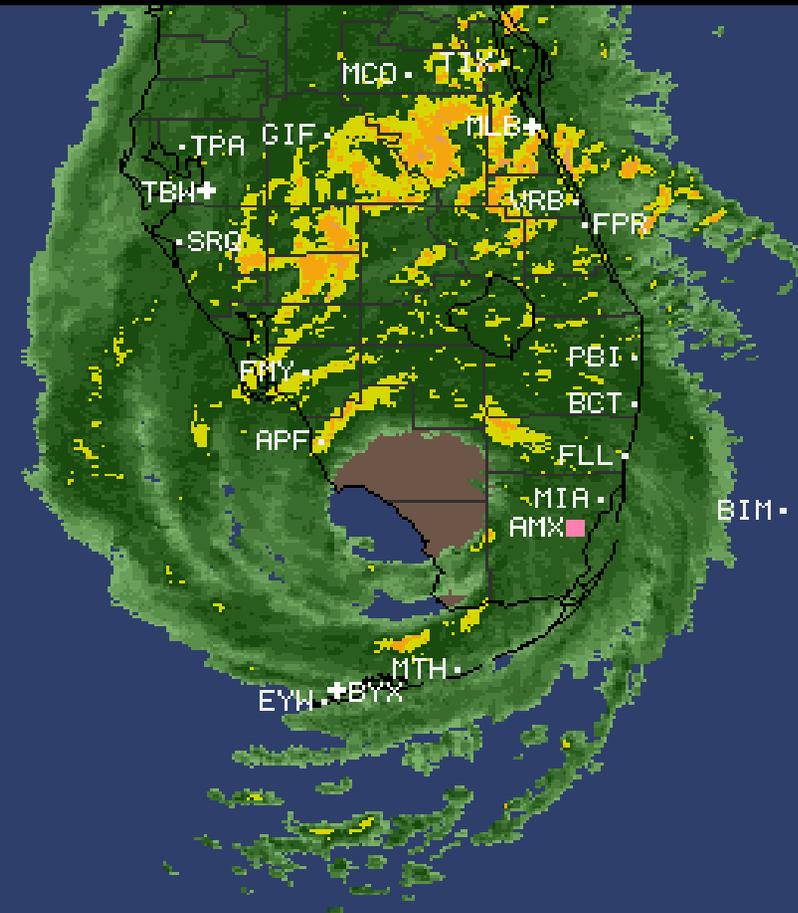




t MSI Corporation <http://www.usi.com>



Restoration Challenges



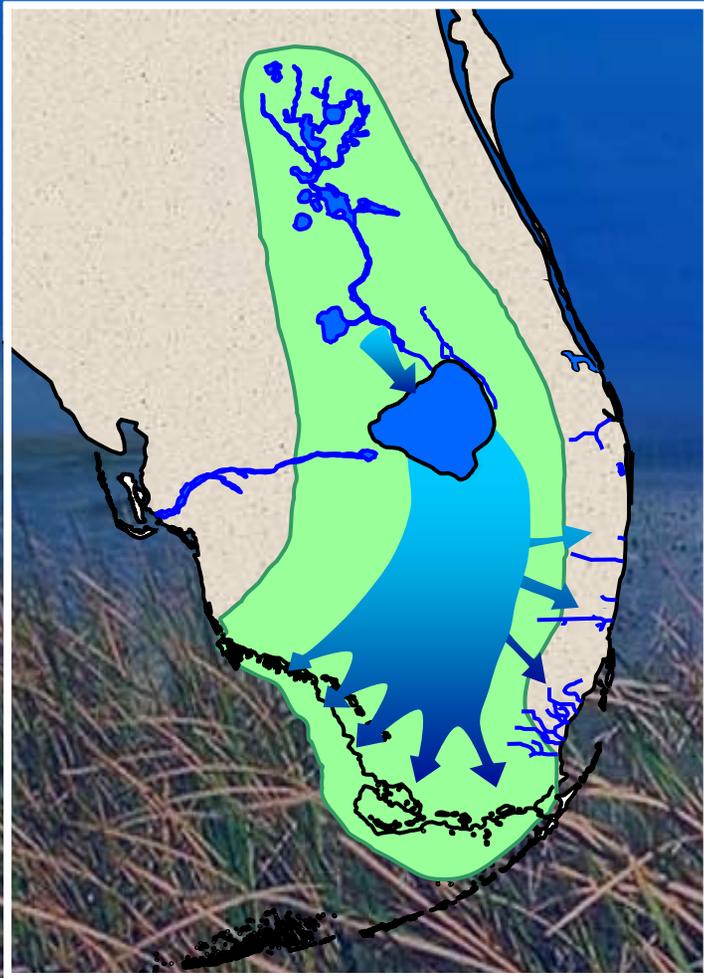
Topics

- **Historical System**
- **Man Made Alterations**
- **What's Left**
- **What's Happening**
- **Challenges**



The "Original" Everglades Ecosystem

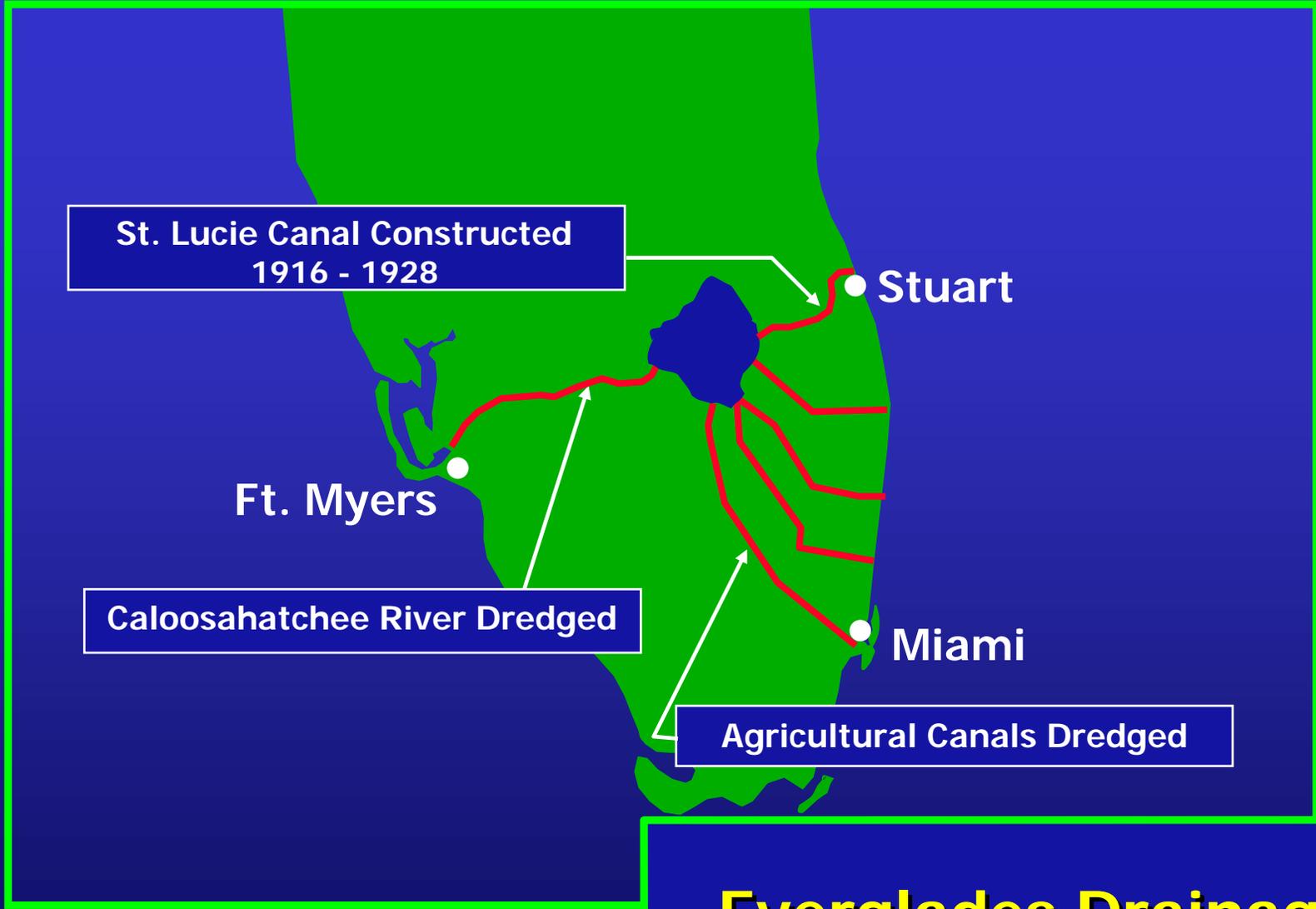
"River of Grass"



- Water connected the system, from top to bottom
- 9 million acres of wetlands providing a variety of habitat
- Diverse mosaic of landscapes and seascapes

The Diverse Ecosystem





St. Lucie Canal Constructed
1916 - 1928

Stuart

Ft. Myers

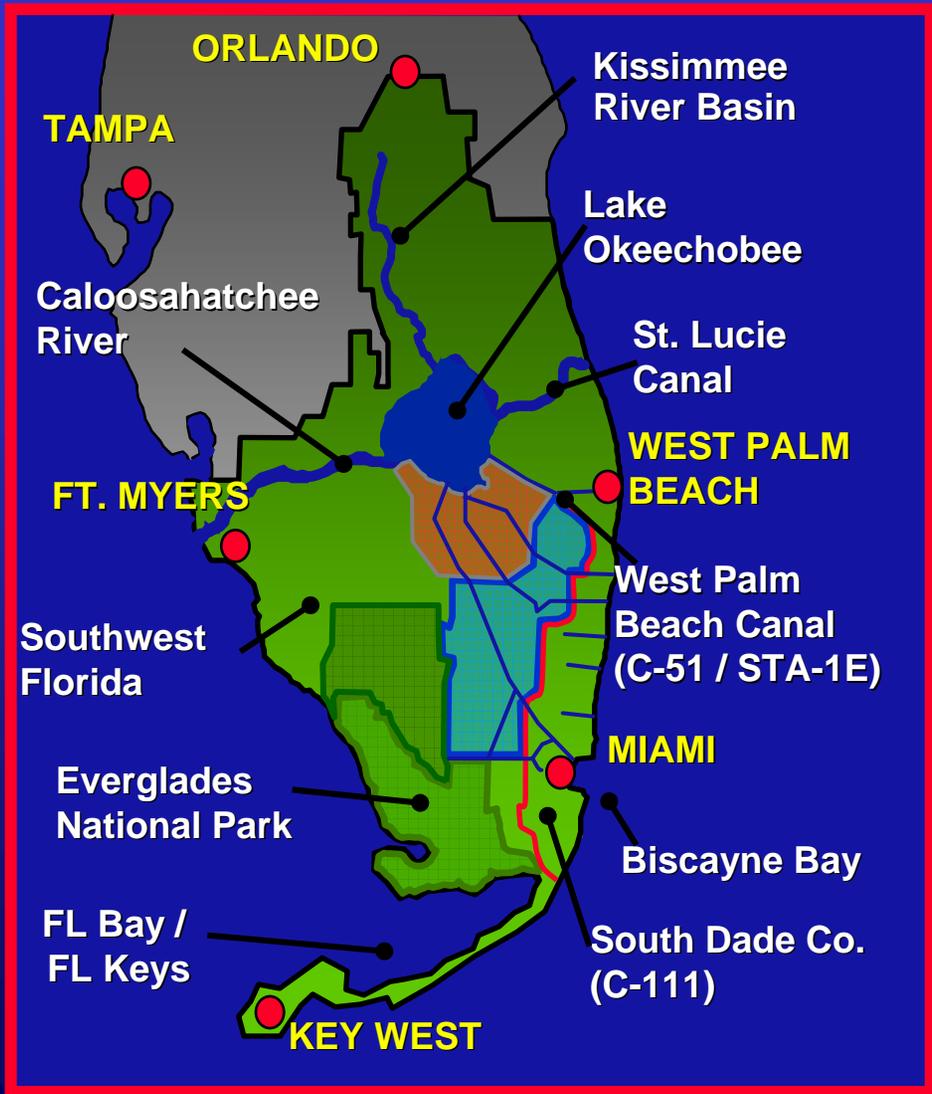
Caloosahatchee River Dredged

Miami

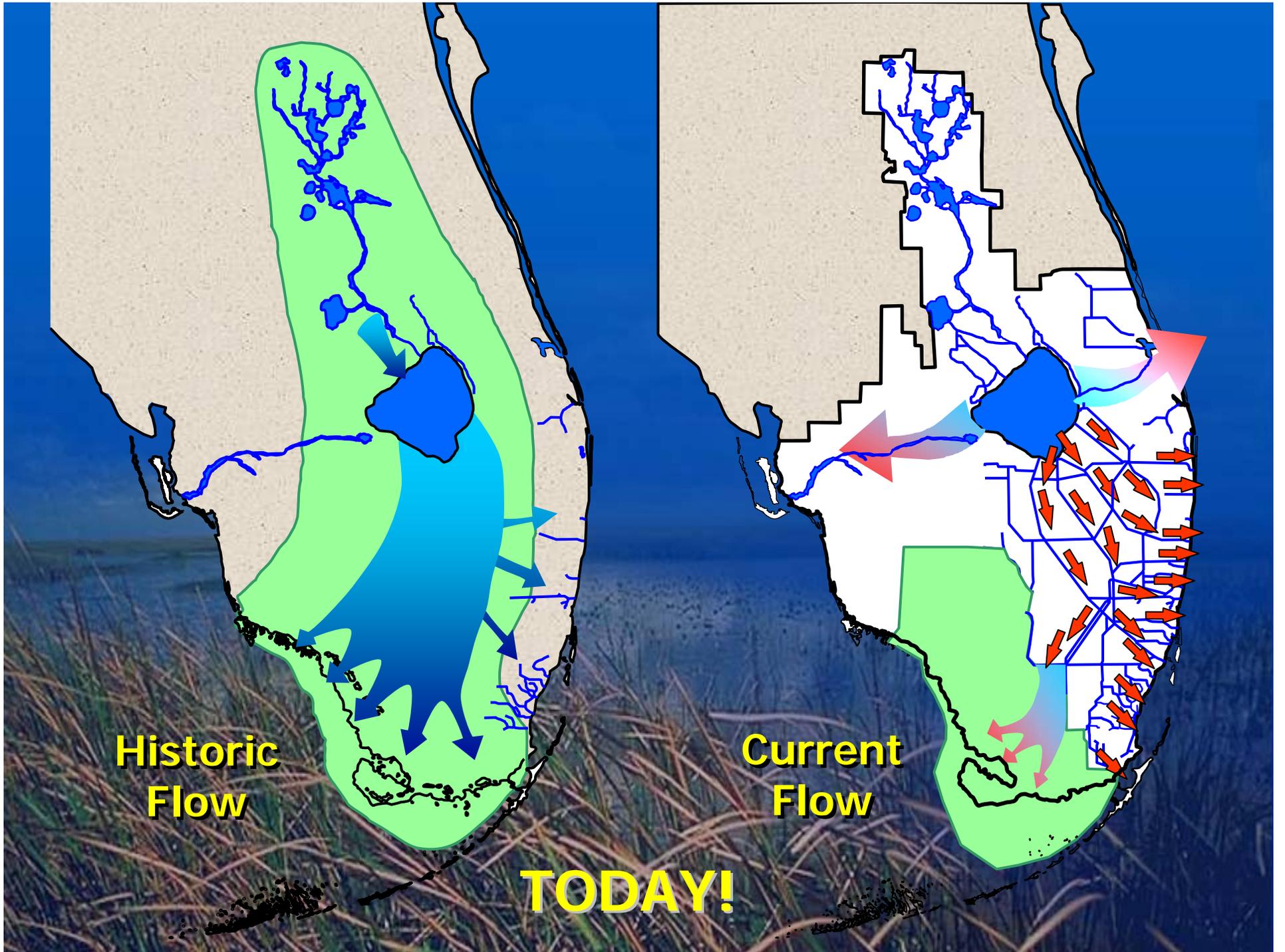
Agricultural Canals Dredged

**Everglades Drainage
District Works
1905-1928**

Central & Southern Florida Project (C&SF)

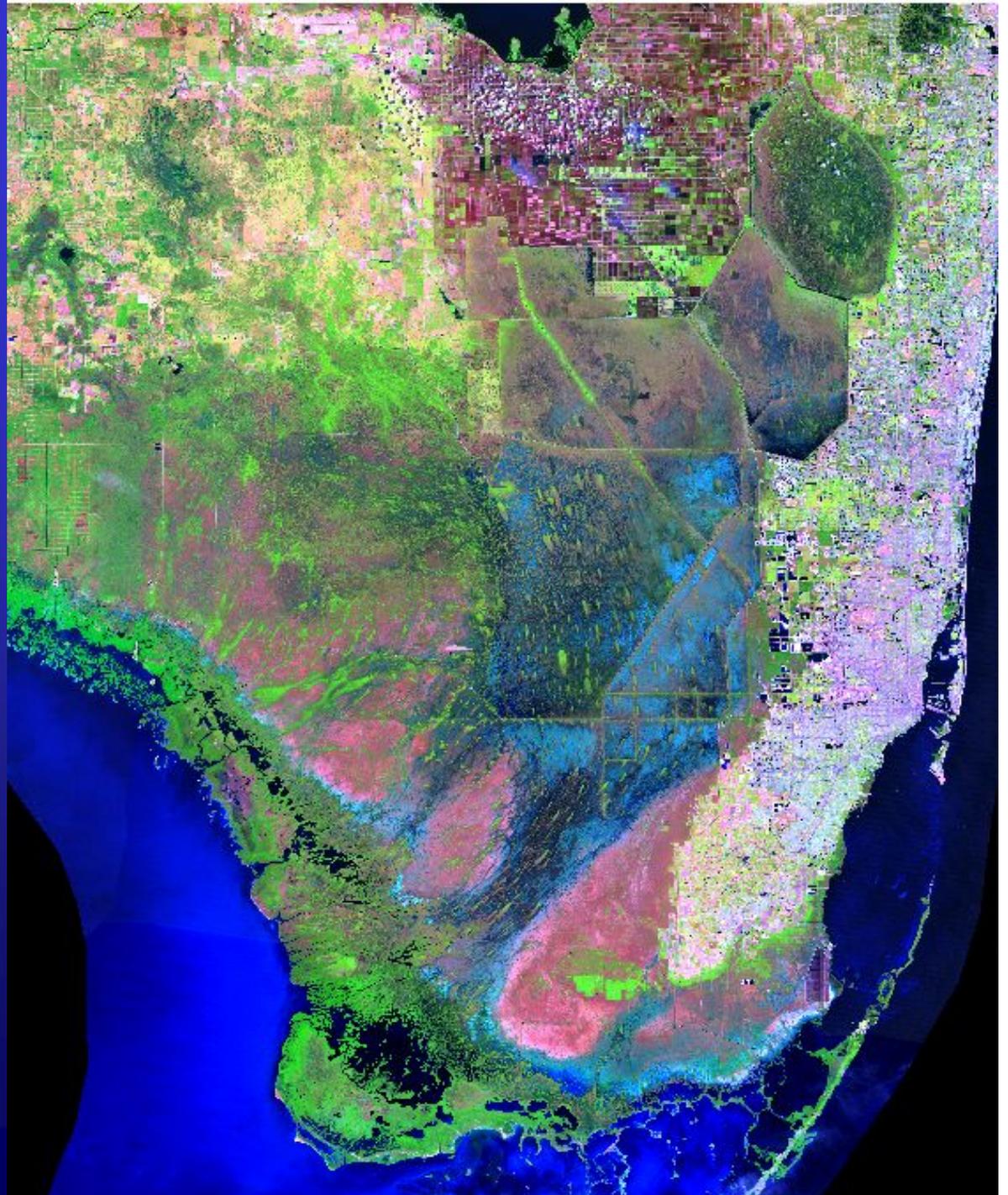


- **Authorization:** Flood Control Act of 1948 +
- **Purpose:** Flood Control, Water Conservation & Control, Salt Water Intrusion, F&W, Water Supply to ENP, FL Bay/FL Keys, & Environmental Restoration
- **Features:** 46 bridges, 10 locks, 670 miles of canals, 809 miles of levees, 130 control & diversion structures, & 16 pump stations
- **Project Cost:** \$2.9B
- **Cost Share:** Varies
- **Local Sponsor:** Various

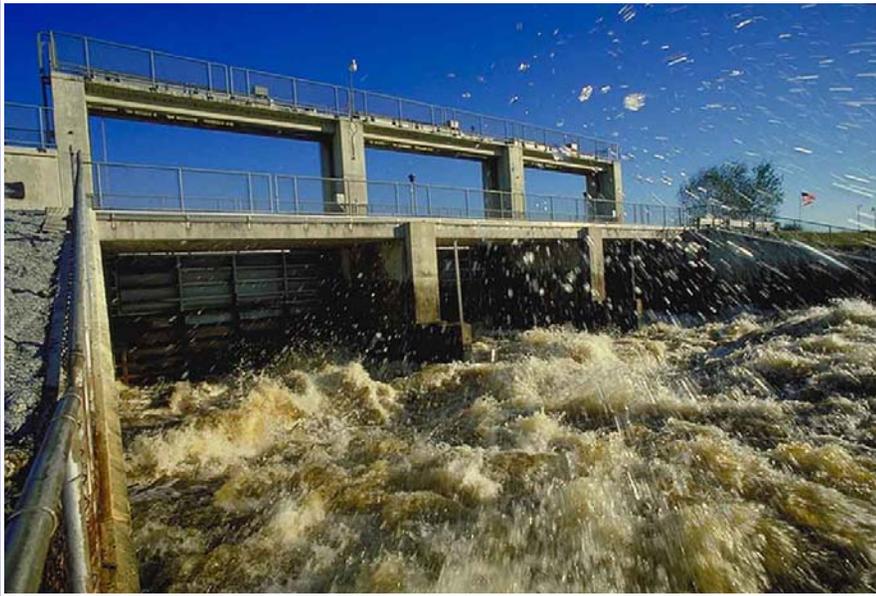


Current Conditions

- Greatly altered landscape
- Flow interrupted by canals and levees
- Timing and distribution of flow changed



Problems: Water Quantity



Problems: Timing & Distribution



Problems: Water Quality





**Expanding population
with demands for land,
flood control, and
water Supply**



Ever Changing Needs and Priorities

**Flood Control
Water Supply
Economic Growth
Transportation
Tourism
Recreation
Environmental Protection
Restoration**

CERP is all about Getting The Water Right

Quantity

Quality

Q

Q

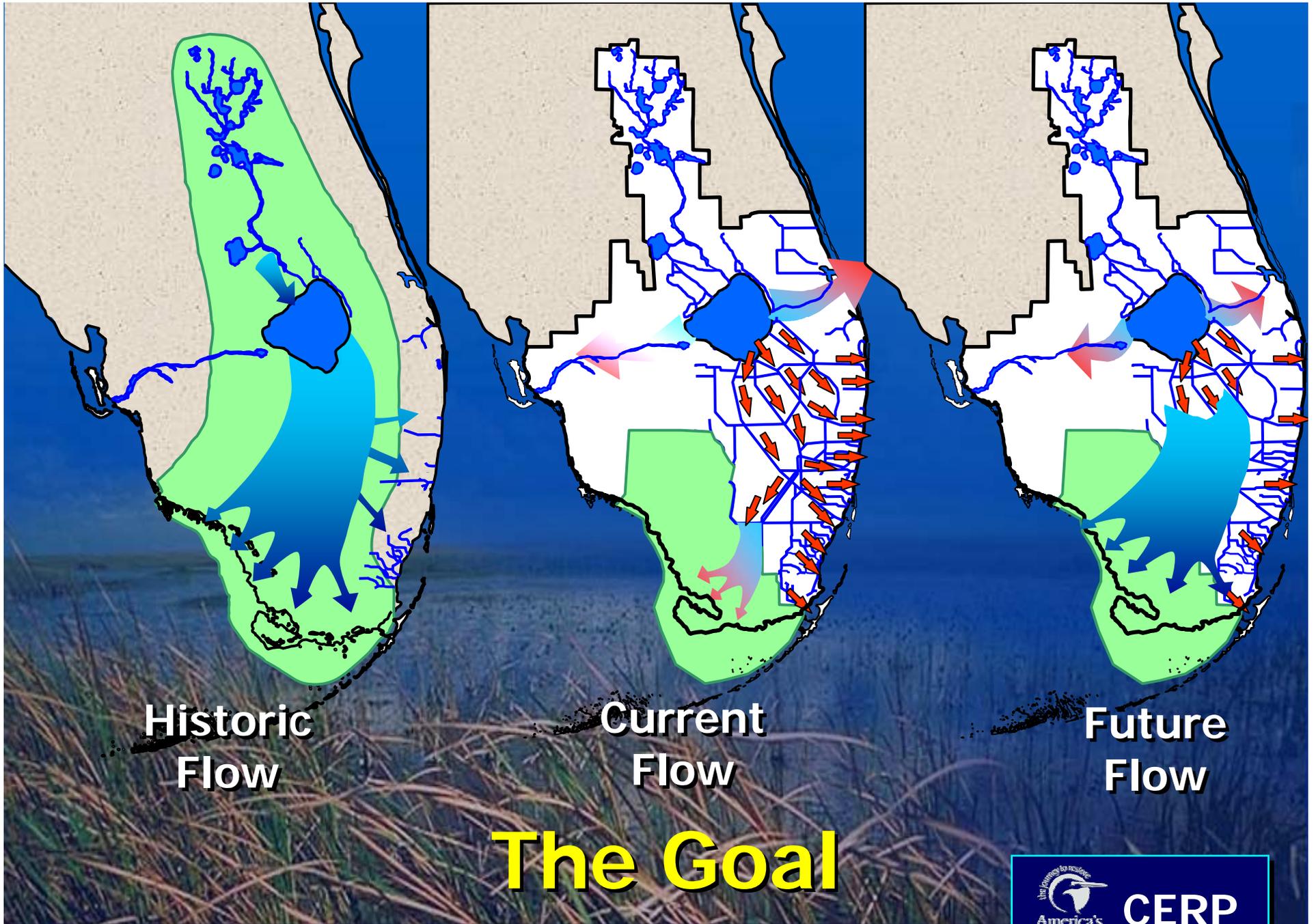
T

D

Timing

Distribution





**Historic
Flow**

**Current
Flow**

**Future
Flow**

The Goal

Where it all Starts!



KISSIMMEE RIVER, FLORIDA

Kissimmee Basin

- Challenges
 - Rapid Growth and Development
 - Long term water management

Lake Okeechobee



US Army Corps
of Engineers ®

Lake Okeechobee Basin

- Challenges
 - Persistent High Lake Levels
 - Sediments
 - Herbert Hoover Dike

St Lucie Basin

- Challenges
 - Peak Discharges from Lake
 - Water quality
 - Local Runoff
 - Continuing Growth

Caloosahatchee Basin

- Challenges

Everglades Agricultural Area

- Challenges

Upper East Coast Basin

- Challenges

Lower East Coast Basin

- Challenges

Lower Southwest Coast Basin

- Challenges

Central Everglades Basin

- Challenges

Everglades National Park and Lower Basin

- Challenges

Florida Keys

- Challenges

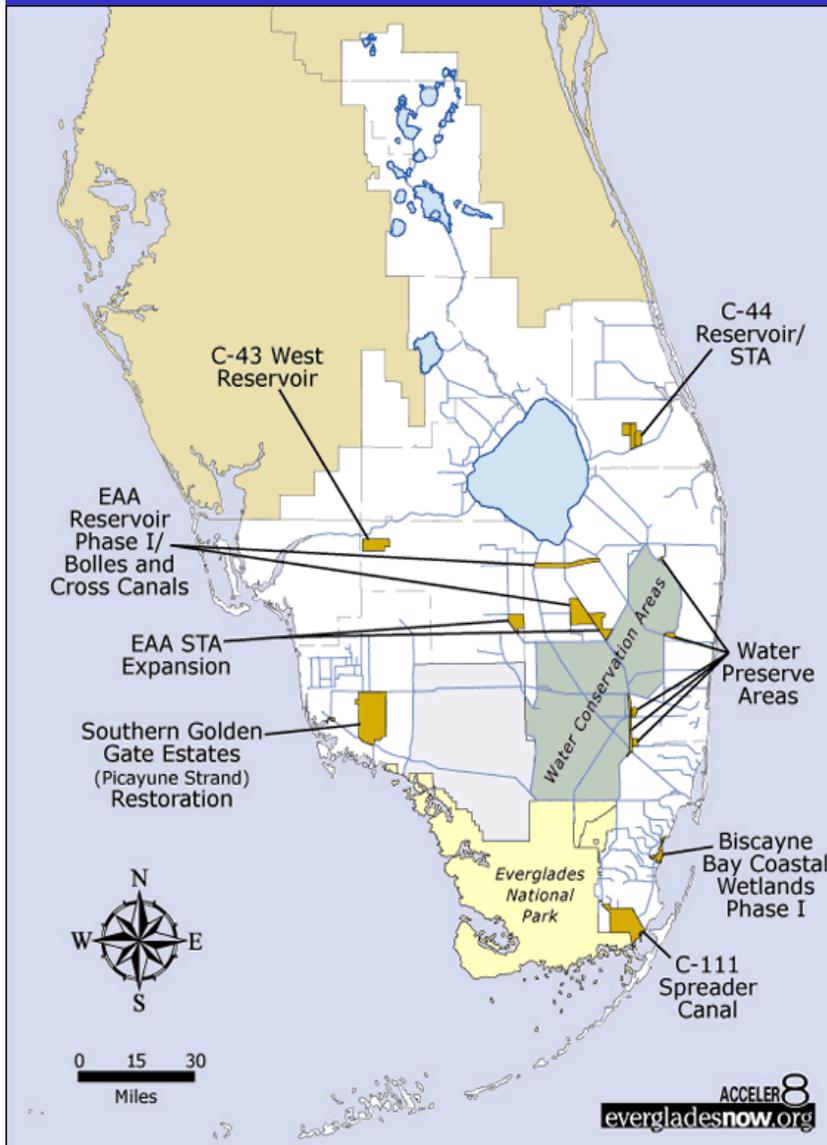
Program Challenges



State of Florida Accelerate Program

Challenges

- Linkage to Federal Plan
- Linkage to existing C&SF
- The 404 Permit Challenge



Cost Sharing

The Plan

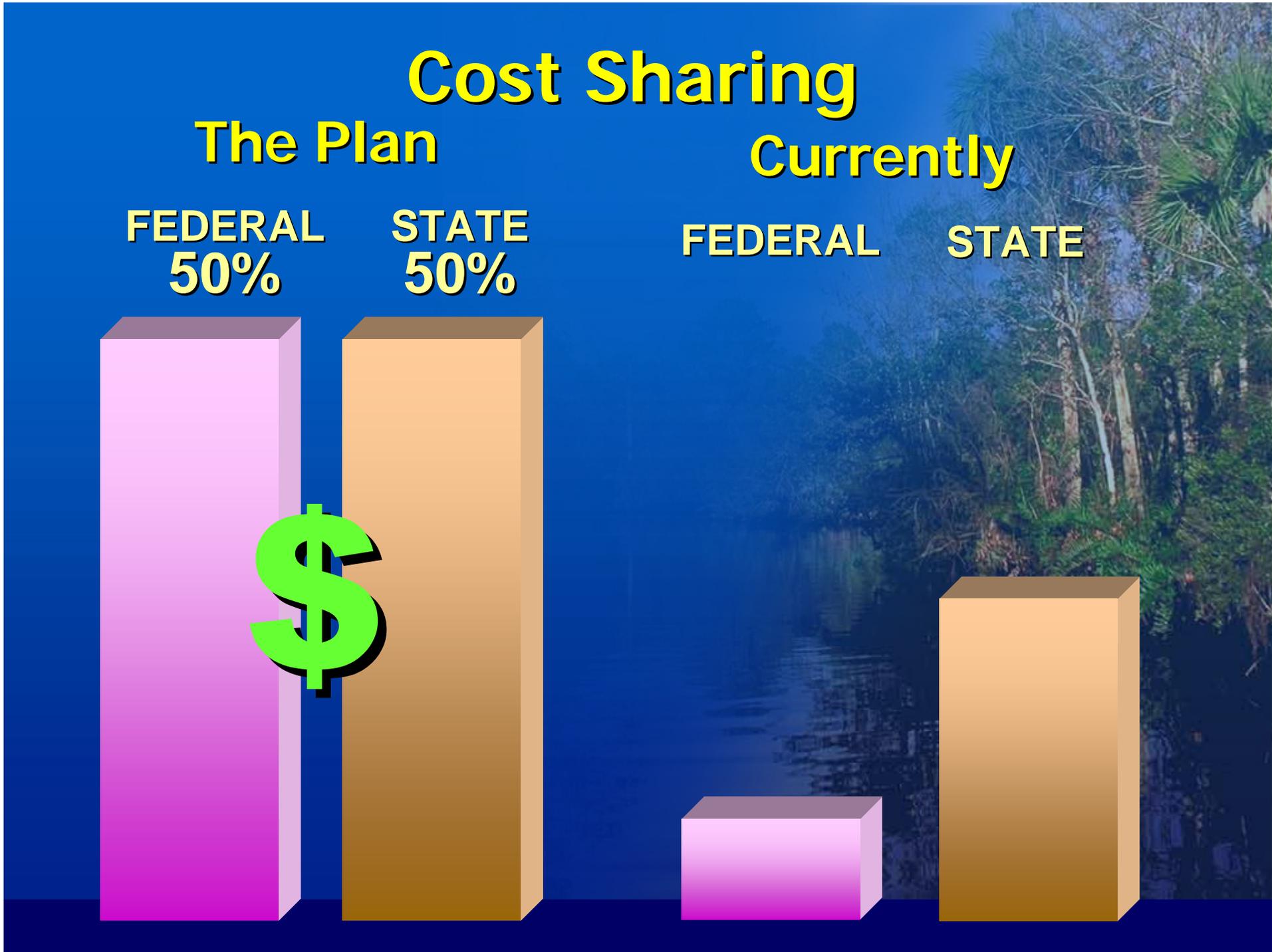
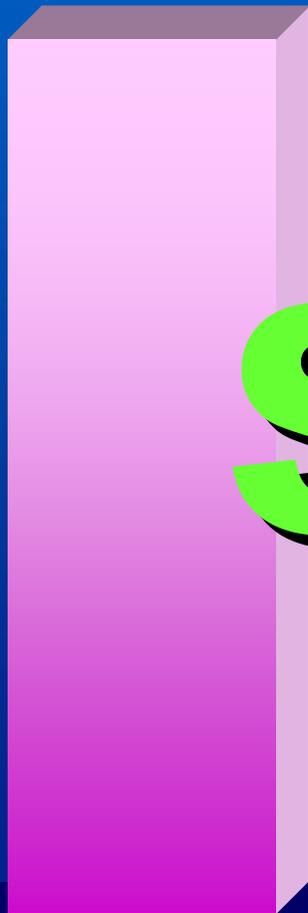
Currently

FEDERAL
50%

STATE
50%

FEDERAL

STATE



Water Quality

- Challenges

Recreation

A white egret stands in a marshy area with tall grasses and a body of water in the background. The egret is the central focus, with its long neck curved and its long, pointed beak facing right. The background shows a calm body of water under a clear blue sky, with a distant horizon line. The foreground is filled with tall, thin grasses, some green and some brown, suggesting a natural, undisturbed habitat.

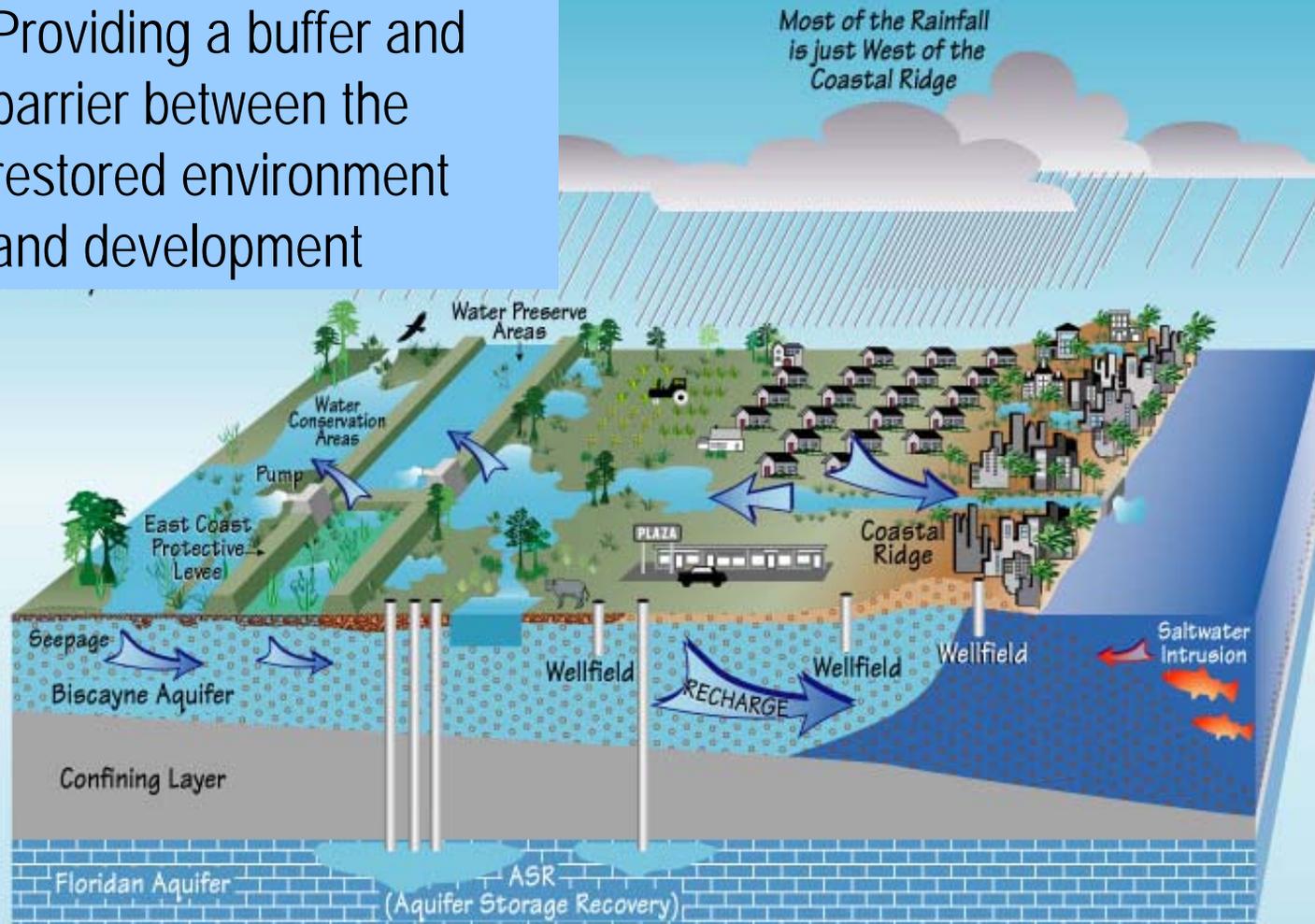
Challenges

- **Public Access**
- **Preserving Benefits**
- **Facilities**

Challenges

Maintaining the Balance

Providing a buffer and barrier between the restored environment and development



404 Permitting

- Challenges

Restoration Coordination and Verification

Challenges

- Can we stand the Truth
-
-



30+ years implementation

WRDA 2000

Timeline for Restoration

Challenges

- Funding for public projects.
- Biological response time
- Long term Monitoring
-

Communications

Challenges

- PDT's – Pubic Interaction?
-



Thank You?

