



C-111 Spreader Canal Project Expedited Construction

April 28, 2008 Working Group

*Dewey Worth – Dir. Southern Everglades
Everglades Restoration Resource Area
South Florida Water Management District*

Recommended Plan – Alt 2D





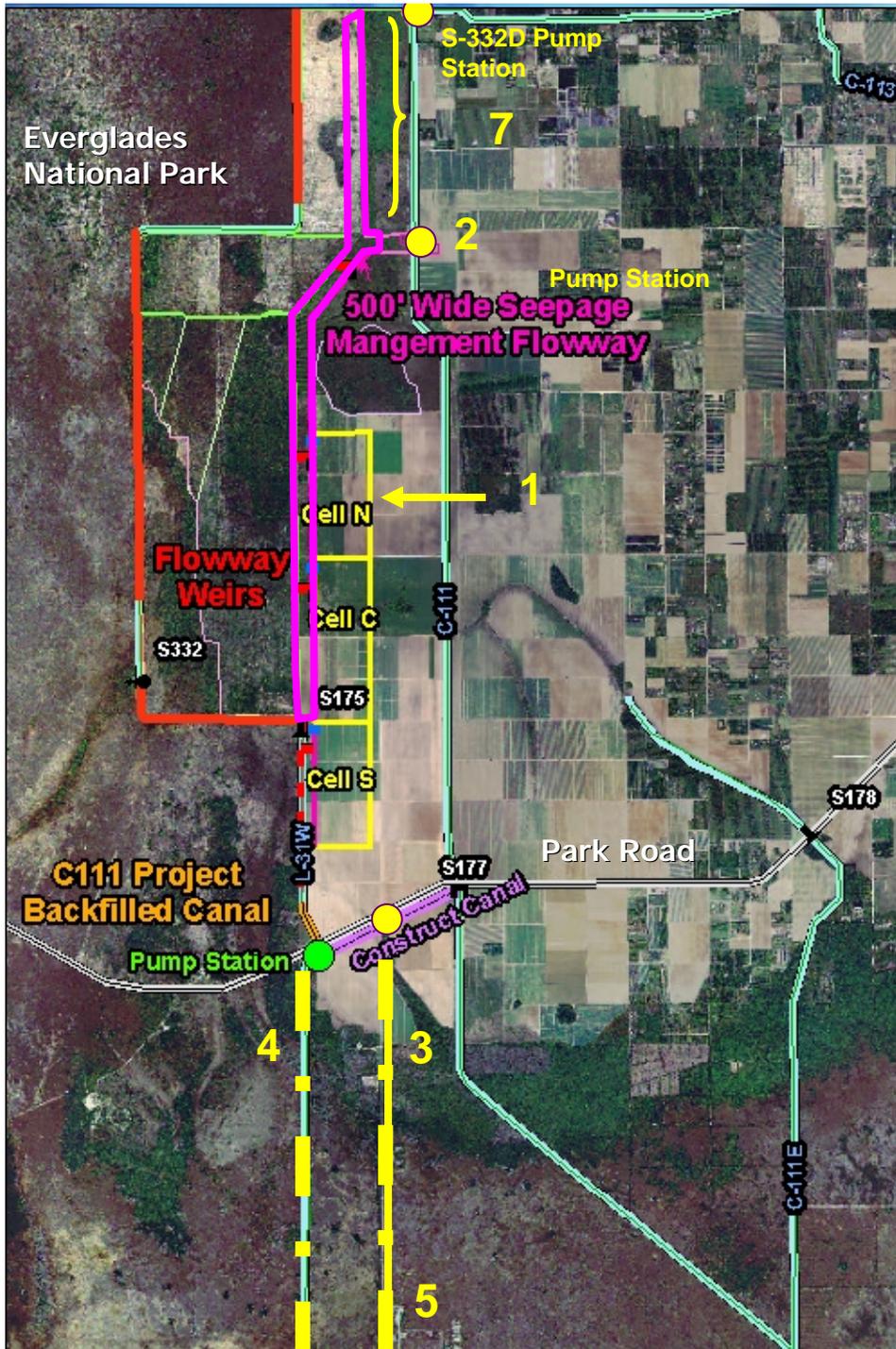
Status Update

- **Stakeholder Meeting Held Feb 5**
 - **Explore General Support for PIR-1**
 - **SFWMD Proposal to Construct Recommended Plan**
 - **Kick-off of Stakeholder Meetings**
 - **Continuing Process for Fast Track Implementation**



Design Refinements

- **Evaluating proposed design refinements**
 - Value Engineering
 - Stakeholder Suggestions
 - C111 GRR Overlap
- **Prioritize Needed Refinements**
 - Right Sizing Pumps to match required Seepage Control
 - Pump locations to optimize seepage control objectives
 - Determine any added capacity to allow raising water control levels
- **Complete capacity/location decisions by June 08**



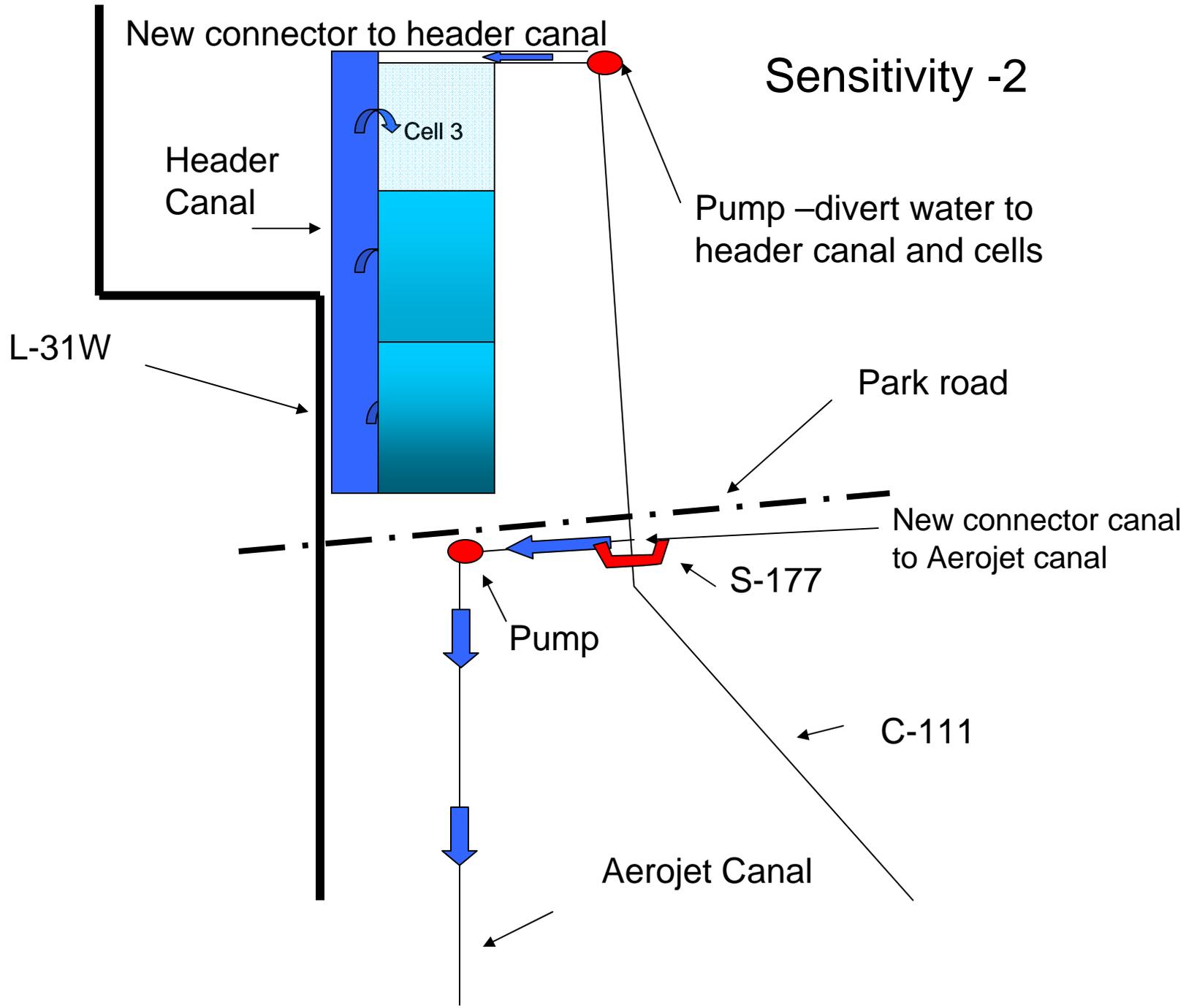
Design Refinements

- 1) Integration of C-111 GRR seepage management
- 2) Evaluate 2-pump system for achieving seepage control; 1-pump (200 cfs) north of Park Road and 1-pump (200 cfs) south
- 3) Aerojet canal as primary seepage control component south of Park Road – look at L-31W as alternate – pump water from C-111 upstream of S-177 to either canal
- 4) C-111 GRR L-31W backfill or plug and stair-step water levels in L-31W to south of Park Road Stair-step Aerojet canal levels with plugs/weirs south of Park Road
- 5) Evaluate change in water control levels at S-18C and S-197 with compensating pump capacity upstream
- 6) Evaluate seepage barrier costs at S-332D pump station to increase water delivery efficiency to TS



Sensitivity Tests

- **Sensitivity runs conducted to help refine design concepts**
- **Model simulations to evaluate water placement and potential operational flexibility**
 - **Priority for operating seepage control features**
 - **How to maximize environmental benefits**
 - **How to maintain existing levels of service**



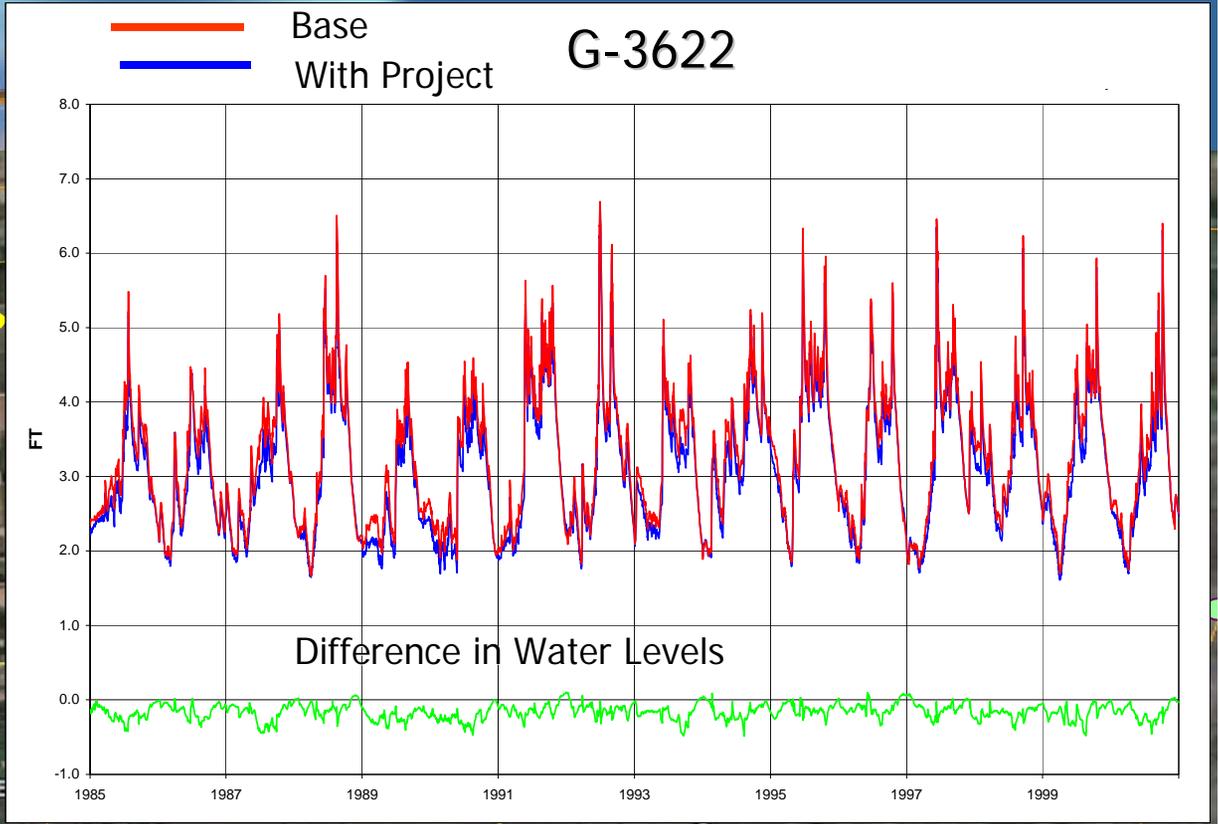
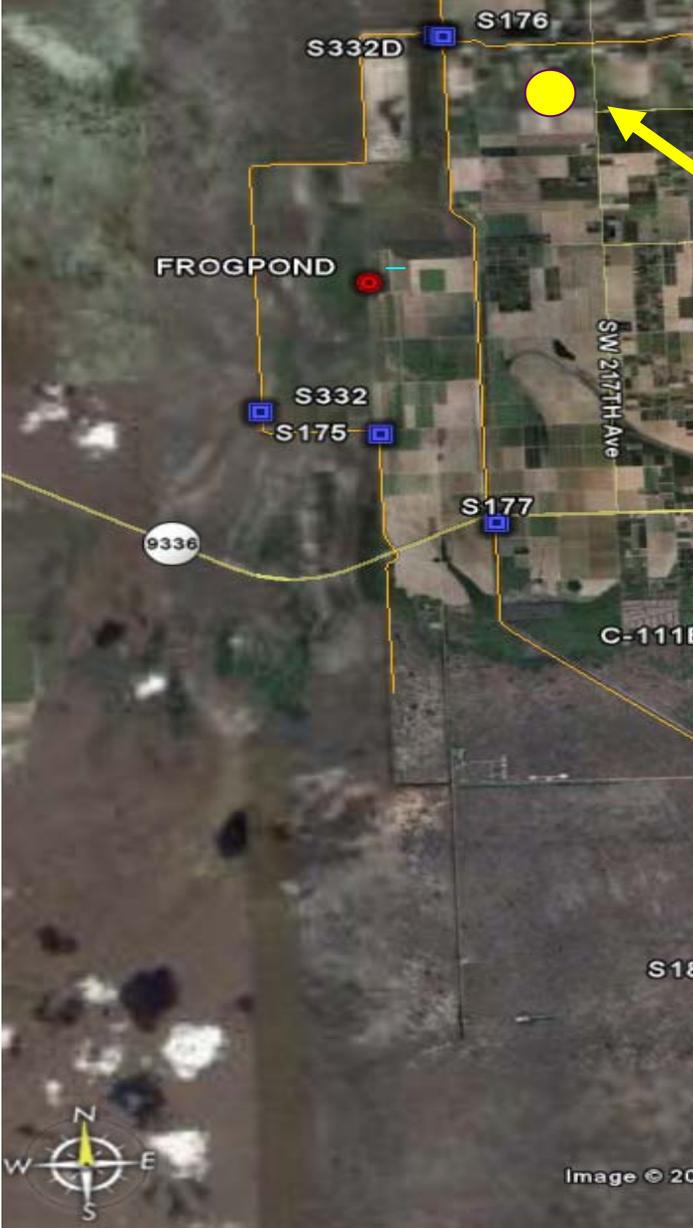


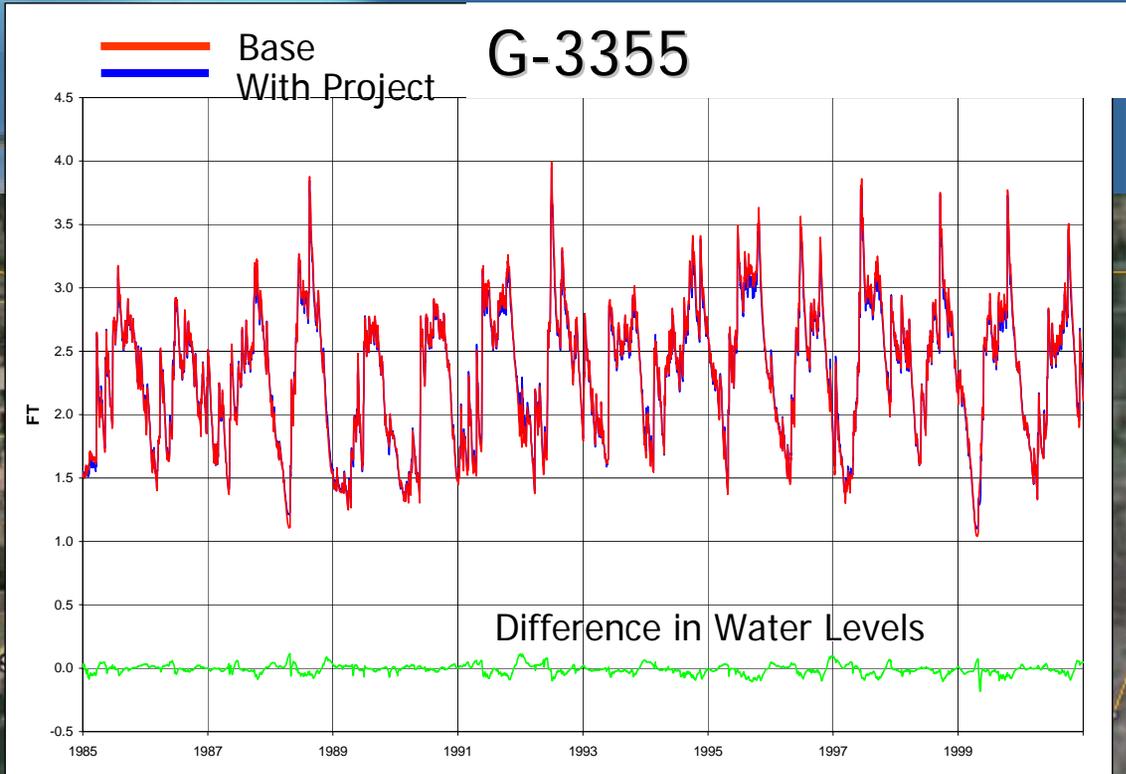
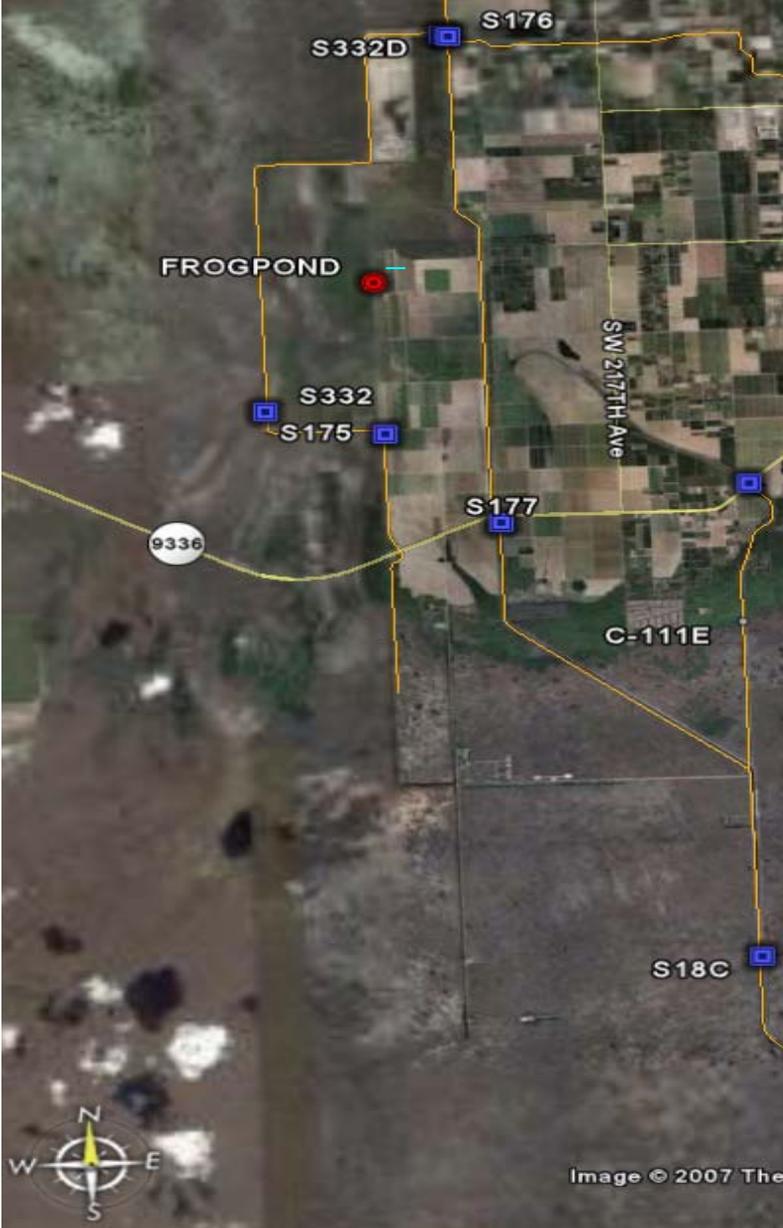
Example RSM Model Results

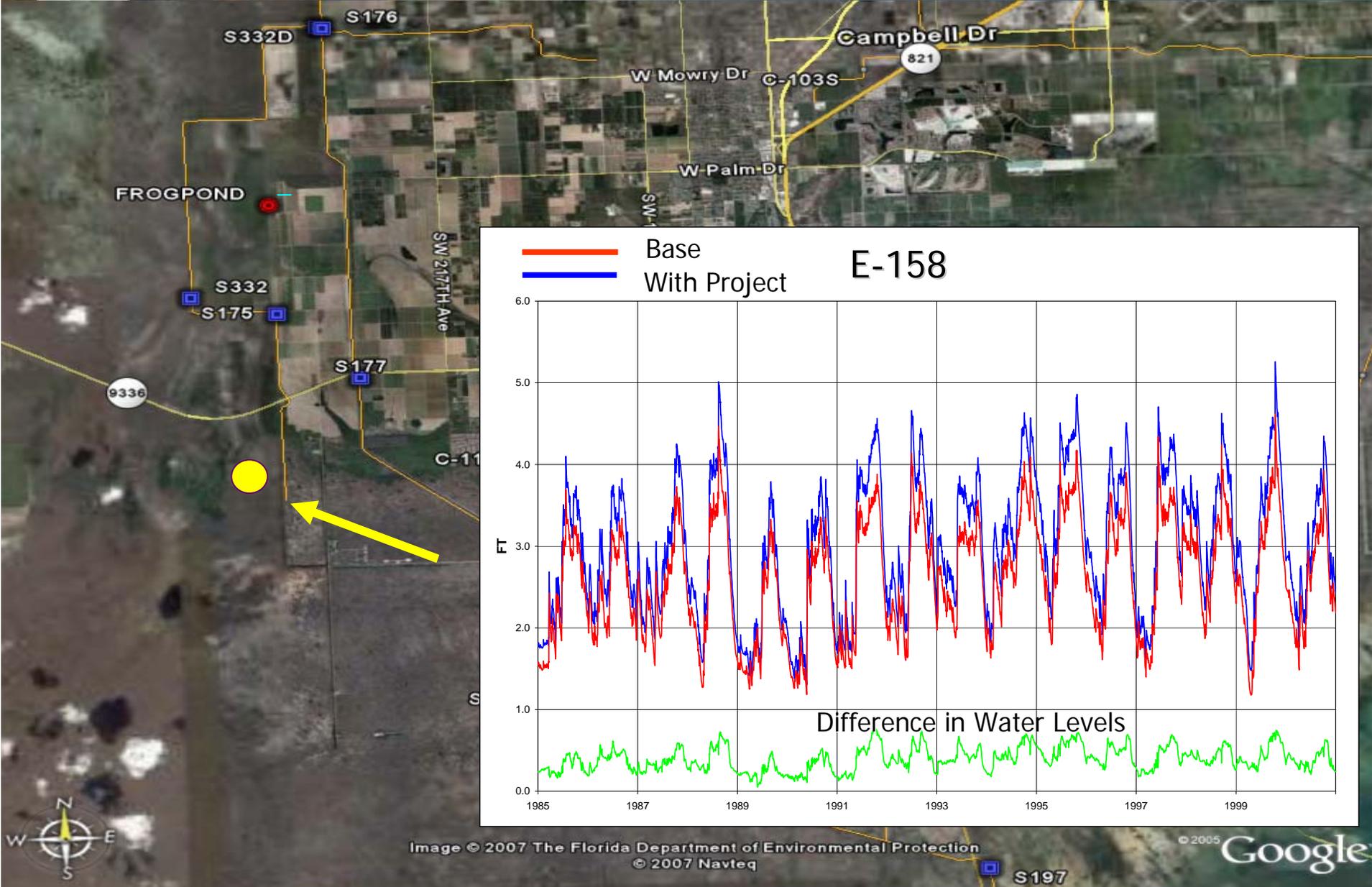
1991 Wet Year

Volume

Location	1991 Baseline (1,000 ac ft)	With Project (1,000 ac ft)	% Change
Upper TS (GW+SW)	181	221	22
Lower TS (GW+SW)	166	201	21
S-18C	172	68	-60
S-197	15	7	-57







Alt 2D with Pilot Projects





Pilot Project Features

- **Additional Technical Discussions Needed**
 - Component details
 - Costing
 - Operating strategy
 - Schedule for Implementation under Design Agreement (Independent of PIR Congressional Authorization/Funding)



Final Operational Details To Be Determined

- Maximize operations to retain water in Taylor Slough
- Depending on operations - TS flows could increase from 8% to 25% during wet season
- Operational testing (post construction) will determine how far we can go while balancing flood control and beneficial flows to the environment
- An interim operating plan will be included in the Draft PIR



Required Commitments for Success of Expedited Project

■ FUNDING

\$70M by SFWMD

■ To Do What

As much of recommended
features in PIR-1 as funds
allow



Required Commitments for Success of Expedited Project

- **PIR to Provide NEPA and 404 Permit for SFWMD Construction**
 - **AFB Review (Critical Buy-in) April 08**
 - **Wetland Delineation Documentation and Mitigation**
 - **Cultural Resources Assessment**



Required Commitments for Success of Expedited Project

- **SFWMD Eng Design Lead – Review & Support by COE**
 - Include 30% Design in Draft PIR
Eng Appendix Nov 08
 - Final Design in Final Draft PIR May 09

- **SFWMD Construction**
 - 404 Permit/PIR Decision Document Aug 09
 - Groundbreaking Sep 09
 - Complete Construction Aug 11



Continuing Coordination

- High level interaction with PDT - Ongoing

- Brief at WRAC Issues Workshops and Full WRAC Group on expedited construction effort
 - May 23
 - June 17
 - July 3

- Governing Board Approval of Expedited Construction Plan
 - July 10