



S12-D Flow-way Maintenance

**Prepared for the TOC
21 February 2006**

Susan Sylvester, LeRoy Rodgers & Fred Remen

Overview

- Collaborative effort between SFWMD, USACE, and ENP.
- S-12D chosen because there are no operational constraints.
- Only maintenance canal cleaning and vegetation management— no new works or design modifications proposed.
- Need for routine maintenance at the S-12 structures and in the Old Tamiami Canal.

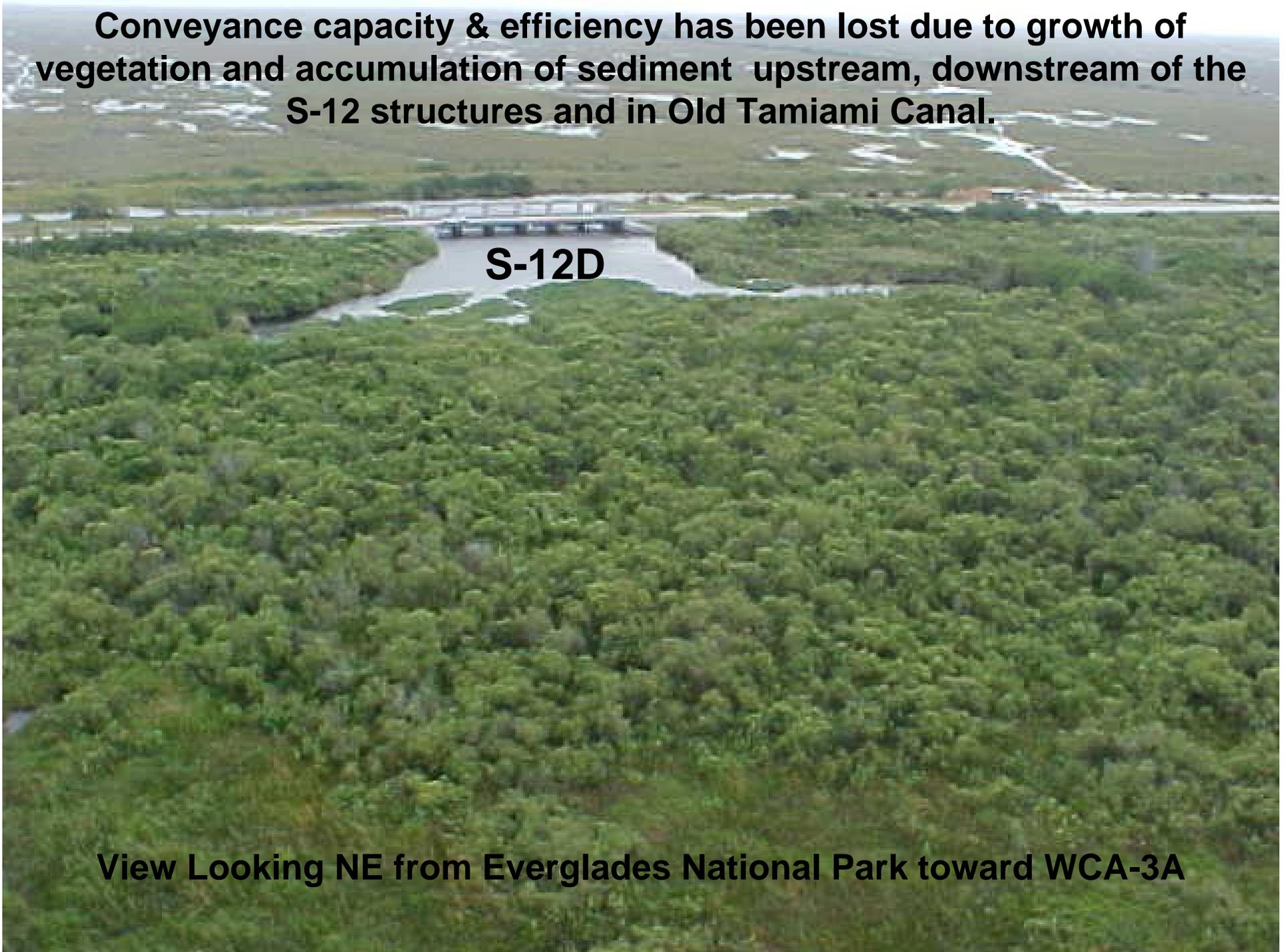
Overview

- Vegetation and sediment has accumulated in the upstream & downstream flow-way and in the Old Tamiami Canal.
- Flow ratings for the S-12 system, particularly S-12D, indicate reduced conveyance capacity.
- Flow conveyance restriction primarily downstream (tailwater driven).

Conveyance capacity & efficiency has been lost due to growth of vegetation and accumulation of sediment upstream, downstream of the S-12 structures and in Old Tamiami Canal.

S-12D

View Looking NE from Everglades National Park toward WCA-3A



Ridge and Slough Concept in Action!



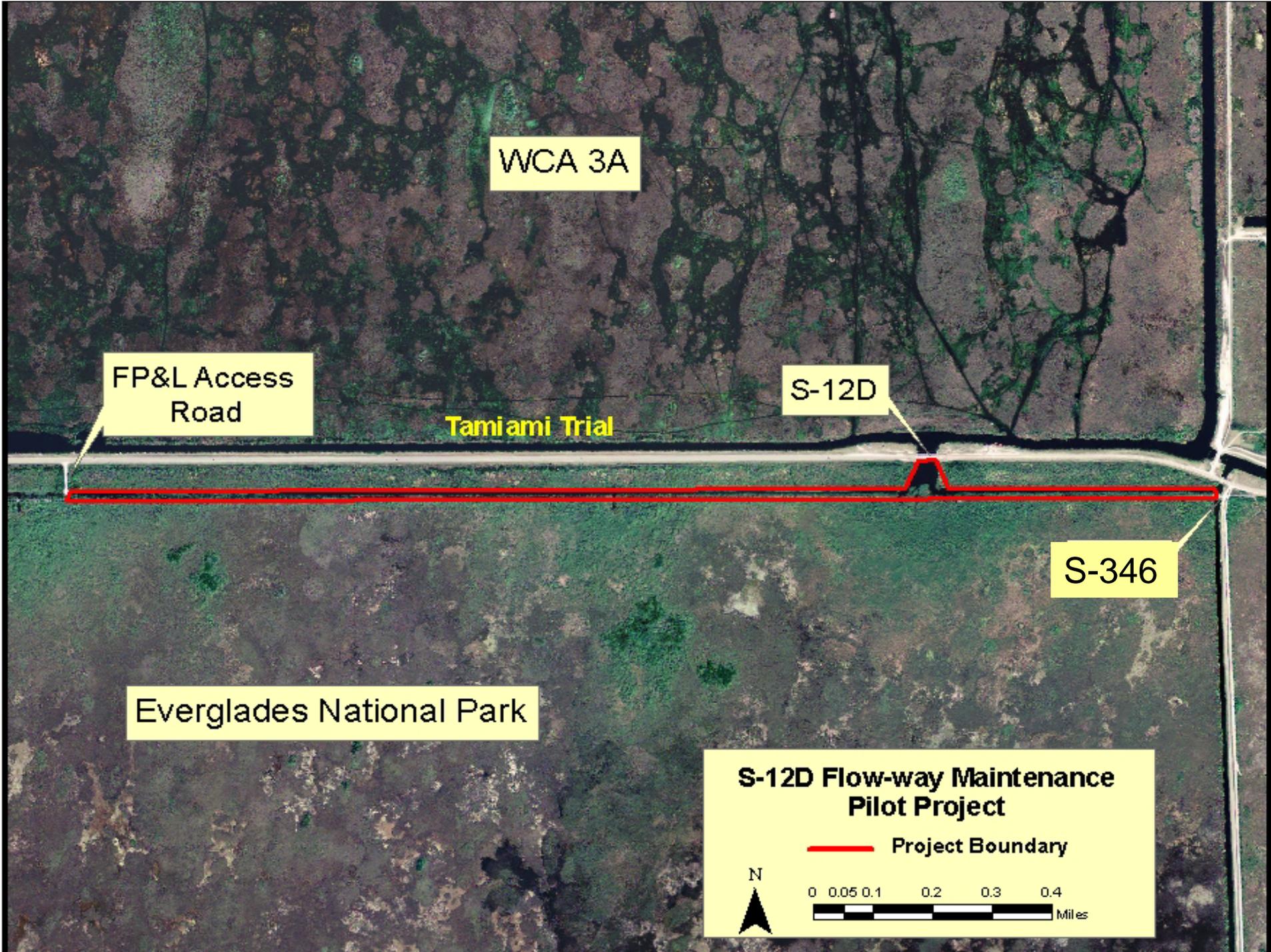
1995 – 2 Meter

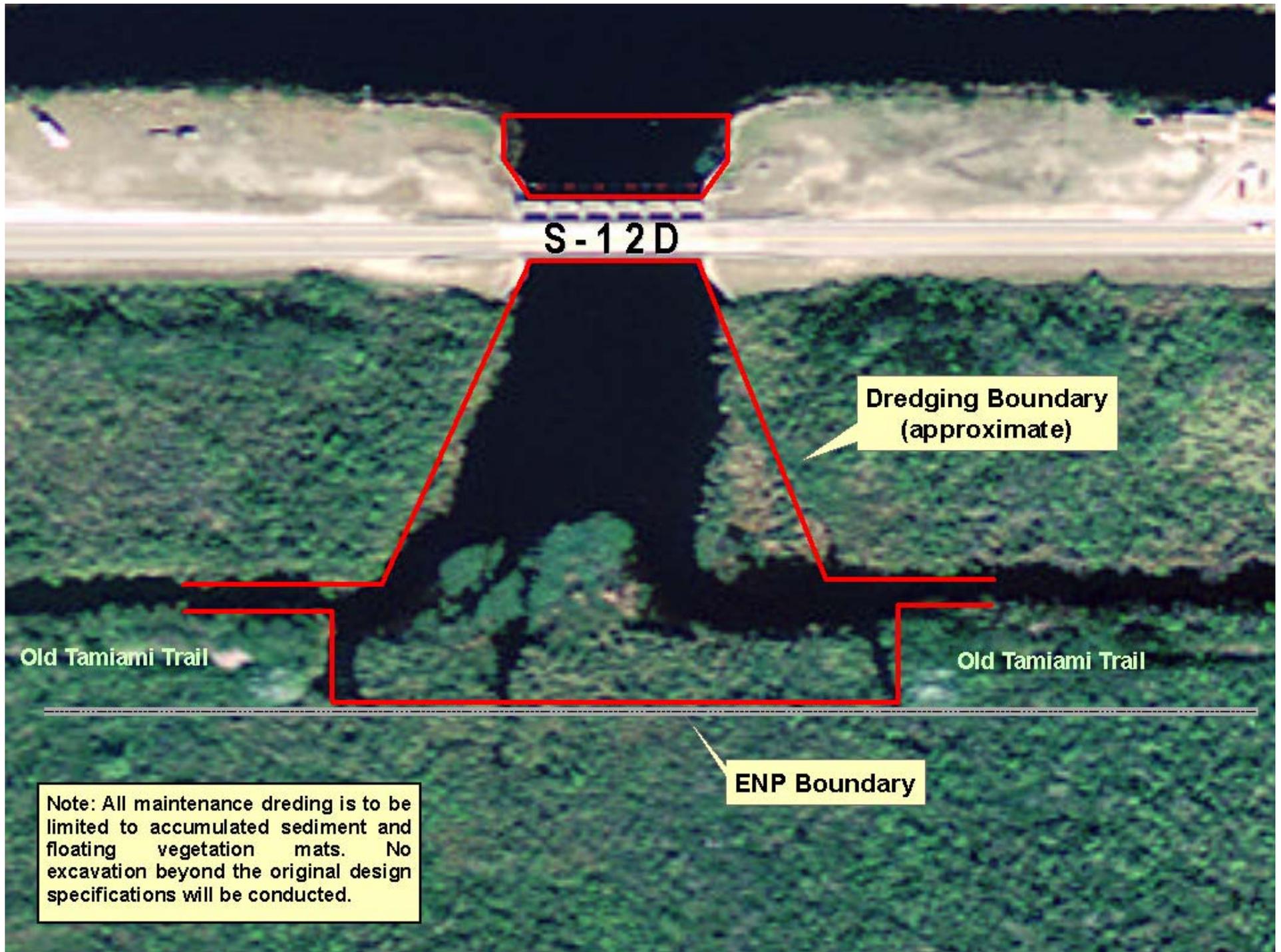


1999 – 2 Meter

Methodology

- Mechanical vegetation and sediment removal at the S-12D structure and the downstream flow-way to the ENP boundary;
- Invasive vegetation control along the north and south bank of Old Tamiami Trail from S-346 to the FP&L access road;
- Assessment with recommendations on the feasibility of maintenance at the S-12A, B, & C structures will be done.







S-12D Flow-way Maintenance

Current Project Activities:

- | | |
|---|--------------|
| – Draft plan and inter-agency review | In progress |
| – Bathymetry, boundary survey, and ROW analysis | Completed |
| – Existing vegetation survey (SFWMD & ENP) | Completed |
| – Flow monitoring plan (USGS though USACE) | Completed |
| – Regulatory/Permitting requirements | Under review |

Upcoming Project Activities

- | | |
|---|-----------|
| – Site preparation for equipment access | Feb. 2006 |
| – Vegetation removal | Feb. 2006 |
| – Sediment removal | Mar. 2006 |
| – Post-maintenance flow ratings | Apr. 2006 |
| – Post-maintenance bathymetry | Apr. 2006 |
| – Assessment | Jun. 2006 |