Modified Water Deliveries to Everglades National Park

8.5 Square Mile Area

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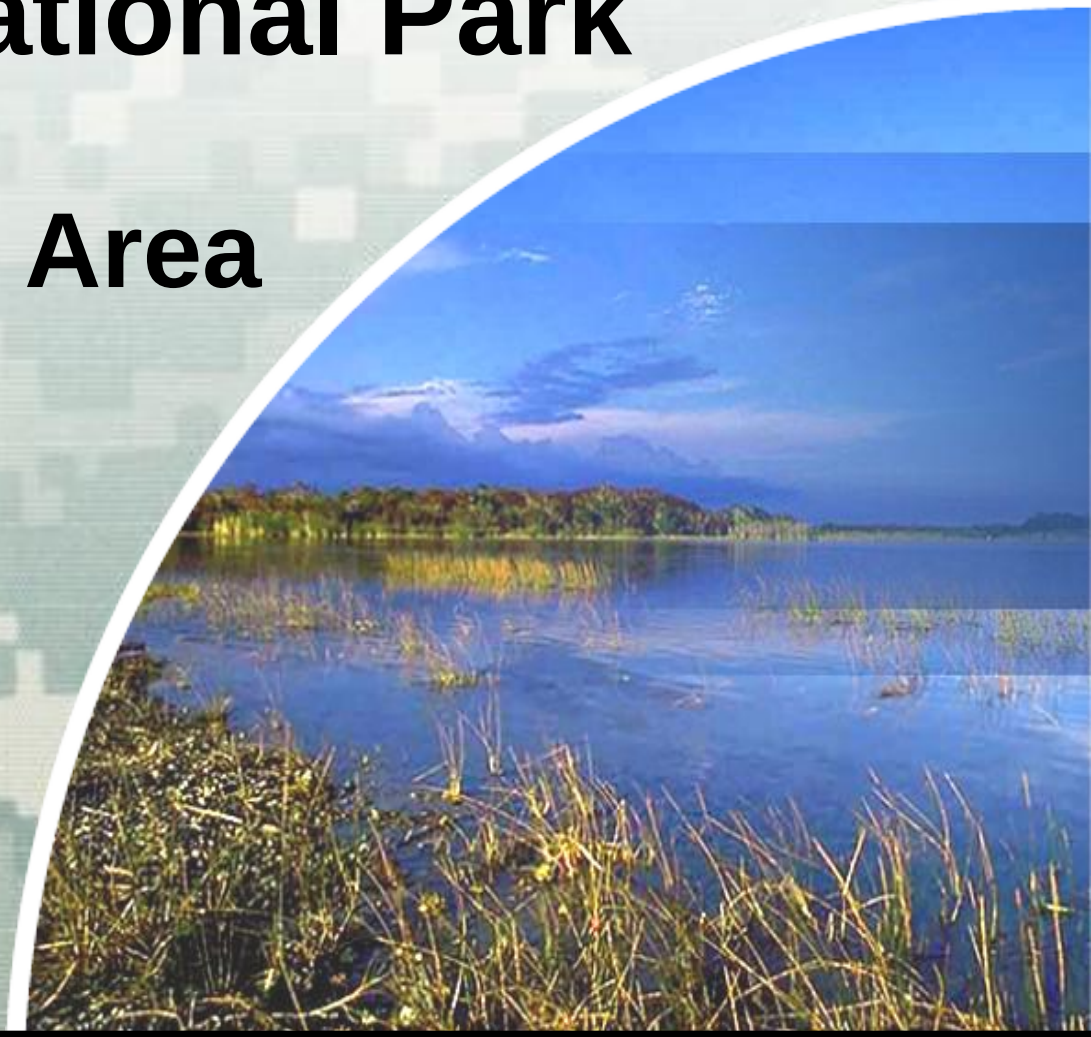
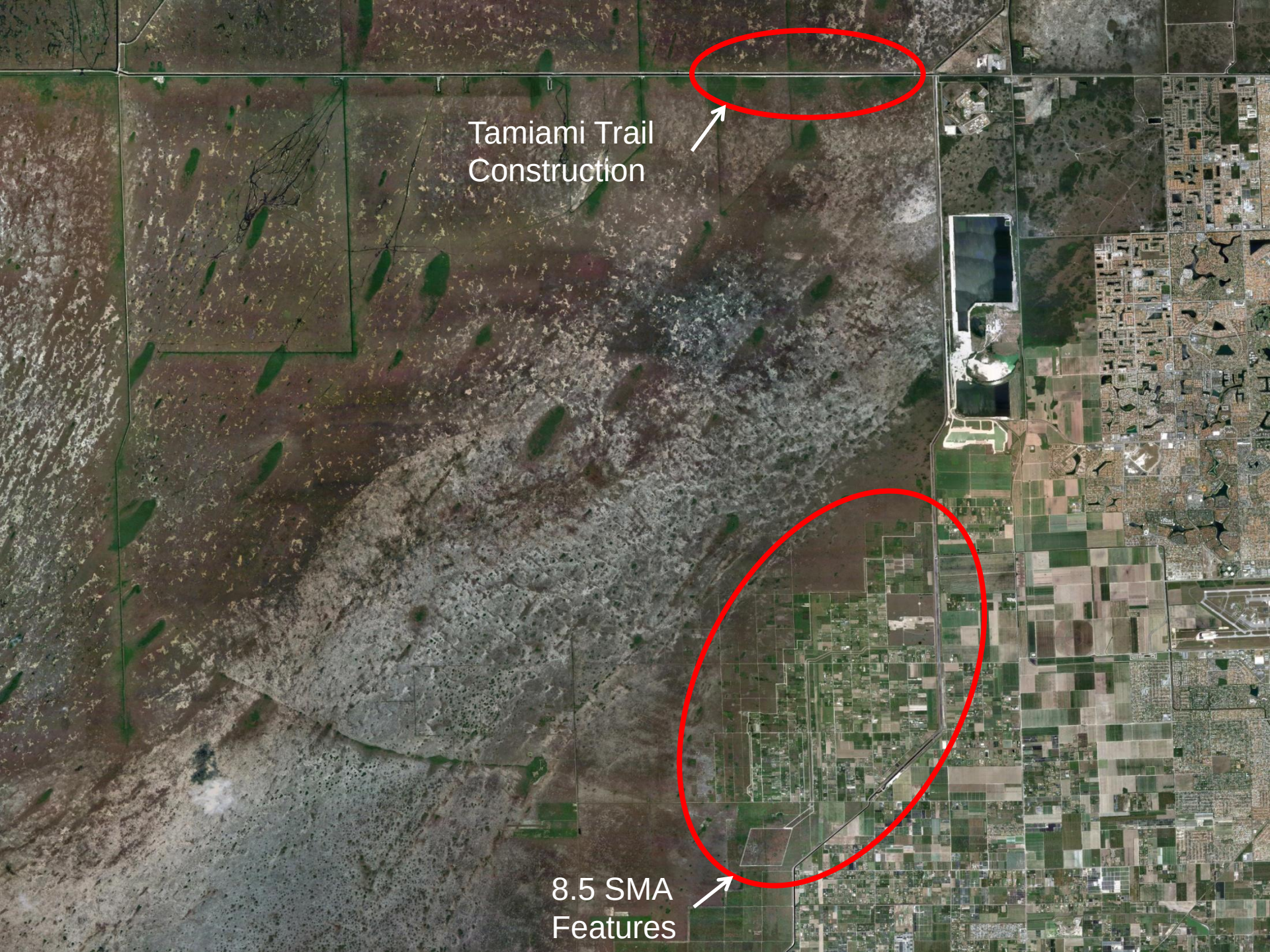


MWD Project Purpose

- Improve water deliveries to Shark River Slough to create more natural conditions

- Project is comprised of four components
  1. 8.5 Square Mile Area Flood Mitigation Plan
  2. Conveyance and Seepage Control Features
  3. Tamiami Trail Modifications
  4. Project Implementation Support


Tamiami Trail
Construction
8.5 SMA
Features

MWD's History

- Central and South Florida (C&SF) Project altered the natural flow of water from Lake Okeechobee to the Park
  - Changes to the ecosystem started as early as 1881
  - In 1983, ENP requested corrective action
  - In 1984 and 1989, Congress directed the Corps to study and modify the C&SF project
- The experimental water delivery program started in response to the Park's 7 point plan (1983)
- The experimental program would stay in place until new ops were identified and implemented

MWD's History

- The 1992 General Design Memorandum and Environmental Impact Statement identified alternatives to the experimental program
- 1992 GDM EIS recognized:

  "Operation of the C&SF Project to achieve the maximum ecological restoration in the Park is expected to be an evolutionary and dynamic process requiring many years of iterative field testing of water delivery strategies in conjunction with an environmental monitoring program by the Park."

MWD's History

- In 1992, operational strategies in the GDM included:
  - Basic Rain Driven Ops
  - Modified Rain Driven Ops
  - Modified Minimum Delivery Ops
- None of these strategies were recommended due to water quality concerns, failing to meet restoration objectives, or jeopardy
- The solution was for the Corps, SFWMD, Park, and the wildlife agencies to develop an operational strategy, beginning with field testing

System Operations

- Since 1992, multiple operational plans have been implemented:
- 2000 to 2002 – Interim Structural and Operational Plan
- 2002 to present – Interim Operational Plan
- 2012 – Everglades Restoration Transition Plan
- Key term used in these plans is “Interim” and “Transition”
  - These plans were not permanent operating plans
  - They were temporary, meant to manage the system until a permanent plan is developed

System Operations

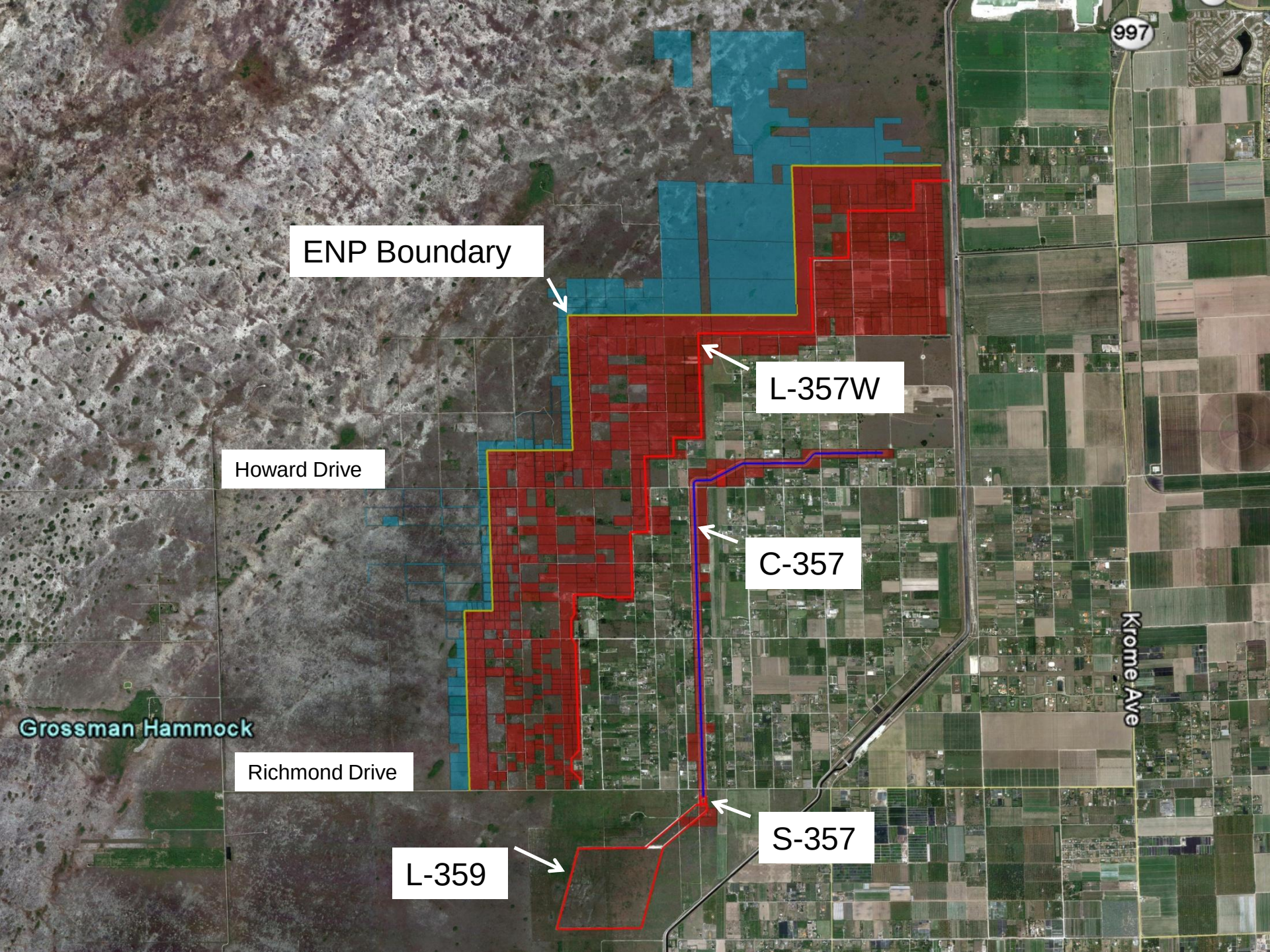
- Everglades Restoration Transition Plan is the next operational plan
- ERTP will replace IOP
- Another step forward which utilizes constructed features of the MWD and C-111 South Dade projects
- When ERTP is implemented it will change the current system operations, which will affect hydrology in the system

System Operations

- ERTP will be superseded by a future operational plan
- The future permanent operational plan will utilize the capabilities of the MWD and C-111 South Dade Projects
- The future operational plan will change system operations, which will affect hydrology in the system

8.5 Square Mile Area Flood Mitigation Plan

- Purpose: Provide flood mitigation for the improved conditions in Shark River Slough
  - The MWD Project will increase water stages and durations west of the 8.5 SMA
  - The flood mitigation plan mitigates for this additional water
- Features: Multiple features constructed to provide mitigation
  - Seepage Canal (C-357) and a Pump Station (S-357)
  - Perimeter levee (L-357W)
  - Detention Area (L-359)


ENP Boundary
L-357W
Howard Drive
C-357
Grossman Hammock
Richmond Drive
S-357
L-359
997
Krome Ave

8.5 Square Mile Area Flood Mitigation Plan

- Mitigation is provided to keep the area whole when compared to 1983 conditions.
- The 2000 General Reevaluation Report determined the appropriate level of mitigation, and this report was approved by Congress
- This is consistent with conditions which existed prior to the start of the experimental deliveries program
  - PL 98-181

Conclusion

- The current operational plan is not the permanent plan
- ERTP will not be a permanent operating plan
- A permanent operating plan will be developed which will change the hydrology and increase water to the Park
  - All operating plan changes are presented to the public for comment
- Mitigation for the 8.5 Square Mile Area is provided to keep the area whole when compared to 1983 conditions