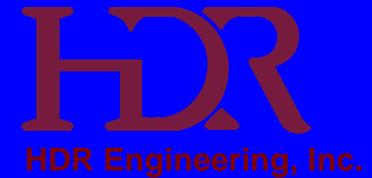


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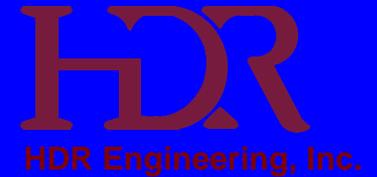
Modified Water Deliveries to Everglades National Park

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

April 26, 2000

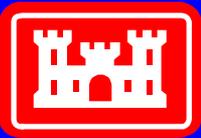


US Army Corps
of Engineers
Jacksonville District

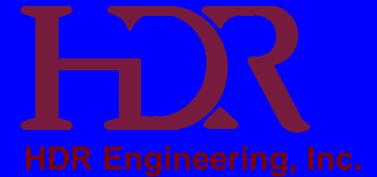


Purpose of Document

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

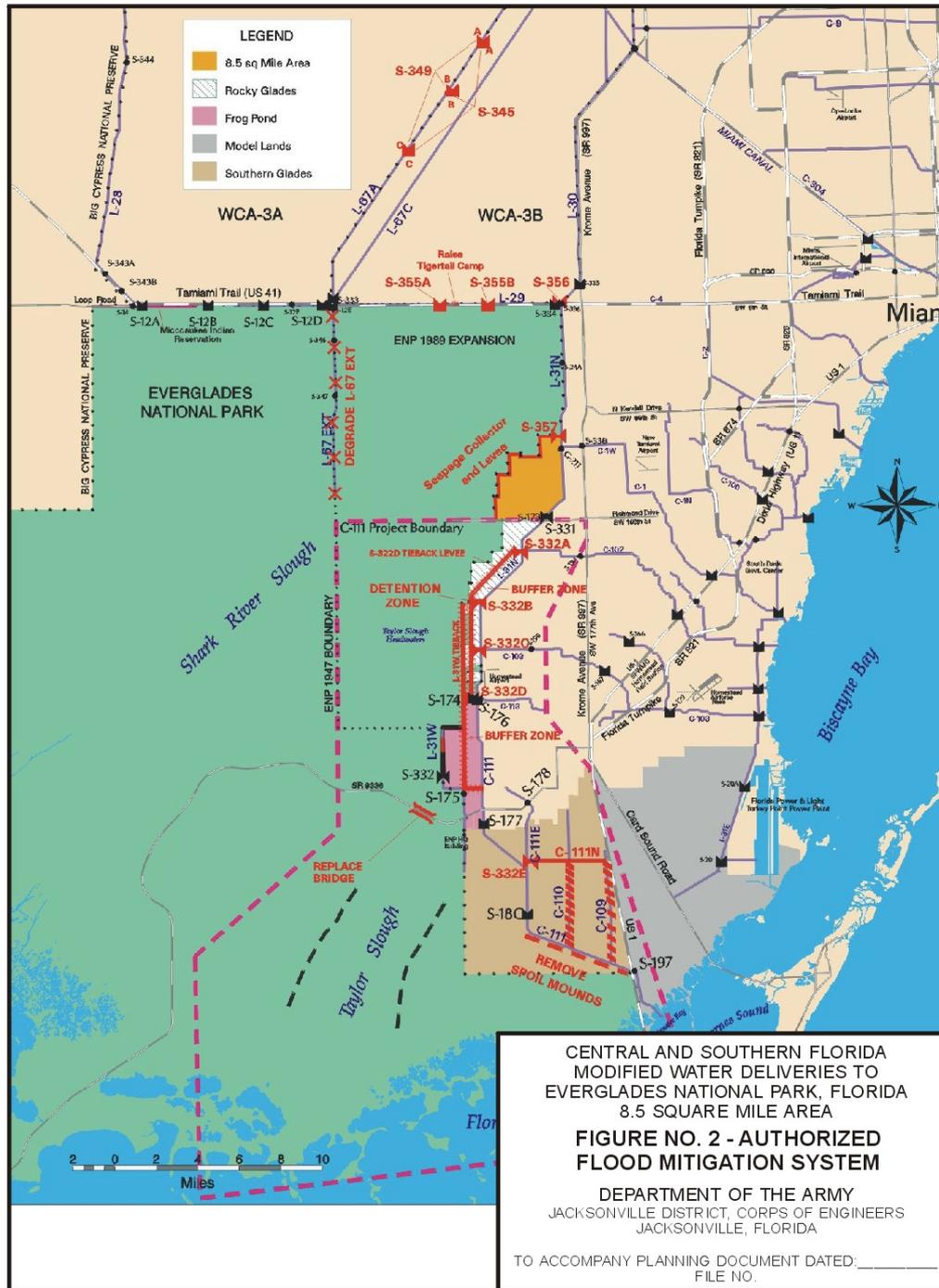


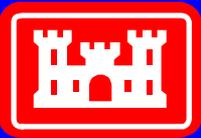
US Army Corps
of Engineers
Jacksonville District



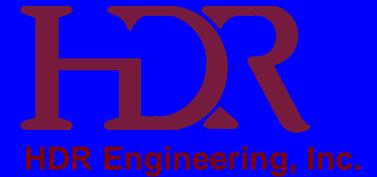
History of MWD Project

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





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of Engineers
Jacksonville District



Public Involvement

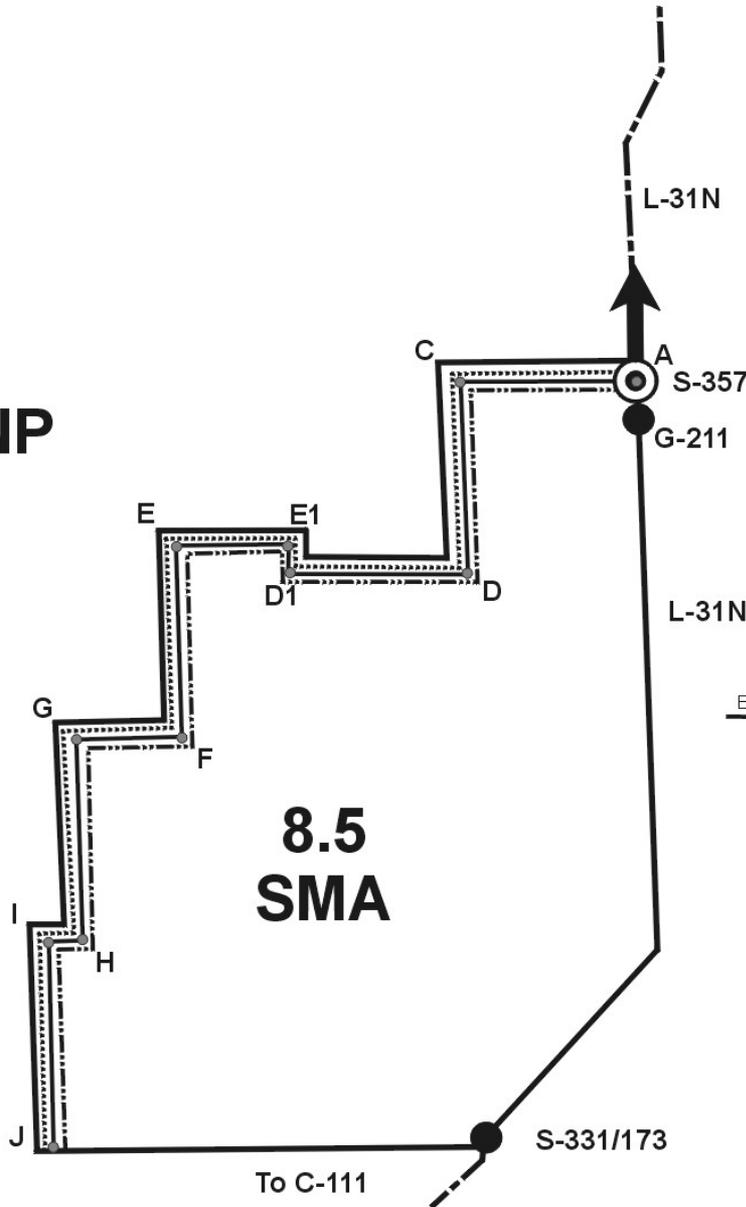
- Scoping Meetings
- Public Workshops
- Technical Team Meetings
- Governing Board Meetings
- Working Group Meetings



Not To Scale

ENP

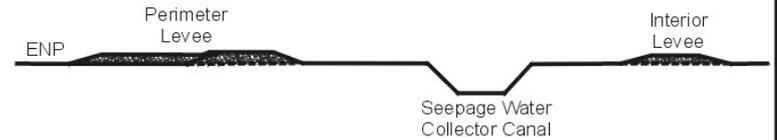
8.5
SMA



LEGEND

- Project Boundary
- - - - - Proposed Perimeter Levee
- Proposed Seepage Canal
- · - · - Proposed Interior Levee
- Existing Structure
- ⊙ Proposed Structure
- Segment Labels

NOTE: S-357 would discharge to L-31 North Canal, then water would be moved into L-29 Canal via S-356 (at Tamiami Canal).



Typical Section

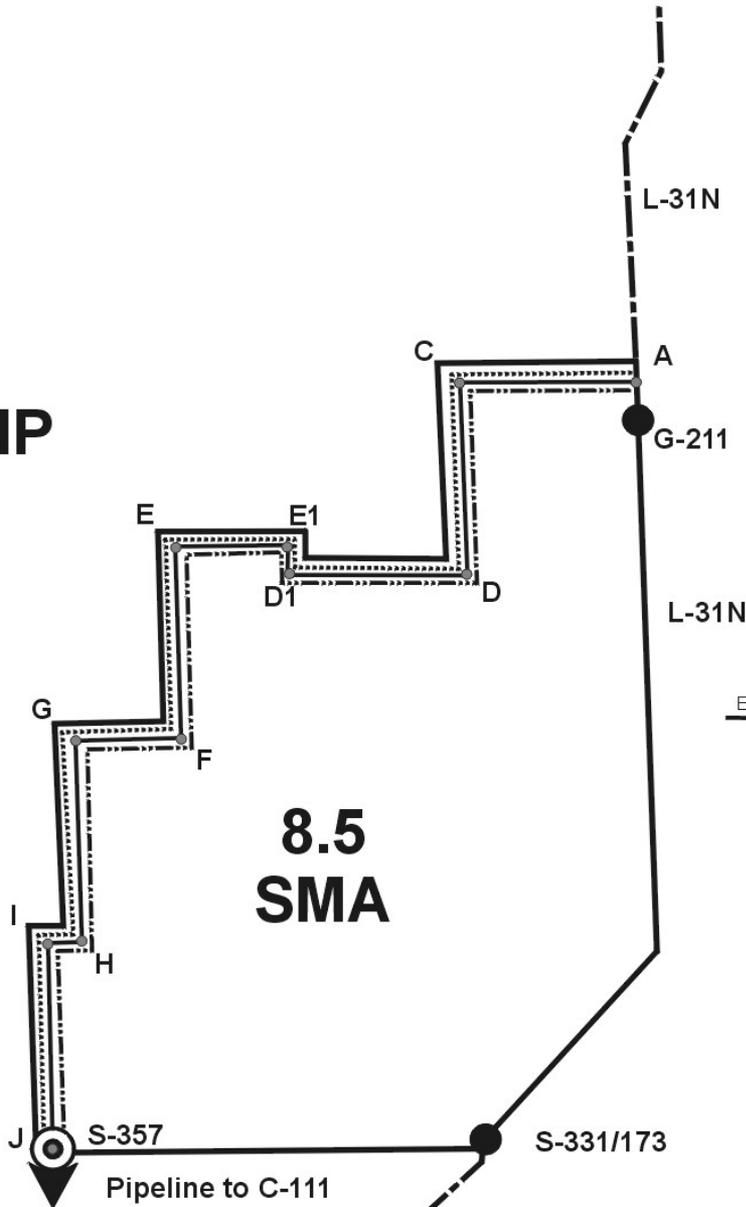
Alternative No. 1
Authorized GDM Plan



Not To Scale

ENP

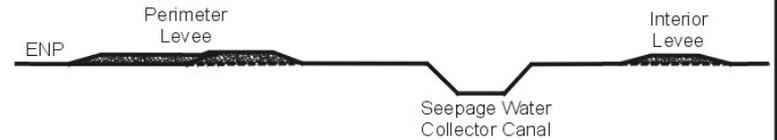
8.5
SMA



LEGEND

- Project Boundary
- Proposed Perimeter Levee
- Proposed Seepage Canal
- · - · - Proposed Interior Levee
- Existing Structure
- ⊙ Proposed Structure
- Segment Labels

NOTE: S-357 discharges into spreader canal 2000' south of 168th Street.



Typical Section

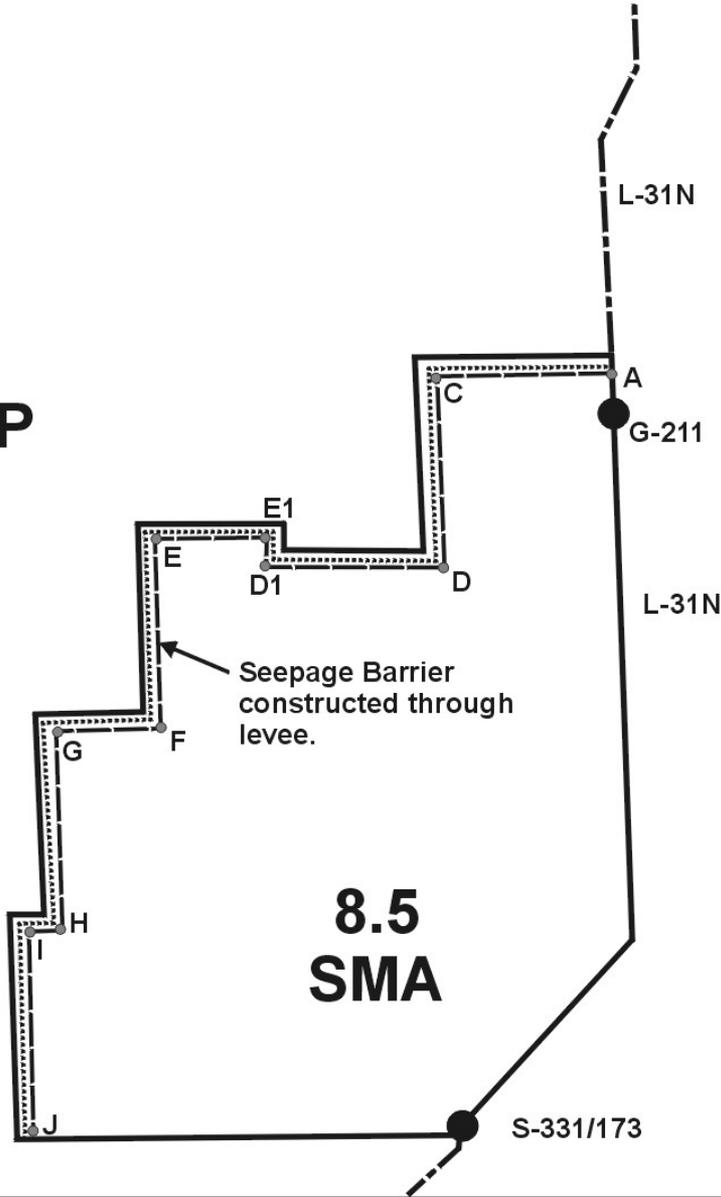
Alternative No. 2B
Modified GDM Plan



Not To Scale

ENP

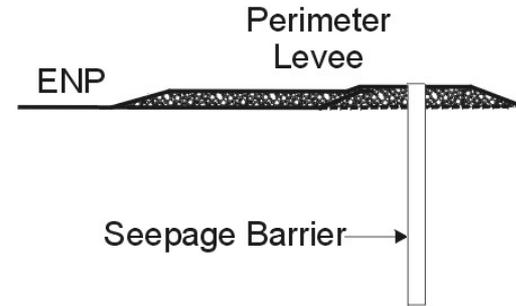
**8.5
SMA**



LEGEND

- Project Boundary
- - - Proposed Perimeter Levee
- - - Proposed Seepage Barrier
- Existing Structure
- Segment Labels

NOTE: Seepage Barrier would be set 50 to 70 feet below grade.



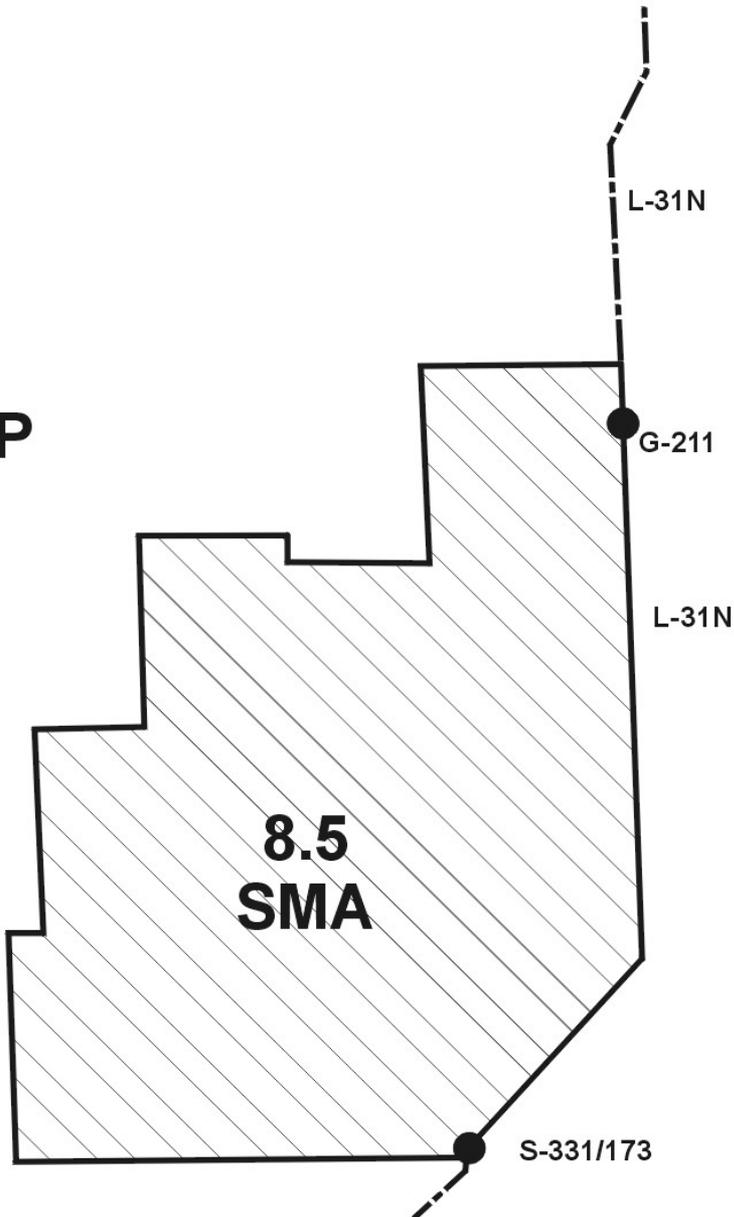
Typical Section

**Alternative No. 3
Deep Seepage Barrier
Plan**



Not To Scale

ENP



LEGEND

- Project Boundary
-  Landowner have choice of Flowage Easement, Buy-Out, or Life Estates
- Existing Structure

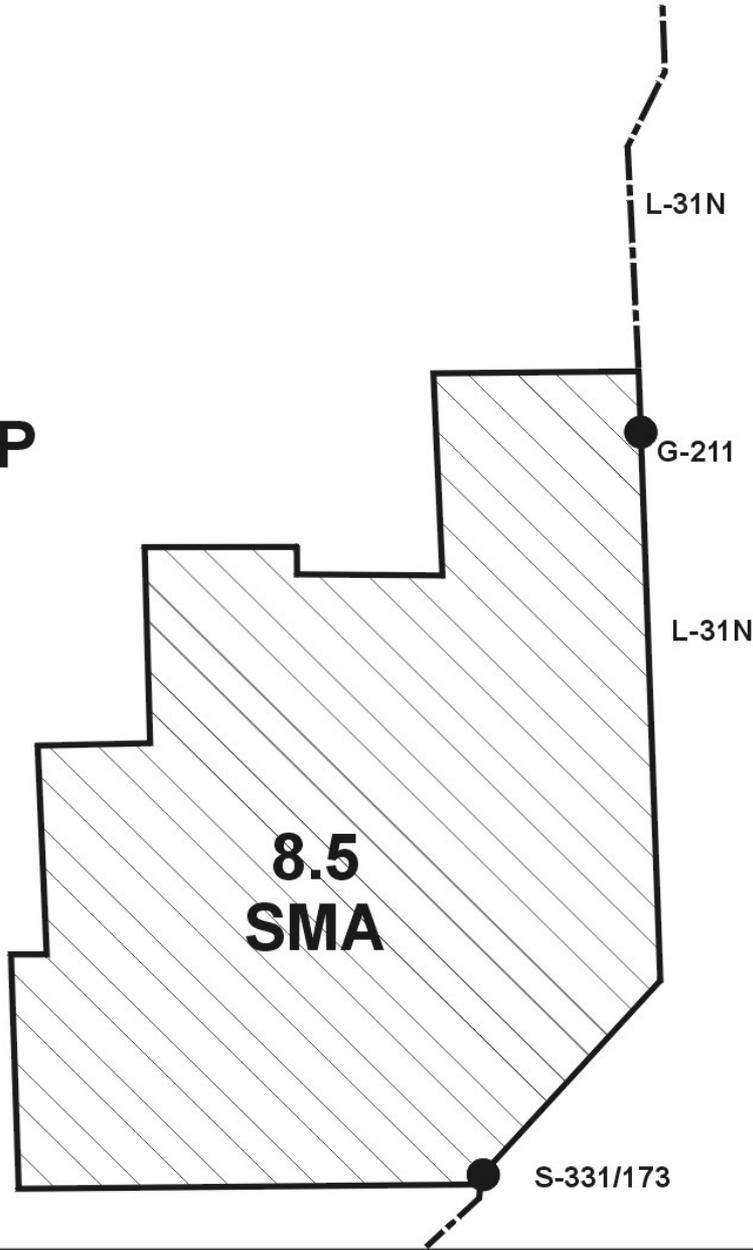
NOTE: Exact real estate requirements will be determined through further analysis.

Alternative No. 4
Landowner's Choice
Land Acquisition



Not To Scale

ENP



LEGEND

- Project Boundary
-  Proposed Buy-Out Areas
-  Existing Structure

NOTE: Overall management of the area has not been determined yet.

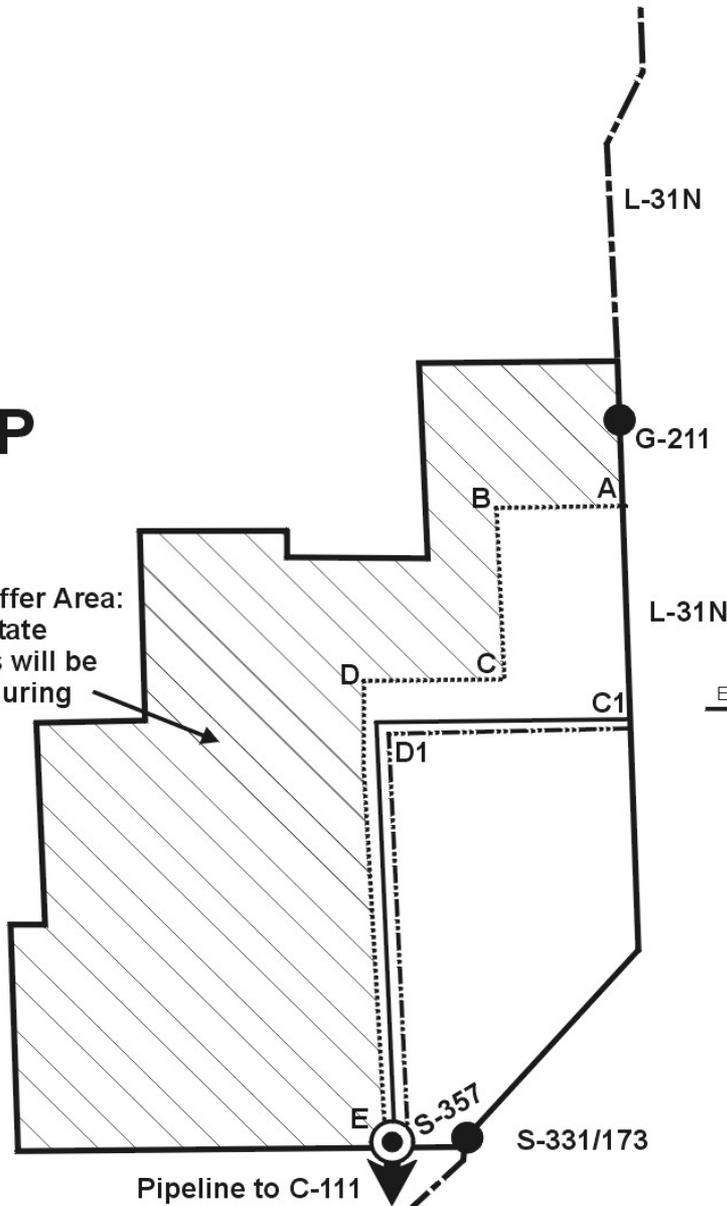
Alternative No. 5
Total Land Acquisition



Not To Scale

ENP

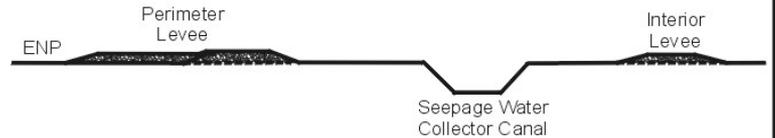
Proposed Buffer Area:
Exact real estate
requirements will be
determined during
design.



LEGEND

-  Project Boundary
-  Proposed Perimeter Levee
-  Proposed Seepage Canal
-  Proposed Interior Levee
-  Proposed Buy-Out Areas
-  Existing Structure
-  Proposed Structure

NOTE: Area west of SW 202nd Ave. would be utilized buffer. S-357 discharges into spreader canal 2000' south of 168th Street.



Typical Section

Alternative No. 6B Western Area As Buffer

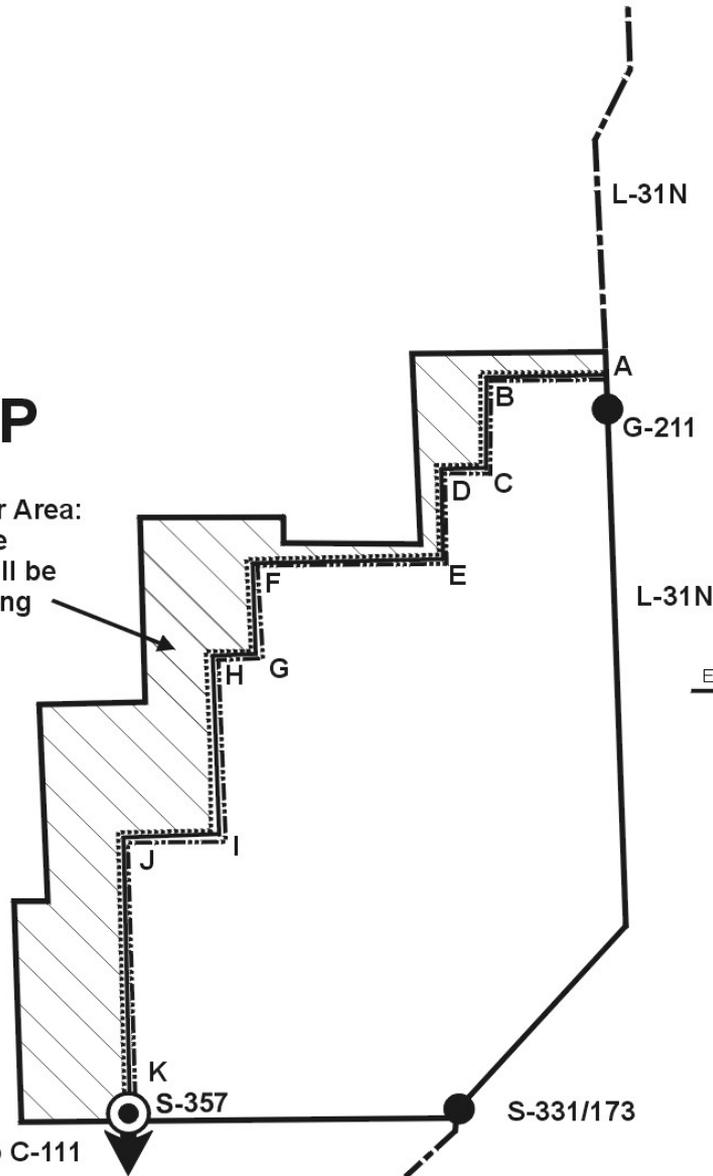


Not To Scale

ENP

Proposed Buffer Area:
Exact real estate
requirements will be
determined during
design.

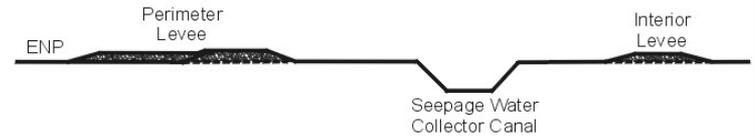
Pipeline to C-111



LEGEND

- Project Boundary
- Proposed Perimeter Levee
- Proposed Seepage Canal
- Proposed Interior Levee
- Proposed Buy-Out Areas
- Existing Structure
- Proposed Structure

NOTE: Area west of SW 202nd Ave. would be utilized buffer. S-357 discharges into spreader canal 2000' south of 168th Street.



Typical Section

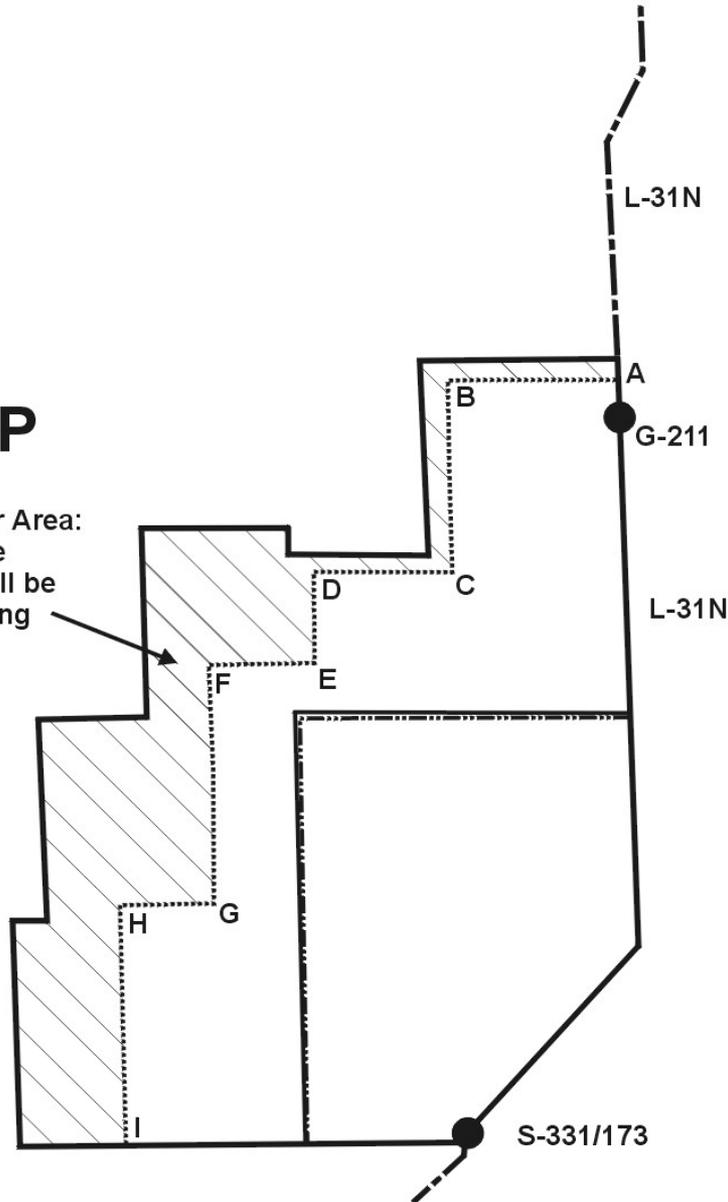
Alternative No. 6C Modified Buffer Plan



Not To Scale

ENP

Proposed Buffer Area:
Exact real estate
requirements will be
determined during
design.



LEGEND

-  Project Boundary
-  Proposed Perimeter Levee
-  Proposed Seepage Canal
-  Proposed Interior Levee
-  Proposed Buy-Out Areas
-  Existing Structure

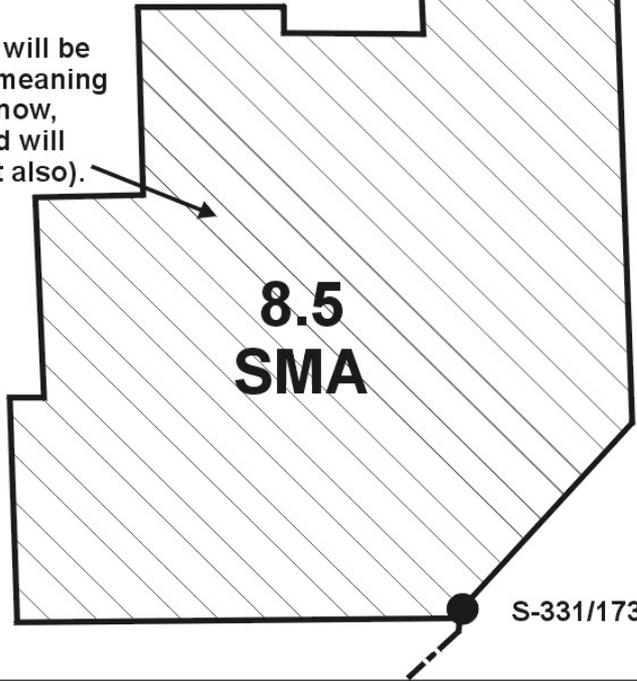
Alternative No. 6D
Modified Buffer Plan



Not To Scale

ENP

Road raisings will be done in-kind, meaning that if it's dirt now, the raised road will be similar (dirt also).



LEGEND

- Project Boundary
- ▨ Raise all area roads in-kind
- Existing Structure

NOTE: Interior Drainage/Seepage would be handled through flowage easements.

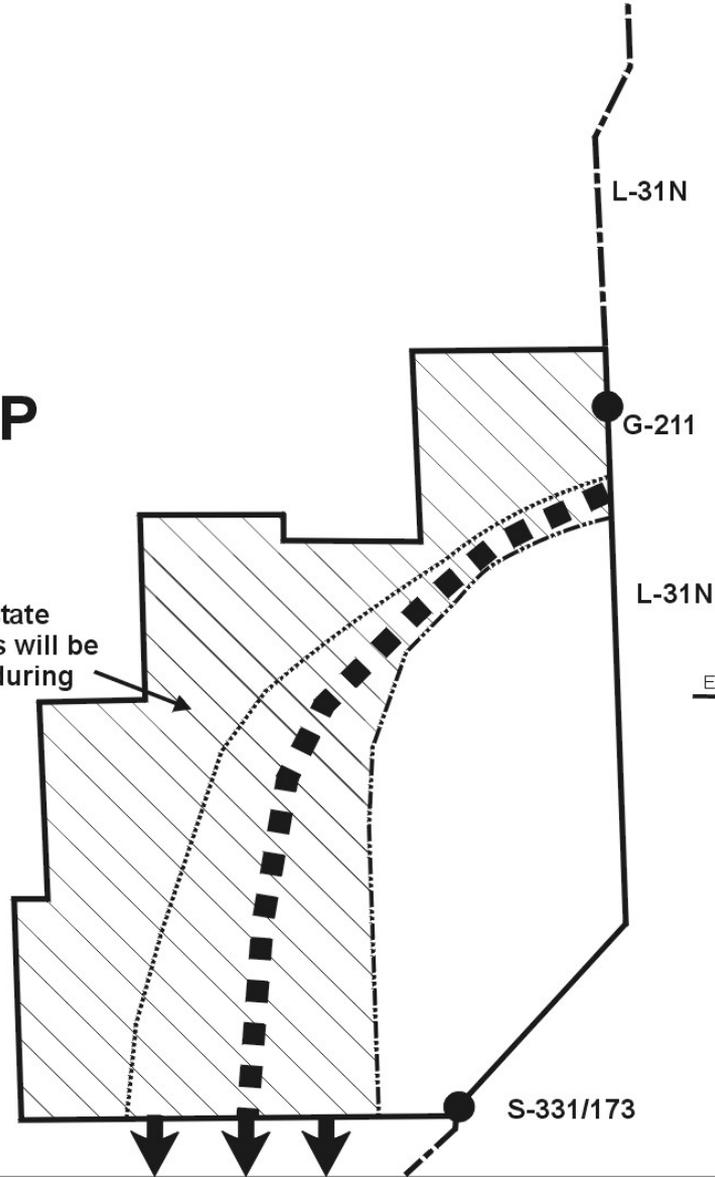
Alternative No. 7
Raise All Roads



Not To Scale

ENP

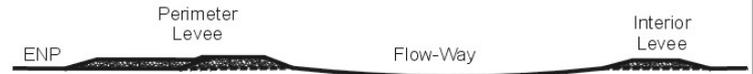
Buffer Area:
Exact real estate
requirements will be
determined during
design.



LEGEND

- Project Boundary
- Proposed Perimeter Levee
- Proposed Flow-Way
- Proposed Interior Levee
- Proposed Buy-Out Areas (Buffer)
- Existing Structure

NOTE: Area west and north of major levee would be used as flow-way. S-357 discharges into spreader canal 2000' south of 168th Street.



Typical Section

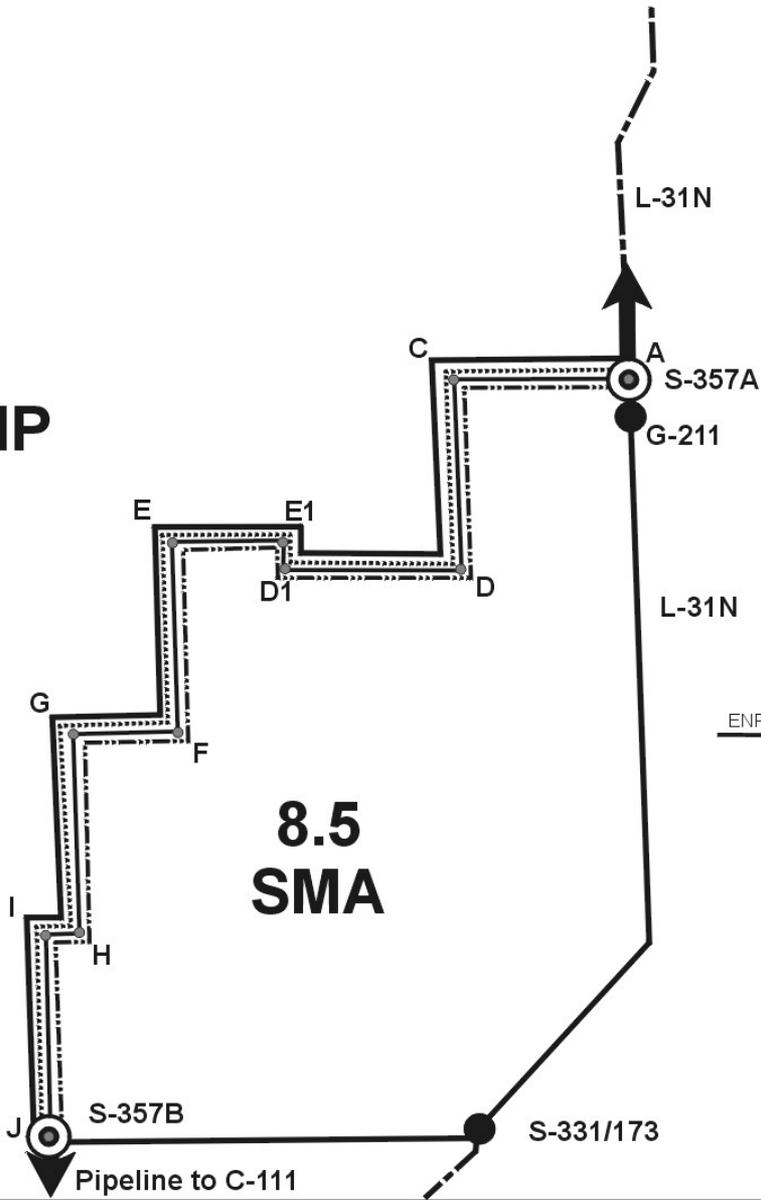
Alternative No. 8A Western Area As Flow-way



Not To Scale

ENP

8.5
SMA

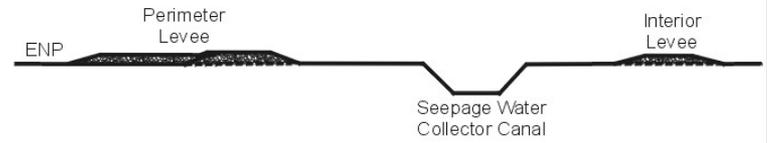


LEGEND

- Project Boundary
- Proposed Perimeter Levee
- Proposed Seepage Canal
- - - Proposed Interior Levee
- Existing Structure
- ⊙ Proposed Structures
- Segments

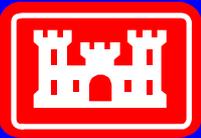
NOTE 1: S-357A would discharge to L-31 North Canal, then water would be moved into L-29 Canal via S-356 (at Tamiami Canal).

NOTE 2: S-357B would discharge into spreader canal 2000' south of 168th Street.

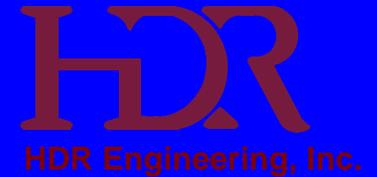


Typical Section

Alternative No. 9
Adaptive Refinement
of Authorized Plan

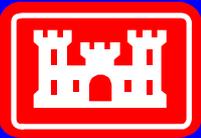


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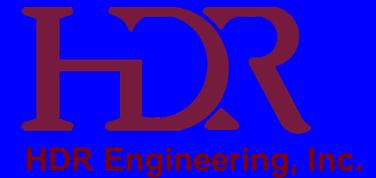


Project Requirements:

*The results required for any
alternative to be viable*

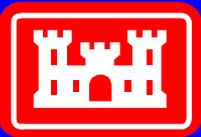


US Army Corps
of Engineers
Jacksonville District

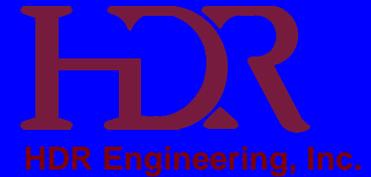


Requirement No. 1: Higher stages in ENP

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

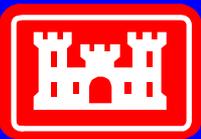


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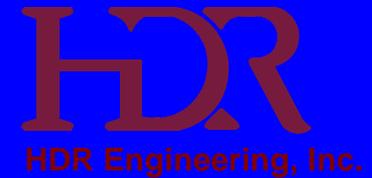


Requirement No. 2: Mitigate for increased stages

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

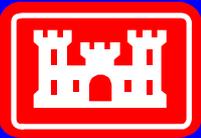


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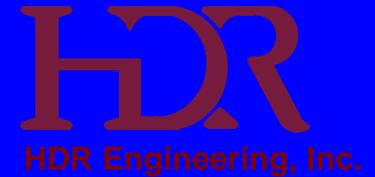


Requirement No. 3: Permittable solution

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

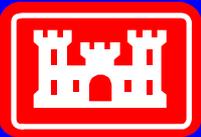


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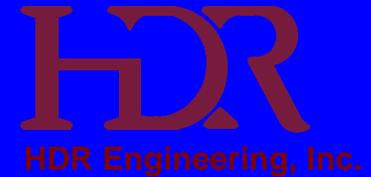


Requirement No. 4: Impact to E&TS habitat

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

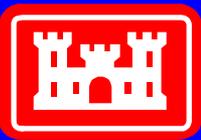


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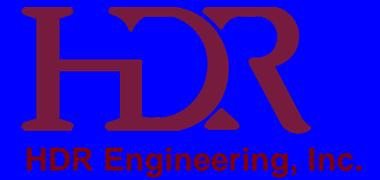


Requirement No. 5: Impact to agricultural interests

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



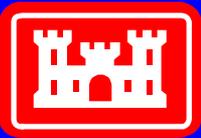
**US Army Corps
of Engineers**
Jacksonville District



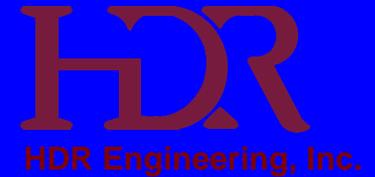
Requirements

Objectives

Performance Measures



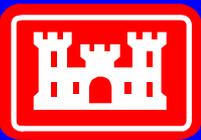
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Project Comparison:

(Basis for determining performance)

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



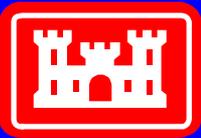
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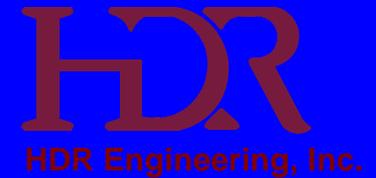
Project Objectives:

(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**

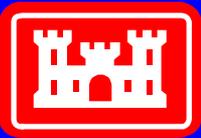


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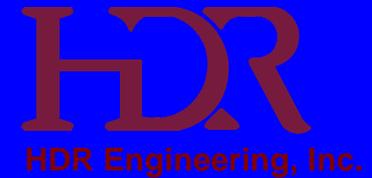


Objective No. 1 - Evaluate effects on hydropatterns in NESRS

- a. Hydroperiod Impacts
- b. Water Depths
- c. Seasonal Variability
- d. Flooding Duration

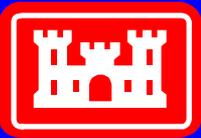


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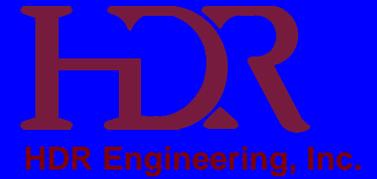


Objective No. 2 - Evaluate impacts to the landowners and residents of the 8.5 SMA resulting from implementation of the Modified Water Deliveries Project

- a. Flood Mitigation Damage
- b. Flood Protection Damage
- c. Impacts to Businesses
- d. Impacts to Residences
- e. Impacts to Agricultural Lands
- f. Unwilling Sellers

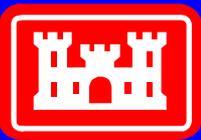


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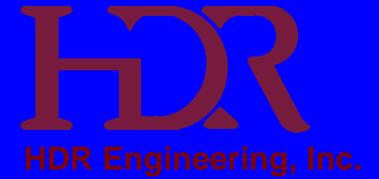


Objective No. 3 - Analyze Cost Effectiveness

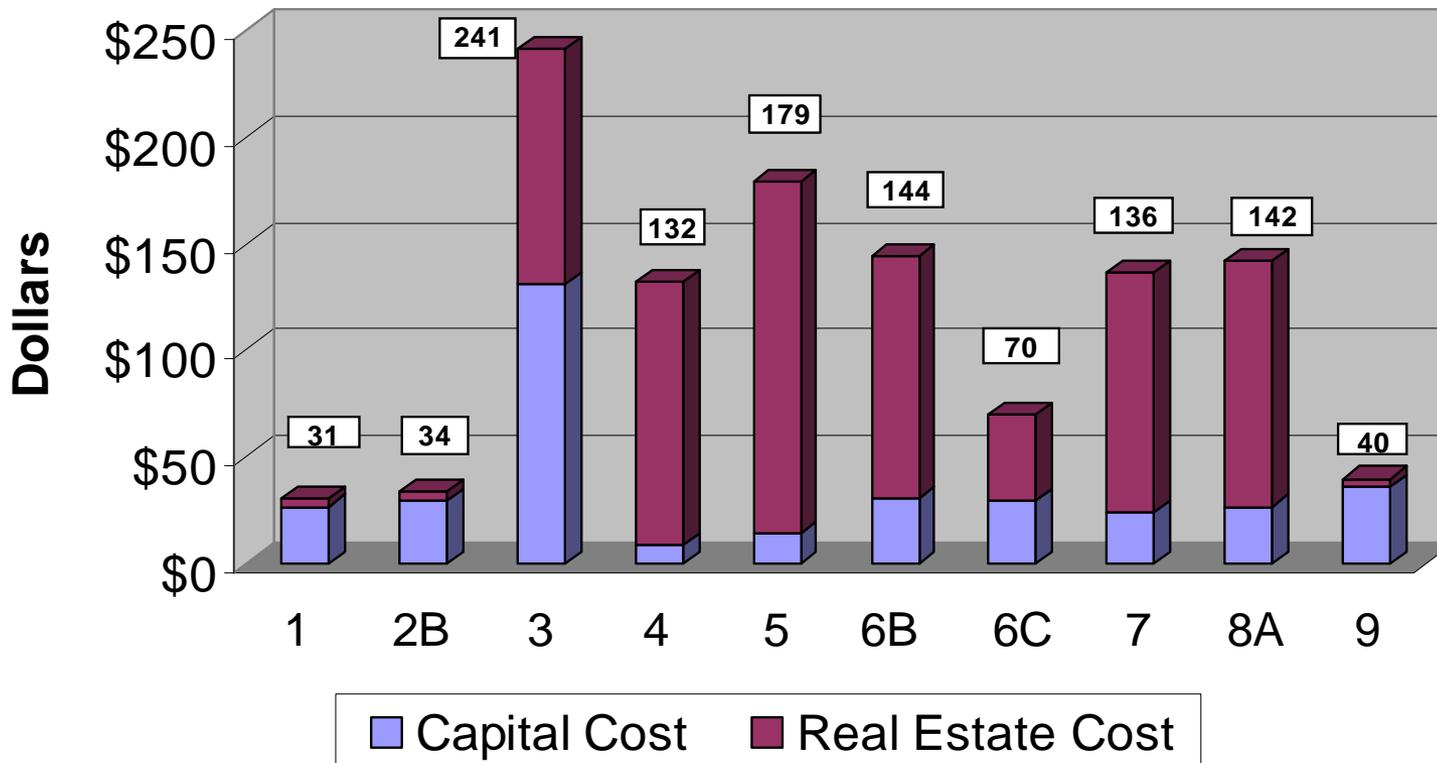
- a. Project Costs
- b. Local Costs

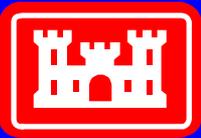


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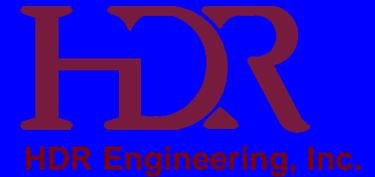


Alternative Costs Comparisons



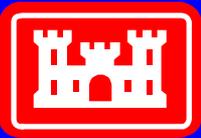


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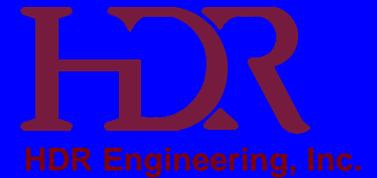


Objective No. 4 - Analyze Effects to Ecological Functions

- a. Wetlands West of L-31N
- b. Short Hydroperiod and Long Hydroperiod Wetlands
- c. WRAP Score

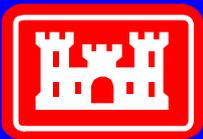


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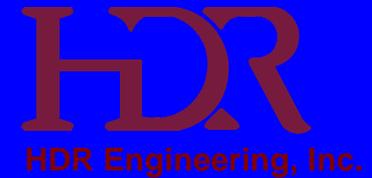


Objective No. 5 - Evaluate effects on conditions favorable to federal and state listed endangered species survival

a. Cape Sable Seaside Sparrow

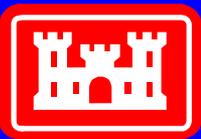


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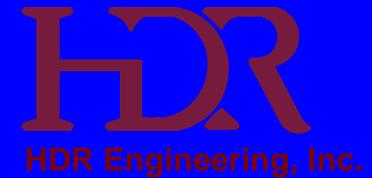


Objective No. 6 - Measure the compatibility with CERP and C-111 projects without adversely impacting the current level of flood protection east of L-31N

- a. Compatibility with CERP
- b. Compatibility with C-111
- c. Agricultural Lands East of L-31N

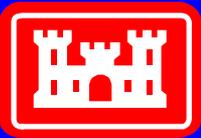


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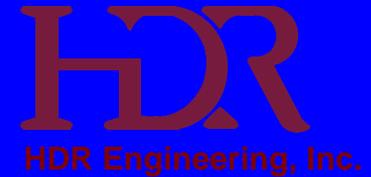


Objective No. 7 - Analyze impacts and costs associated with time delays in implementation of alternatives

- a. Environmental and Cultural Resources
- b. Implementation Schedule
- c. Construction Delays
- d. Administrative Requirements



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What's Next?

14 Apr - 30 May: Public Comment Period

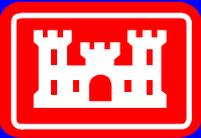
- LPA Selection
- Letter of Intent

30 Jun: Final document to public

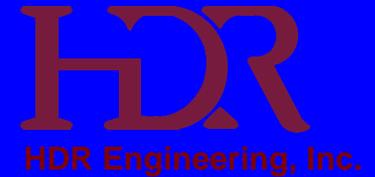
30 Jun - 31 Jul: Public Review

August 2000: Record of Decision

January 2001: PCA Amendment



**US Army Corps
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Jacksonville District



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

8.5 Square Mile Area (SMA)