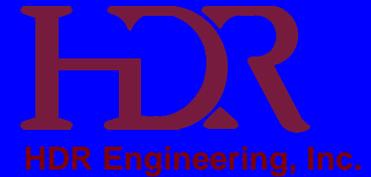


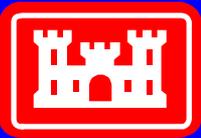
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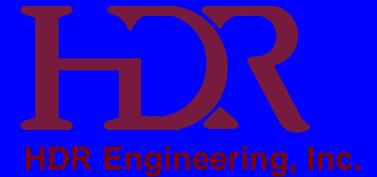
# **Modified Water Deliveries to Everglades National Park**

## **8.5 Square Mile Area (SMA) Draft GRR/SEIS Overview**

**April 12, 2000**

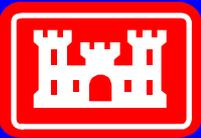


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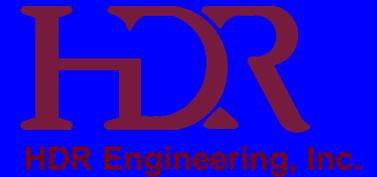


## Purpose of Document

- 1) Selection of LPA
- 2) USACE and DOI Decision Document

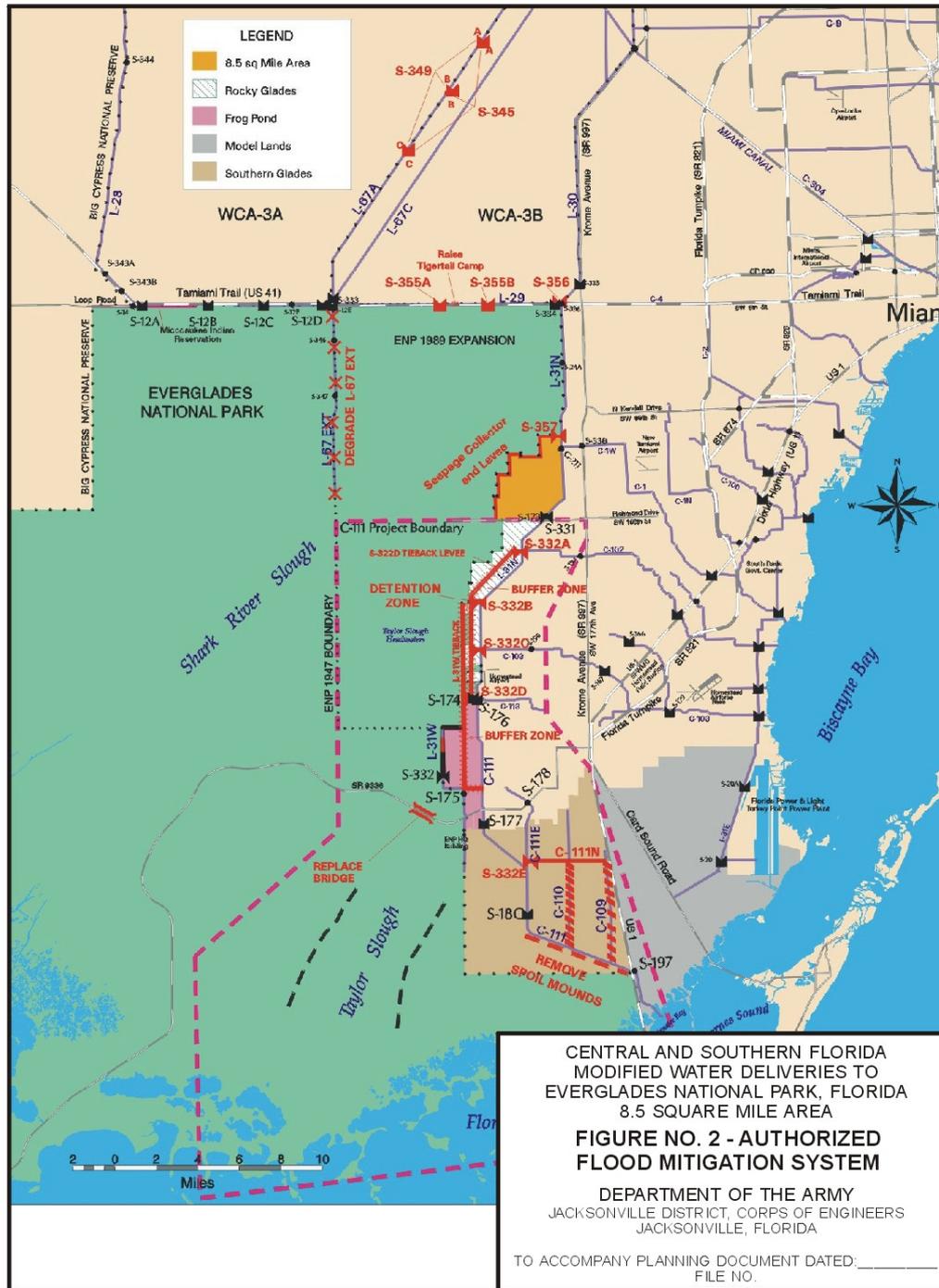


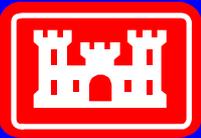
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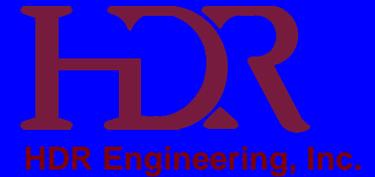
## History of MWD Project

- 1989 ENP Protection and Expansion Act
- 1992 GDM/EIS
- Approval of GDM
- Record of Decision





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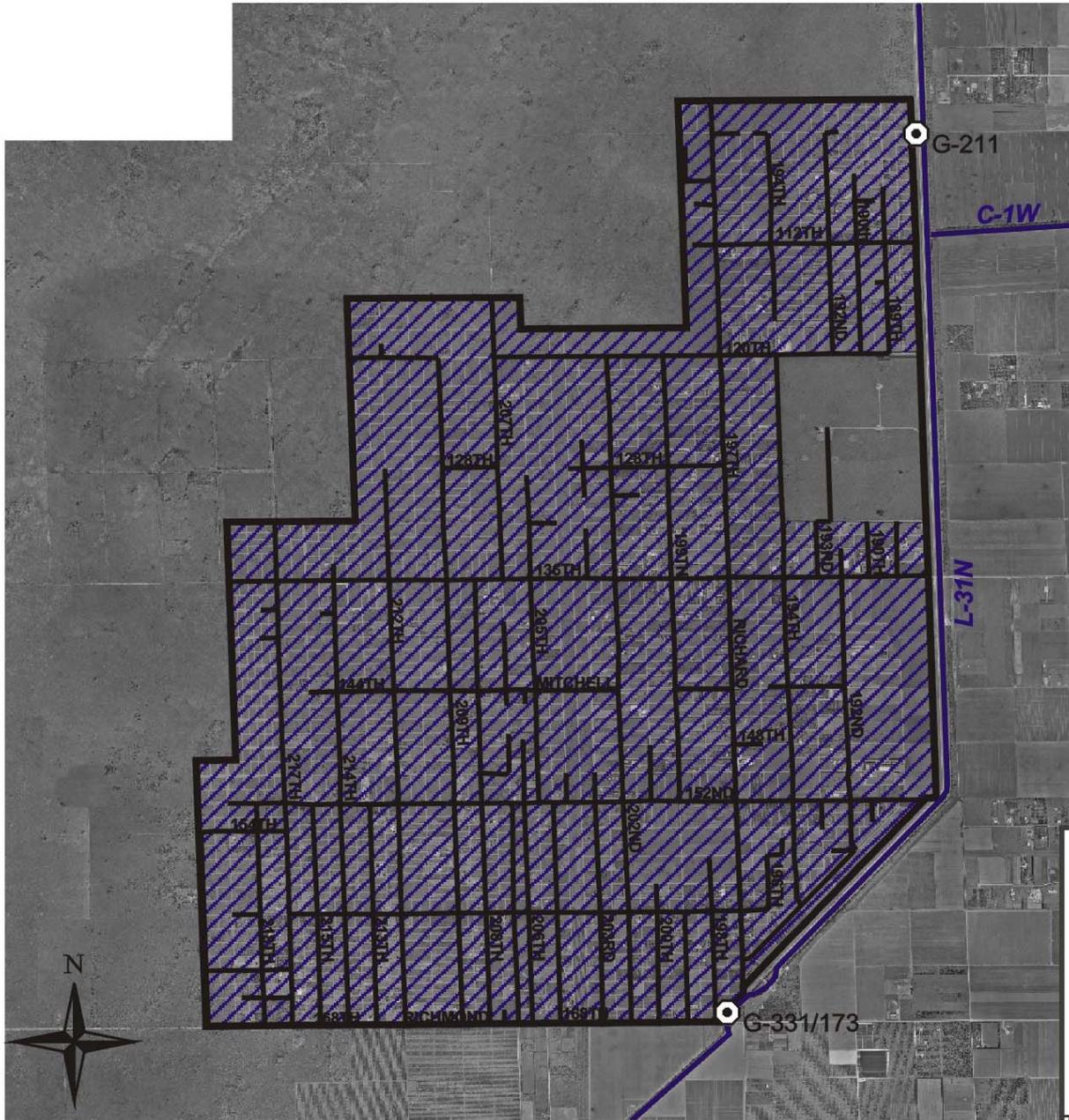
## Public Involvement

- Scoping Meetings
- Public Workshops
- Technical Teams Meetings
- Governing Board Meetings
- Working Group Meetings





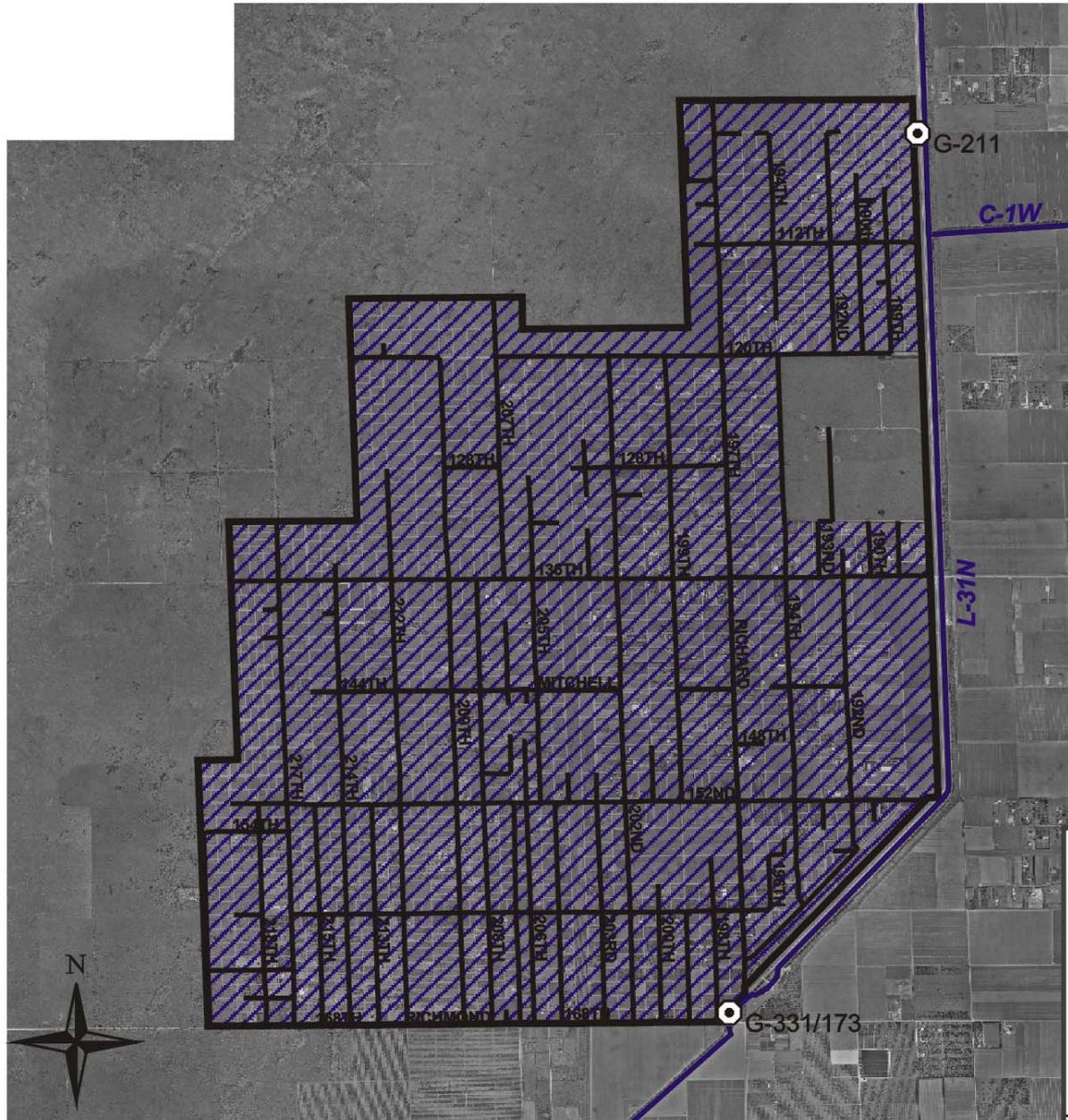




-  Landowner has choice of Flowage Easement, Buy-Out, or Life Estates
-  Existing Structure
-  Canals

**CENTRAL AND SOUTHERN FLORIDA  
 MODIFIED WATER DELIVERIES TO  
 EVERGLADES NATIONAL PARK, FLORIDA  
 8.5 SQUARE MILE AREA**  
**FIGURE 7 - ALTERNATIVE 4 LAND-  
 OWNER'S CHOICE LAND ACQUISITION**  
 DEPARTMENT OF THE ARMY  
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
 JACKSONVILLE, FLORIDA

TO ACCOMPANY PLANNING DOCUMENT DATED: \_\_\_\_\_  
 FILE NO: \_\_\_\_\_



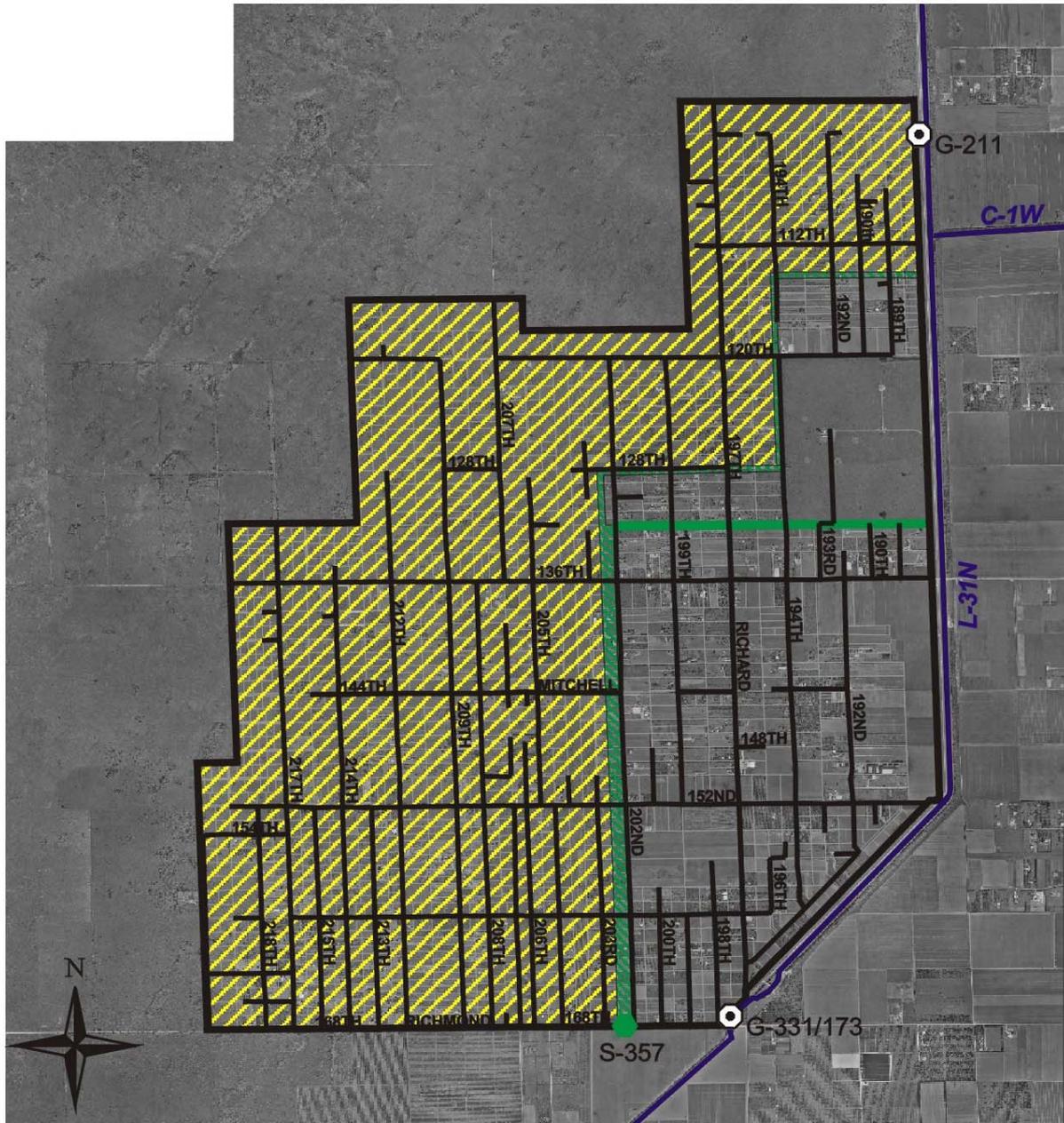
-  Total Buy-Out Area
-  Existing Structure
-  Canals

CENTRAL AND SOUTHERN FLORIDA  
 MODIFIED WATER DELIVERIES TO  
 EVERGLADES NATIONAL PARK, FLORIDA  
 8.5 SQUARE MILE AREA

**FIGURE 8 - ALTERNATIVE 5  
 TOTAL BUY-OUT PLAN**

DEPARTMENT OF THE ARMY  
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
 JACKSONVILLE, FLORIDA

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 FILE NO: \_\_\_\_\_



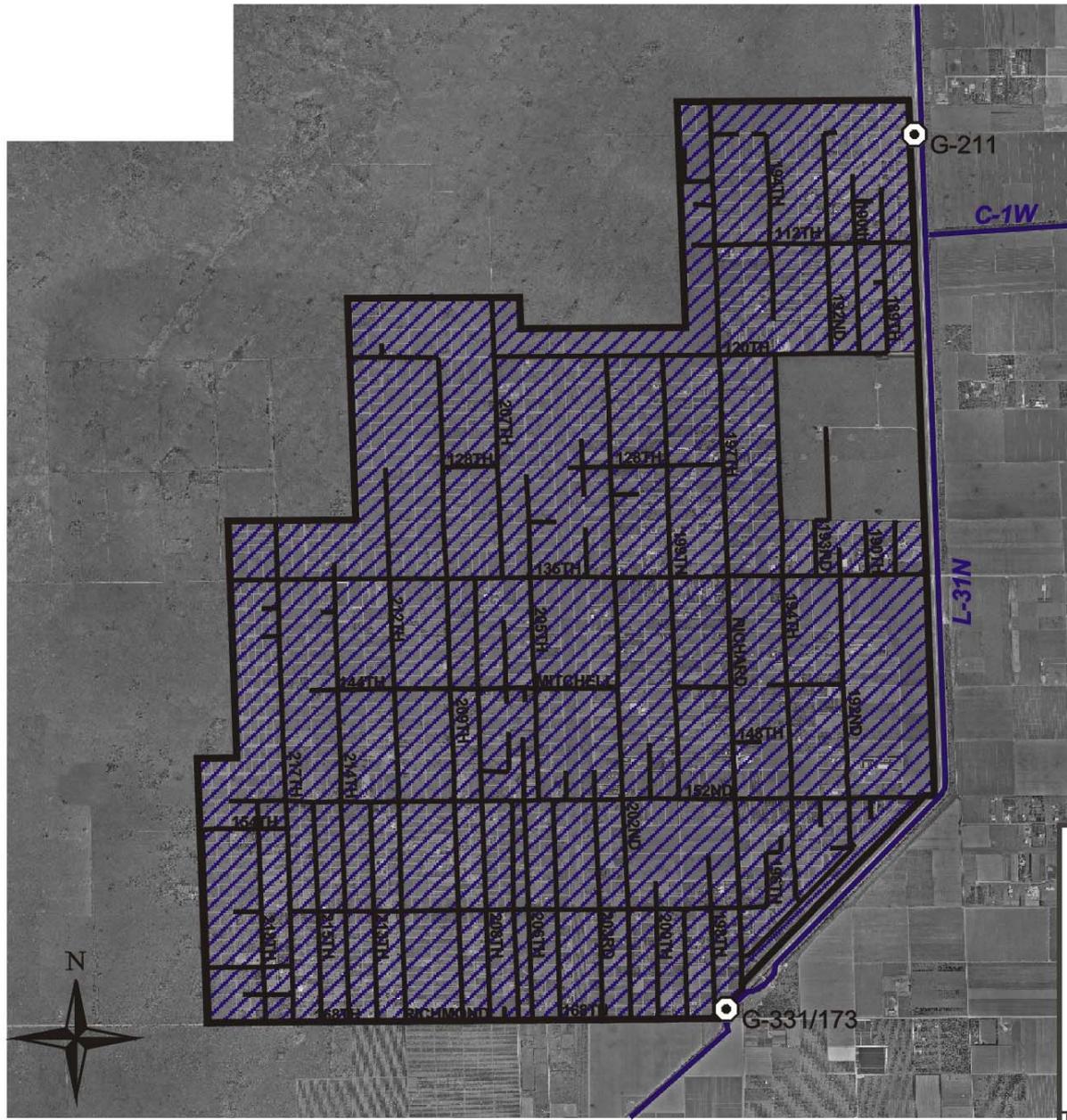
-  Levees and Seepage Canal
-  Buy-Out Area
-  Proposed Structure
-  Existing Structure
-  Canals
-  Proposed Canal

CENTRAL AND SOUTHERN FLORIDA  
 MODIFIED WATER DELIVERIES TO  
 EVERGLADES NATIONAL PARK, FLORIDA  
 8.5 SQUARE MILE AREA

**FIGURE 9 - ALTERNATIVE 6B  
 WESTERN BUFFER PLAN**

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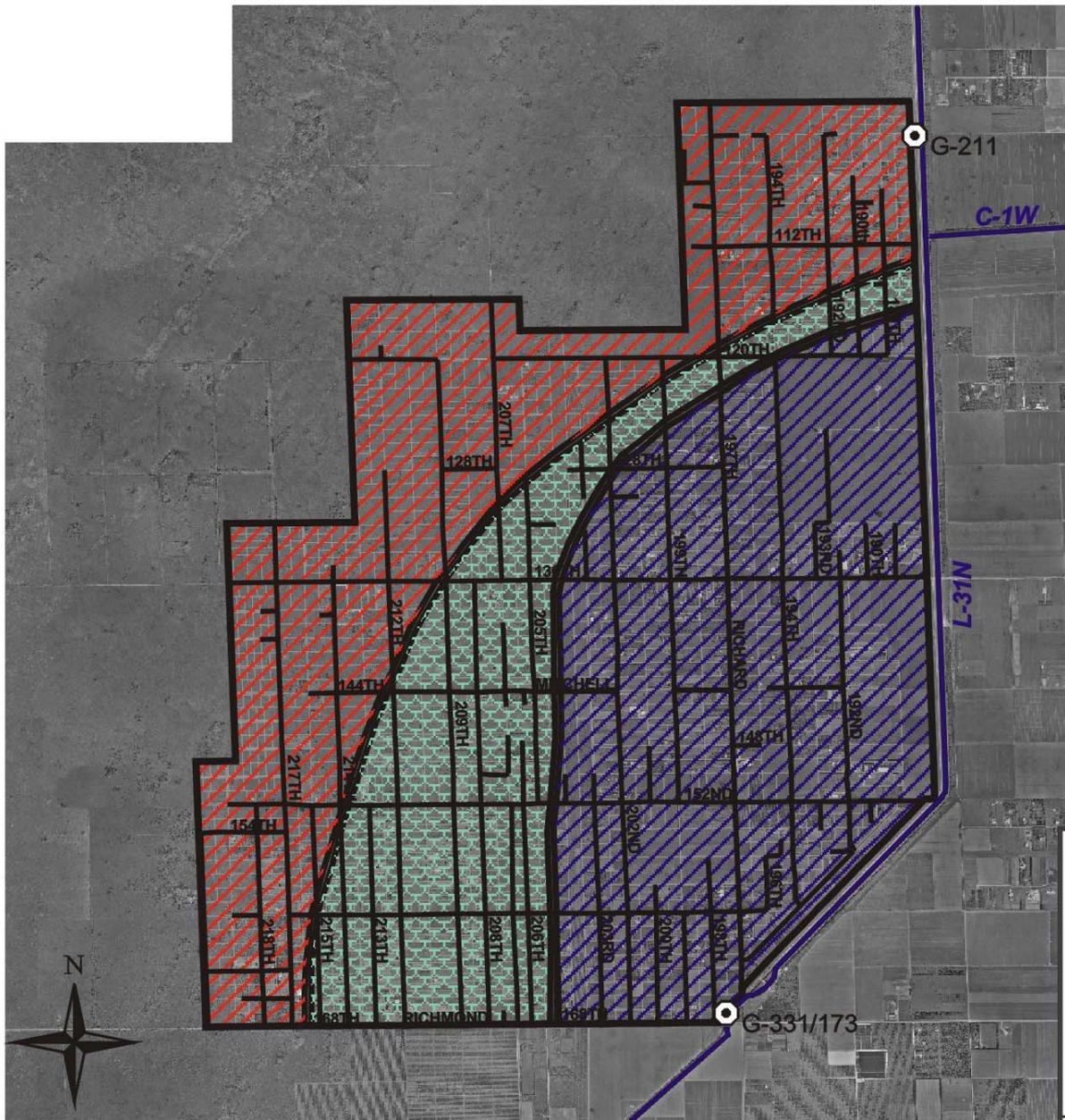
-  Area of Raised - Flood Free Roads
-  Existing Structure
-  Canals

CENTRAL AND SOUTHERN FLORIDA  
 MODIFIED WATER DELIVERIES TO  
 EVERGLADES NATIONAL PARK, FLORIDA  
 8.5 SQUARE MILE AREA

**FIGURE 10 - ALTERNATIVE 7  
 RAISE ALL ROADS PLAN**

DEPARTMENT OF THE ARMY  
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
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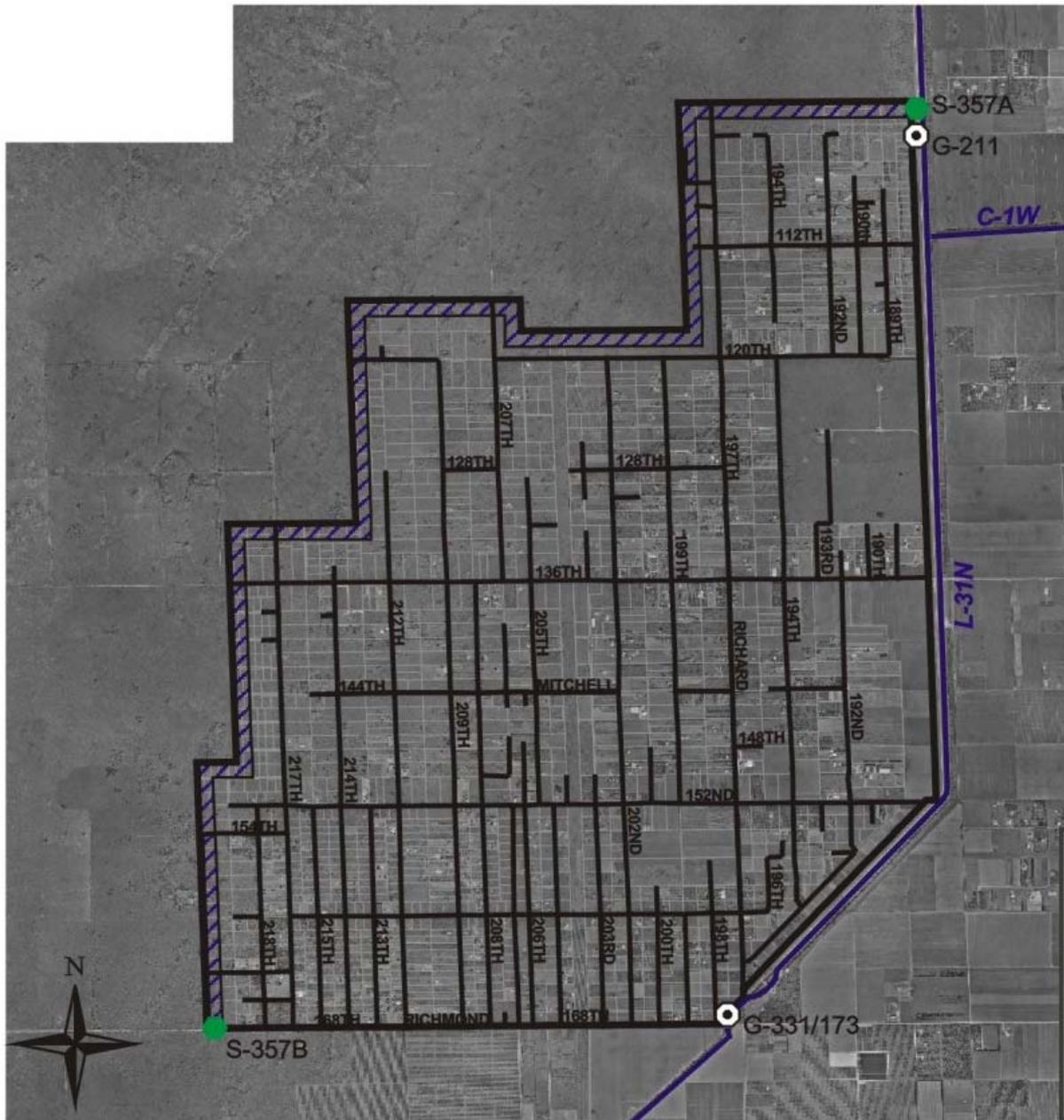
-  Levees
-  Buy-Out Area
-  Floodway/Swale
-  Flood Mitigation
-  Existing Structure
-  Canals

CENTRAL AND SOUTHERN FLORIDA  
 MODIFIED WATER DELIVERIES TO  
 EVERGLADES NATIONAL PARK, FLORIDA  
 8.5 SQUARE MILE AREA

**FIGURE 11 - ALTERNATIVE 8A  
 FLOW-WAY PLAN**

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 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
 JACKSONVILLE, FLORIDA

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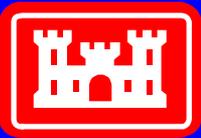
-  Levees and Seepage Canal
-  Proposed Structure
-  Existing Structure
-  Canals

CENTRAL AND SOUTHERN FLORIDA  
 MODIFIED WATER DELIVERIES TO  
 EVERGLADES NATIONAL PARK, FLORIDA  
 8.5 SQUARE MILE AREA

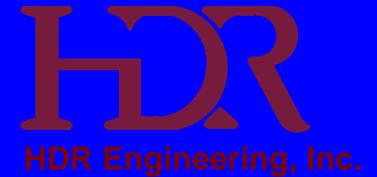
**FIGURE 12 - ALTERNATIVE 9**  
**ADAPTIVE REFINEMENT OF GDM PLAN**

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 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
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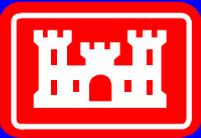


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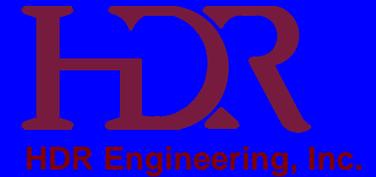


## Project Requirements:

*The results required for any  
alternative to be viable*

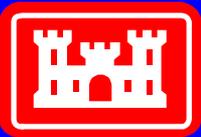


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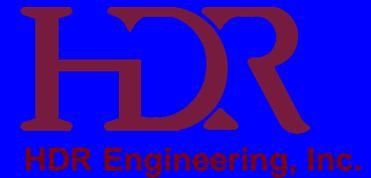


## Requirement No. 1: Higher stages in ENP

Modeling results showed stages for Alternatives 2 -9 were the same or higher than Alternative 1.

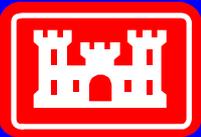


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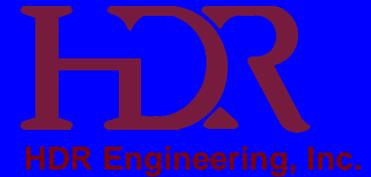


## Requirement No. 2: Mitigate for increased stages

- Structural (1, 2B, 6B, 9)
- Non-Structural (4,5)
- Structural supplemented by non-structural (3, 7, 8A)

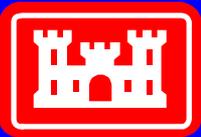


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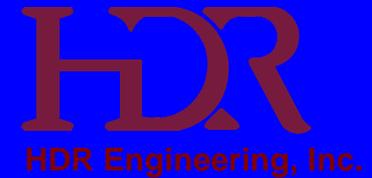


## Requirement No. 3: Permittable solution

- Wetlands - Benefits gained by increased stages in Everglades will offset losses to wetlands
- Water Quality - WQ Treatment handled by interior berm or STAs/buffers

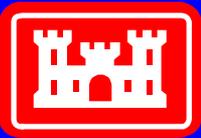


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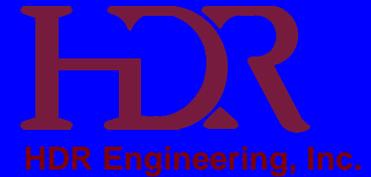


## Requirement No. 4: Impact to E&TS habitat

- CSSS, Wood stork, Snail kite
- No impact to existing habitat
- No adverse impact to listed species of concern

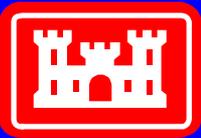


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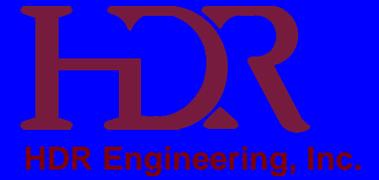


## Requirement No. 5: Impact to agricultural interests

- Limited impacts
- Not associated with 8.5 SMA
- Attributable to restoration flows
- Operational EIS for MWD and C-111



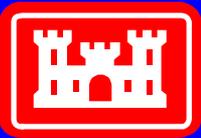
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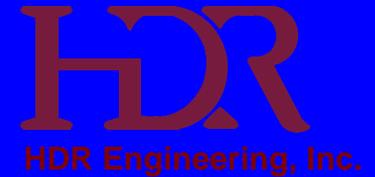
**Requirements**

**Objectives**

**Performance Measures**



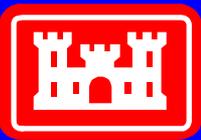
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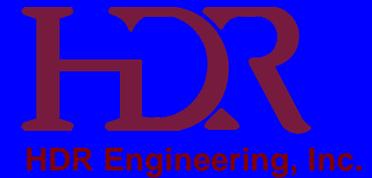
## **Project Comparison:**

*(Basis for determining performance)*

1. Federal Requirements
2. Impacts of Existing Conditions
3. LPA Comparison



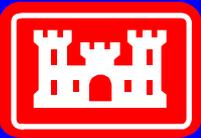
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## Project Objectives:

*(What we want to accomplish)*

1. Evaluate effects on **hydropatterns** in NESRS
2. Evaluate **impacts to the landowners** and residents of the 8.5 SMA
3. Analyze **cost effectiveness**
4. Analyze effects to **ecological functions**
5. Evaluate effects on **E&TS Habitat**
6. Measure **compatibility with CERP and C-111** without impacting flood protection to Agricultural lands east of L-31N
7. Analyze impacts and costs associated with **time delays**

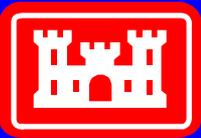


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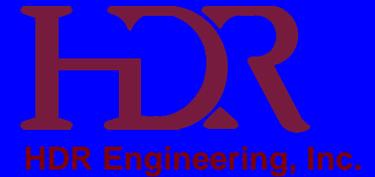


## **Objective No. 1 - Re-establish hydropatterns in NESRS to the maximum extent practicable**

- a. Water depths
- b. Effects on Seasonal variability
- c. Duration of continuous flooding
- d. Spatial extent of increased & decreased hydropatterns

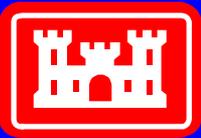


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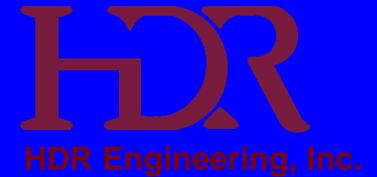


**Objective No. 2 - Minimize impacts to the landowners and residents of the 8.5 SMA resulting from implementation of the Modified Water Delivery Project**

- a. Impacts to business
- b. Number of residents relocated
- c. Number of acres of lost agricultural lands
- d. Number of unwilling sellers

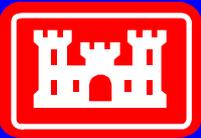


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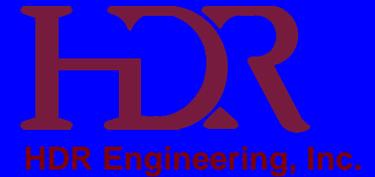


## Objective No. 3 - Analyze Cost Effectiveness

- a. Increase in overall project costs
- b. Secondary impact costs to Miami-Dade County/Residents

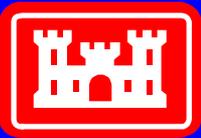


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## Objective No. 4 - Maximize Ecological Functions

- a. Increase/Decrease of spatial extent of jurisdictional wetlands inside ENP
- b. Increase/Decrease of spatial extent of wetlands inside 8½ SMA
- c. Short Hydroperiod Wetlands (Marl forming)
- d. Wetlands Rapid Assessment Score

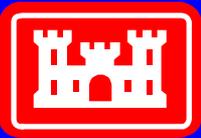


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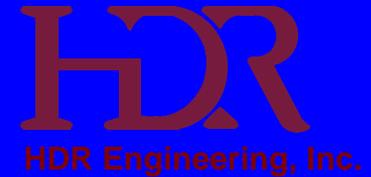


## **Objective No. 5 - Provide conditions favorable to Federal and State Listed Endangered Species survival**

a. Cape Sable Seaside Sparrow

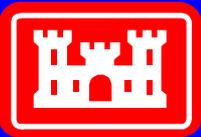


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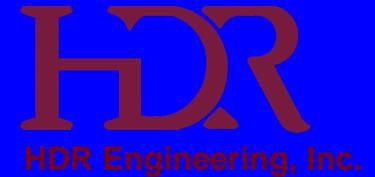


**Objective No. 6 - Assure compatibility with Comprehensive Everglades Restoration Plan and C-111 projects without adversely impacting current level of flood protection east of L-31N**

- a. Compatibility with CERP
- b. Compatibility with C-111
- c. Potential increase in stage or duration to agricultural lands east of L-31N

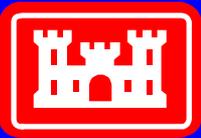


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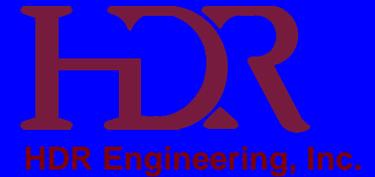


## **Objective No. 7 - Minimize impacts and costs associated with time delays in implementation of alternatives**

- a. Environmental and cultural resources
- b. Ability to meet implementation schedule
- c. Constructability delays
- d. Administrative requirements of alternatives



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## What's Next?

14 Apr - 30 May: Public Comment Period

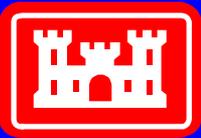
- LPA Selection
- Letter of Intent

30 Jun: Final document to public

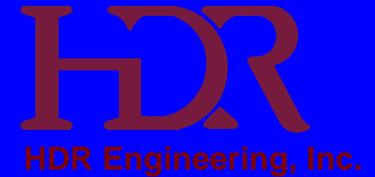
30 Jun - 31 Jul: Public Review

August 2000: Record of Decision

January 2001: PCA Amendment



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**Thank you for giving us an  
opportunity to present to you...**

**8.5 Square Mile Area (SMA)**