

L-31 North (L-30) Seepage Management Pilot Project

Task Force Briefing

May 2008

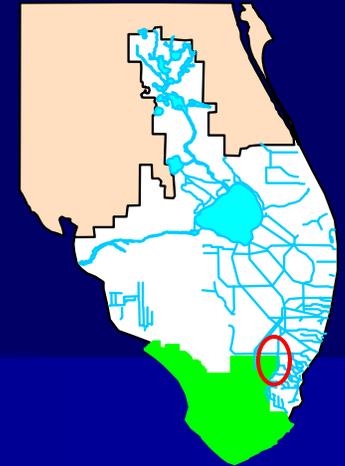


Purpose of Briefing

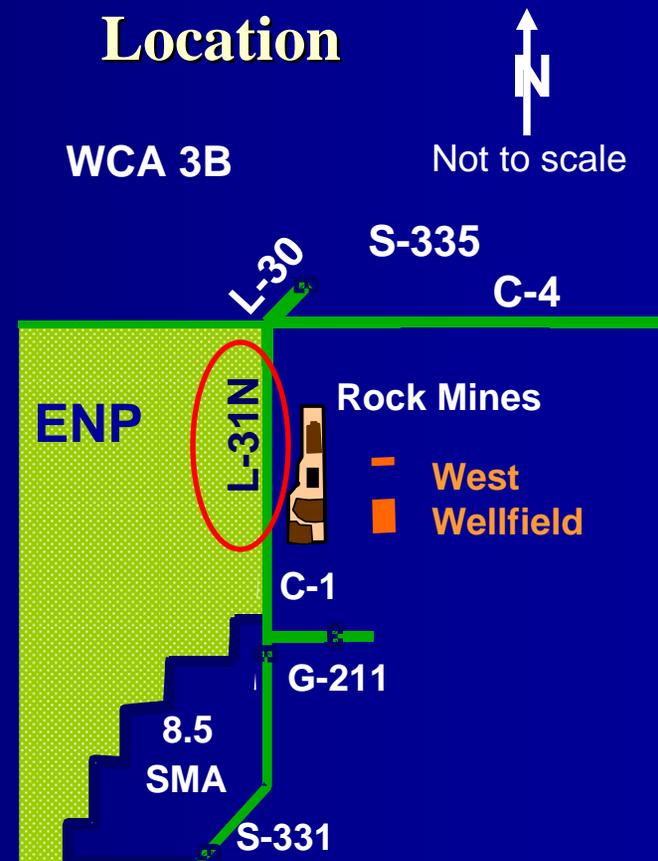
Present the project team's selected
alternative plan and
solicit feedback from the Task Force

1999 Yellow Book Project Purpose

- ❖ Investigate seepage management technologies to control seepage from Everglades National Park.
- ❖ The Pilot project will provide necessary information to determine the appropriate amount of wet season groundwater flow to return to the Park while minimizing potential impacts to Miami-Dade County's West Wellfield and freshwater flows to Biscayne Bay.



Yellow Book Location

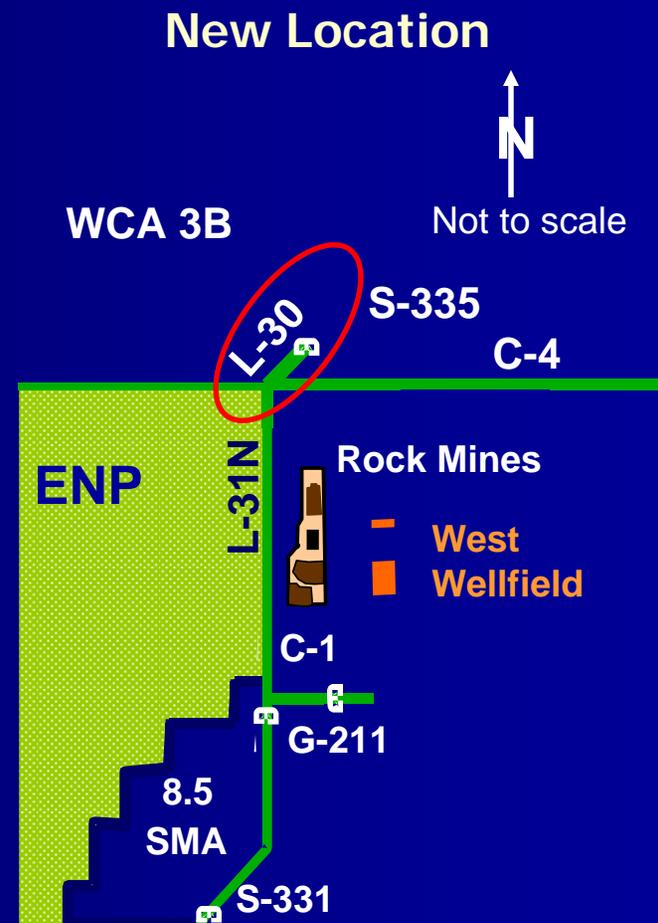


Current Project Purpose



Consistent with the Yellow Book;
Updated to include:
Critical uncertainties associated
with technologies that will likely
be considered to control seepage
from the Everglades National
Park and Water Conservation
Area 3B. **Uncertainties to be
resolved:**

- Reliability** of materials & technology
- Implementability** of a seasonally flexible operating system
- Cost and time** requirements for implementation
- Constructability**



Tree Island Stage
3BS1W1_H



Project Footprint
L-30 Levee & Canal

S-335



WCA 3B

1,000 ft



Street Map Aerial Image
 Show labels

997

Krome Ave

Trail
Glades
Range

0 50 m
150 ft

QUEST

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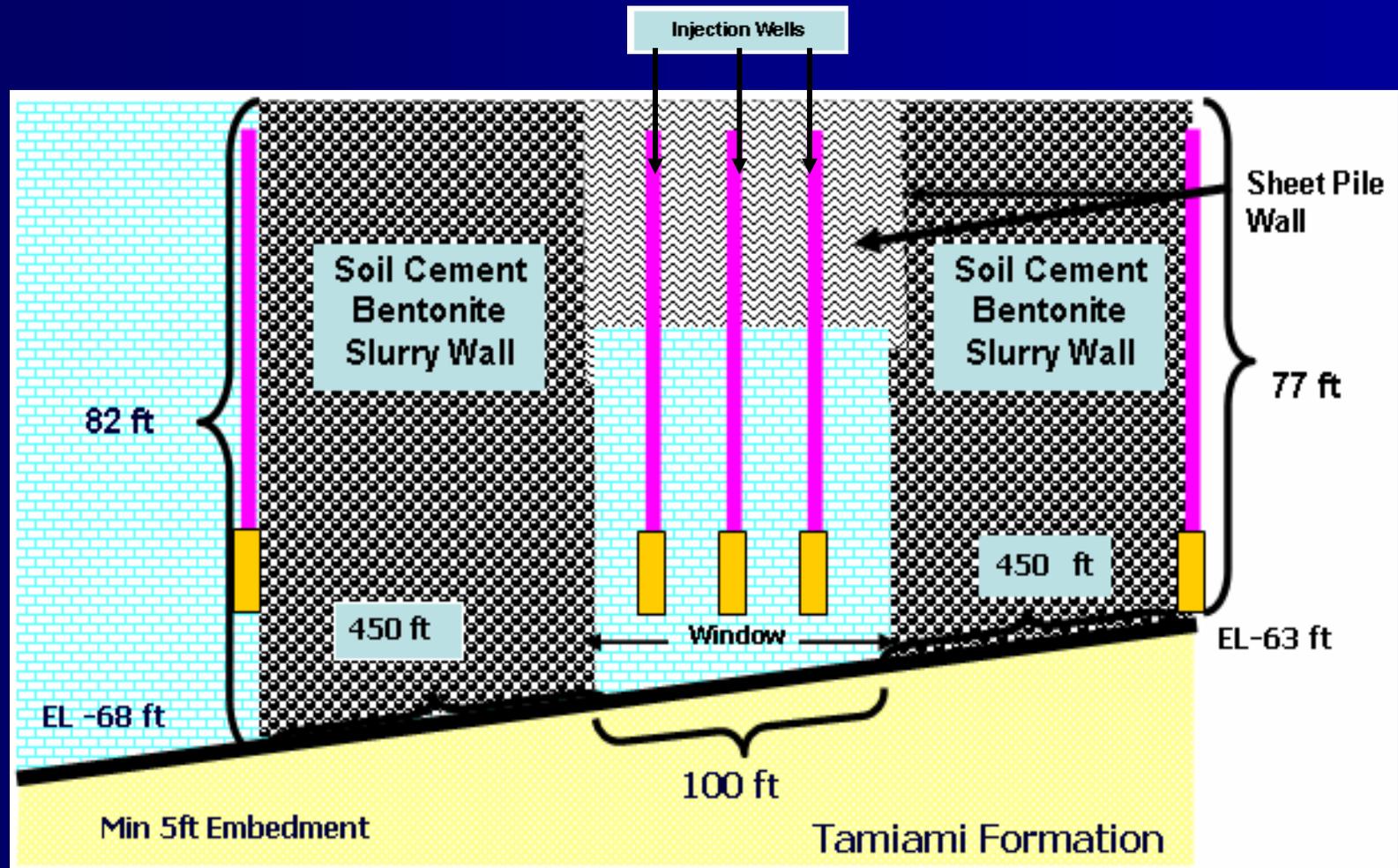
Selected Alternative Plan -1,000 ft Section

- ❖ 2 Slurry Walls (450 ft, -63 ft elev)
- ❖ 1 Sheet Pile (100 ft, -22 ft elev)
- ❖ “Window” (Biscayne Aquifer)
- ❖ 2 Extraction Wells (source water)
- ❖ 3 Injection Wells (hydraulic barrier)
- ❖ 15 Monitoring Wells

Selected Alternative Plan

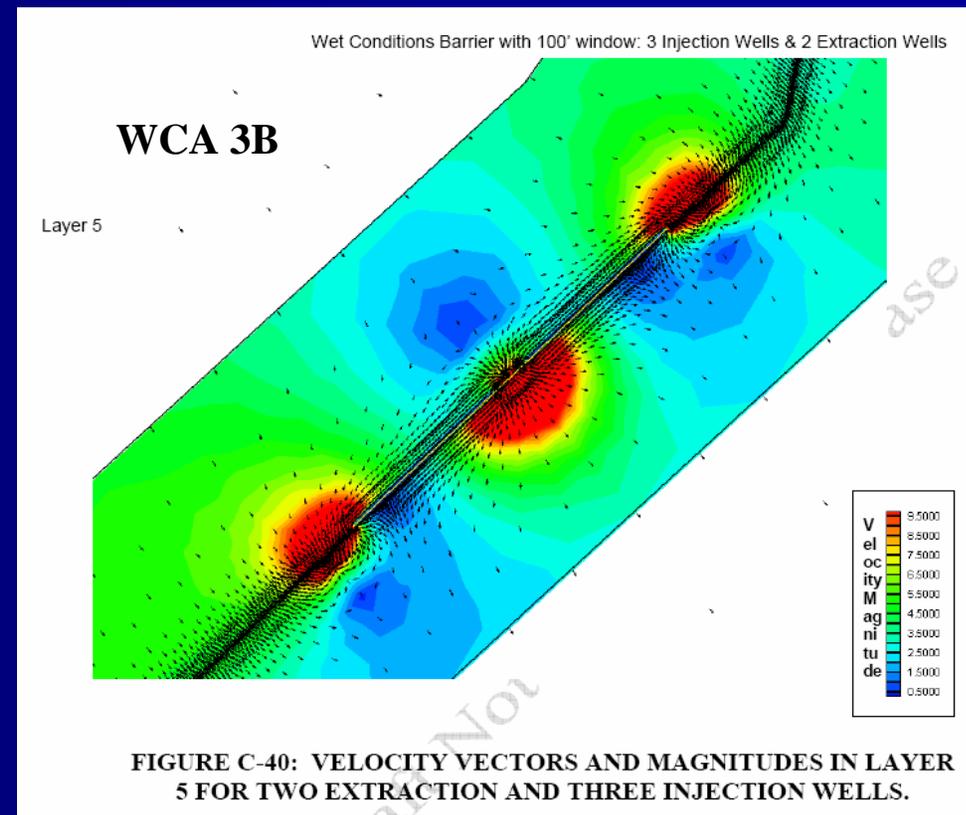
- ❖ Slurry Wall & Sheet Pile - Test constructability and reliability of two structural technologies
- ❖ Extraction & Injection Wells - Test seasonal operational control of seepage management (non-structural)
- ❖ 15 Monitoring Wells - Provide data on effects of seepage

Selected Alternative Plan Slurry & Sheet Pile Wall, Injection Extraction Wells



Hydraulic Barrier

❖ Blue represents very low velocity at the window – no flow through window, no flow THROUGH the barrier walls



Implementation Schedule

Briefing to Commander	May 08
Draft PPDR/NEPA Complete	July 08
Public/Agency Review of DPPDR	July-Aug 08
External Peer Review	July-Aug 08
Final PPDR/NEPA Complete	Sep 08
DE Transmittal/Filing of EA	Sep 08
NTP (Performance Spec)	Spring 2009
Design/Installation & Testing	Jan 09 – Mar 11

Construction Costs *

	YB (1999)	Current (2008)
Project Management Plan		\$ 365,000
Pilot Project Design Report		\$5,000,000
Planning, Engineering & Design		
Construction – Design, Installation & Testing	\$9,000,000	\$5,758,414
- PED during Construction		\$ 362,117
- Construction Management	\$ 500,000	\$ 289,700
Project Implementation Monitoring	\$ 500,000	\$2,500,000
Technical Data Report		\$1,000,000
Lands & Damages	\$ 0	\$ 0
TOTAL	\$10,000,000	\$15,275,232

*Construction cost estimate contains 15% contingency

*Section 902 Limit - \$15,437,000 (Oct 07 dollars)

QUESTIONS?

