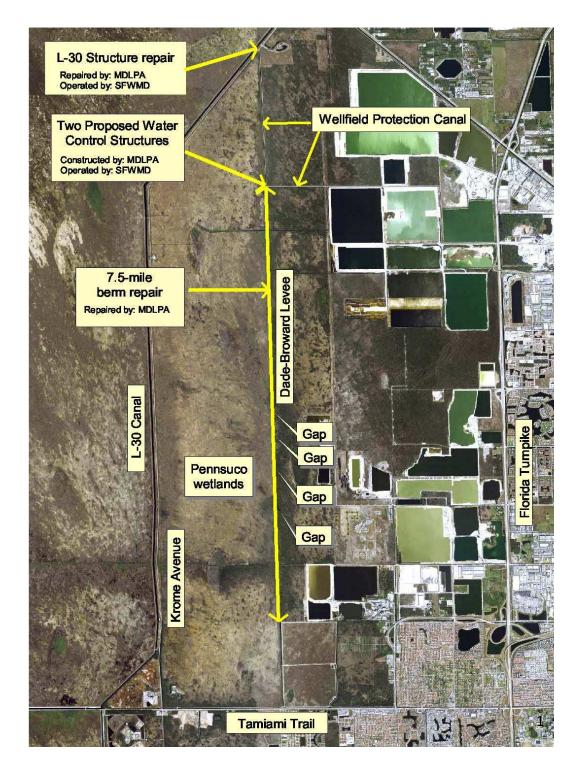
### Dade-Broward Levee Project

Task 1: 7.5 mile berm repair completed 2016

Task 2: two proposed water control structures under construction

Task 3: L-30 structure repair/
remote control operation

<u>design review complete</u>



### **Modeling Results**

### <u>Task 1:</u>

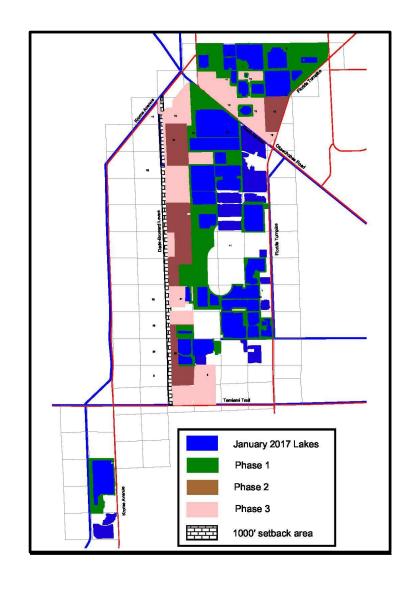
Repair of the gaps in the Dade-Broward Levee offsets potential impacts from Phase 1 mining;

### Task 2:

Wellfield Protection Canal structure offsets potential impacts from Phase 2 mining; and

### Task 3:

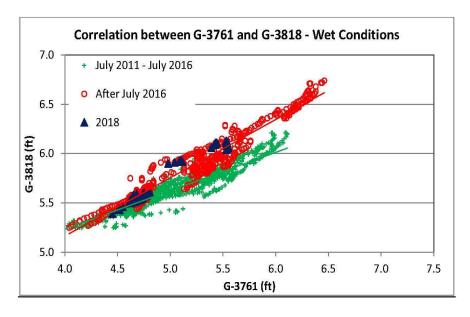
Diversion of water from the L-30 Canal to the Pennsuco wetlands offsets potential impacts from Phase 3 mining with 1000' setback on east side of Dade-Broward Levee.

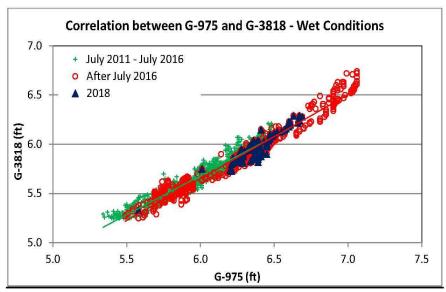


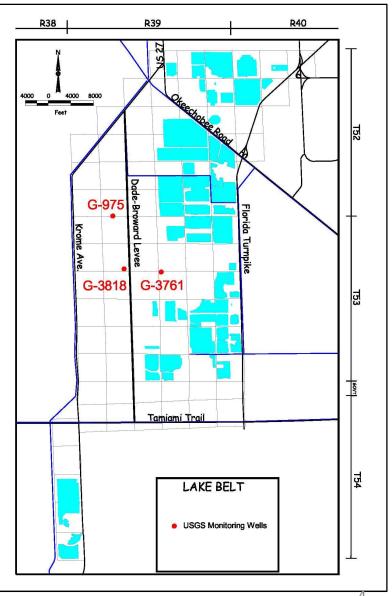


DBL gaps - 1370' below 6.5' (seasonal high water)

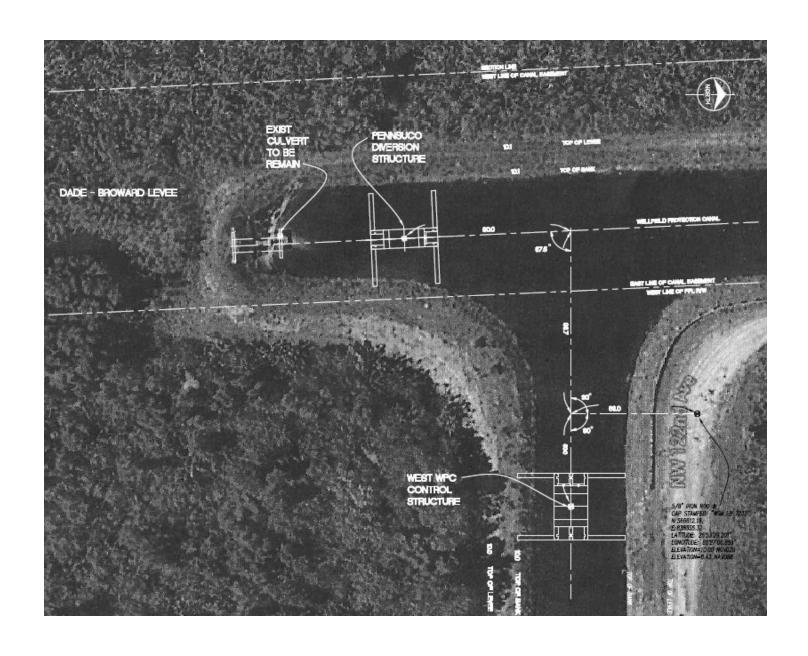
### Berm Repair



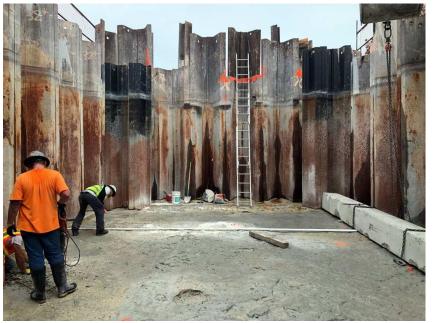




### Water control structures









West Wellfield Protection Canal structure

### West WPC structure



Upstream



Downstream

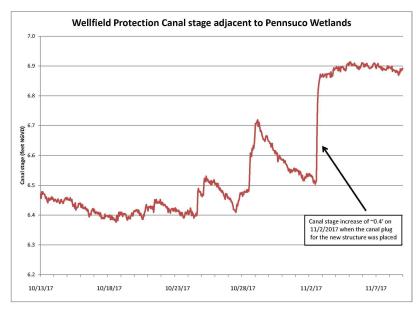


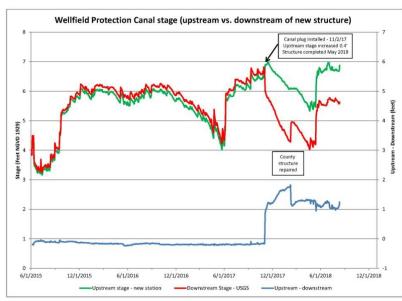
Pennsuco Diversion structure

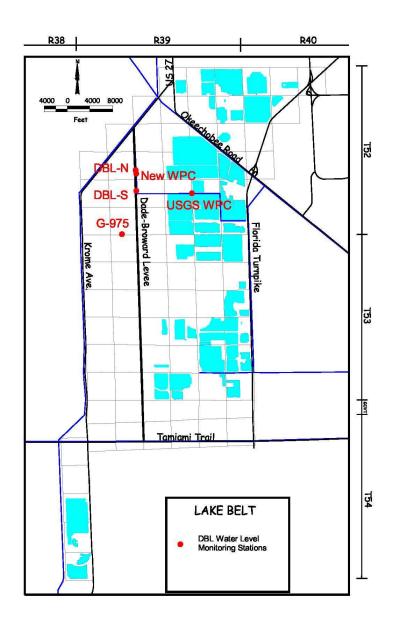




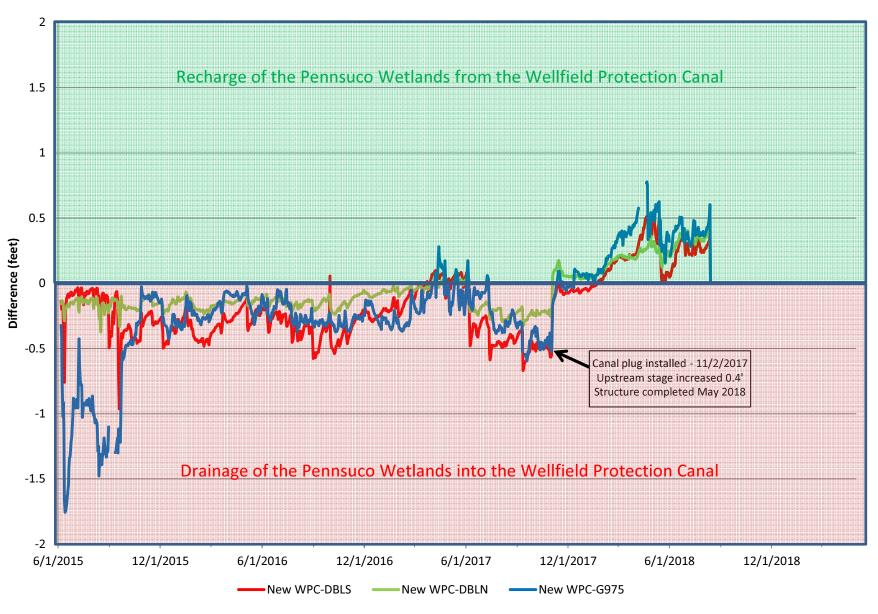
### **New Structure**







### Wellfield Protection Canal vs. Pennsuco wetland water levels

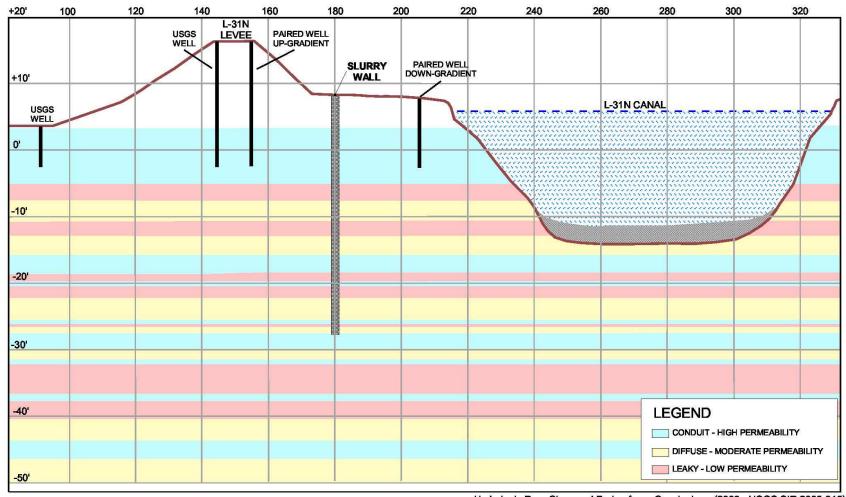


# Paired Monitoring Wells A **Flowmeters**

## L-31N Updated Monitoring Program

New wells and dataloggers have been installed





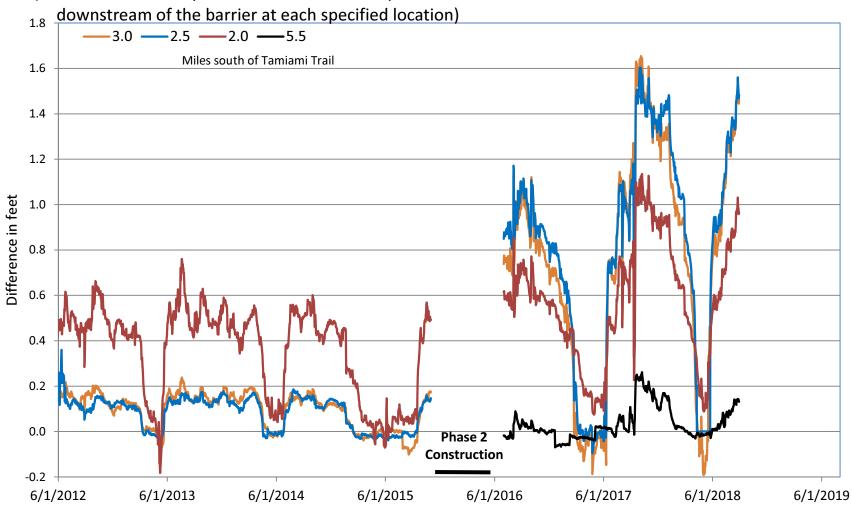
Hydrologic Pore Class and Boring from: Cunningham (2006 - USGS SIR 2005-315)

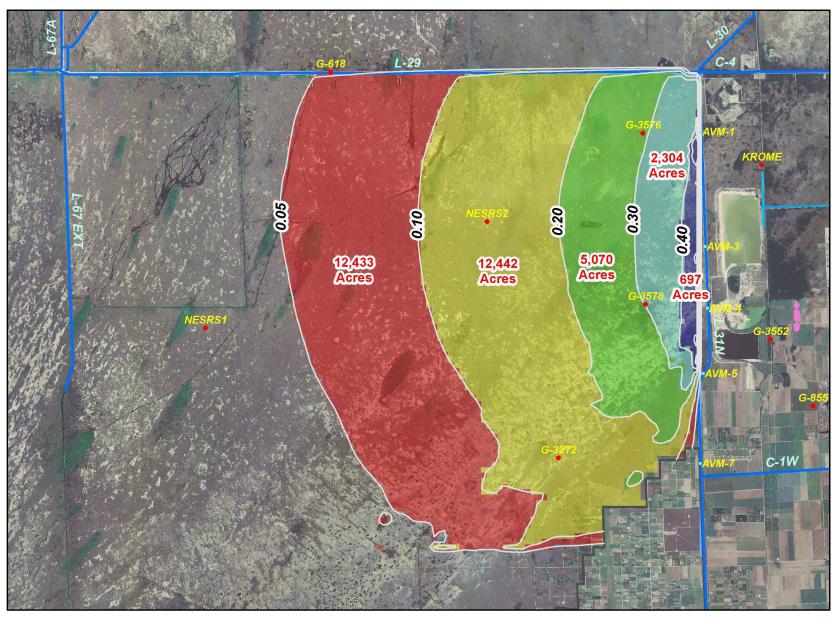
Paired Monitoring Wells Up-gradient and Down-gradient of 36' Deep Seepage Barrier

### Groundwater Stage Difference Across Barrier

(Difference between paired water table wells upstream and

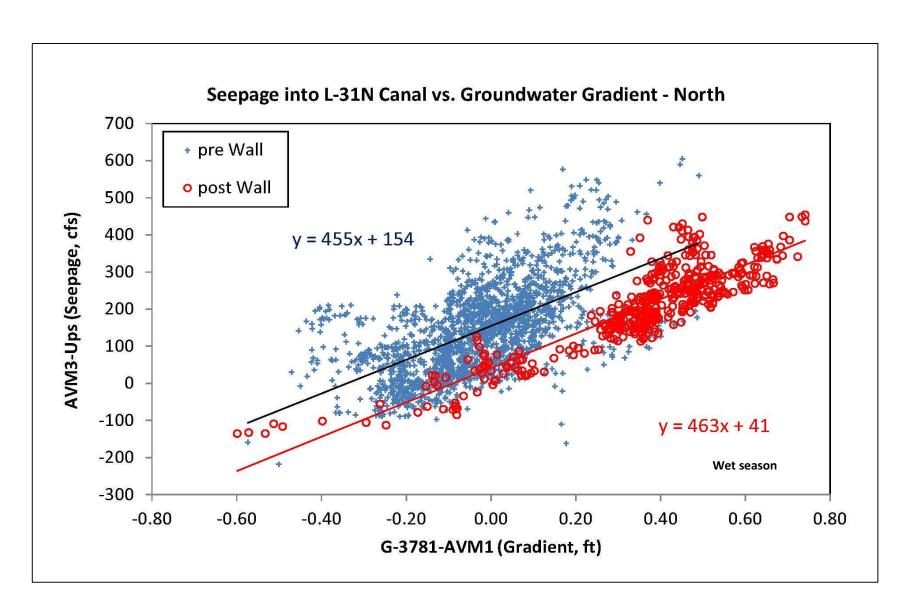
The northern 2 miles of barrier were completed in 2012. The remaining 3 miles were completed in April 2016.



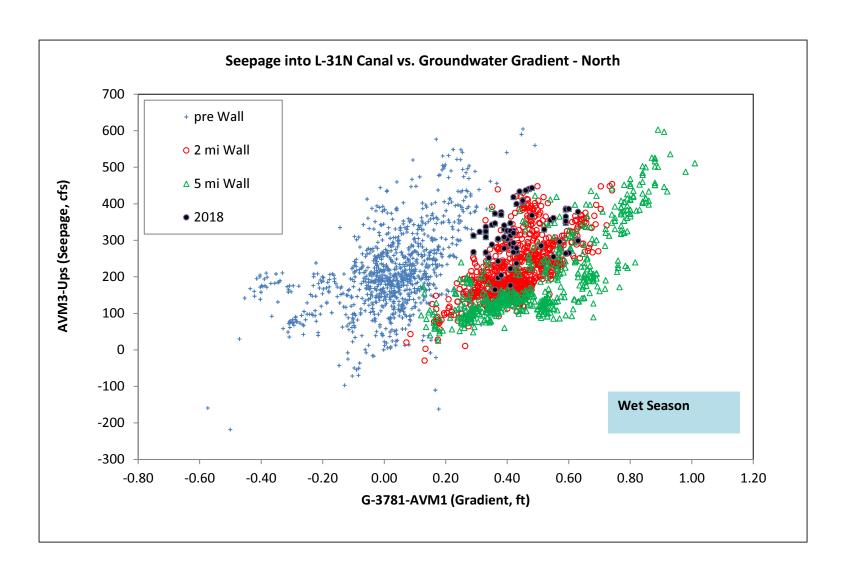


Effect of a 5-Mile Barrier Wall on Groundwater Levels Inside the ENP Barrier Depth: 30 ft; Daily Average: 7/1/2008-10/31/2008 (Wet)

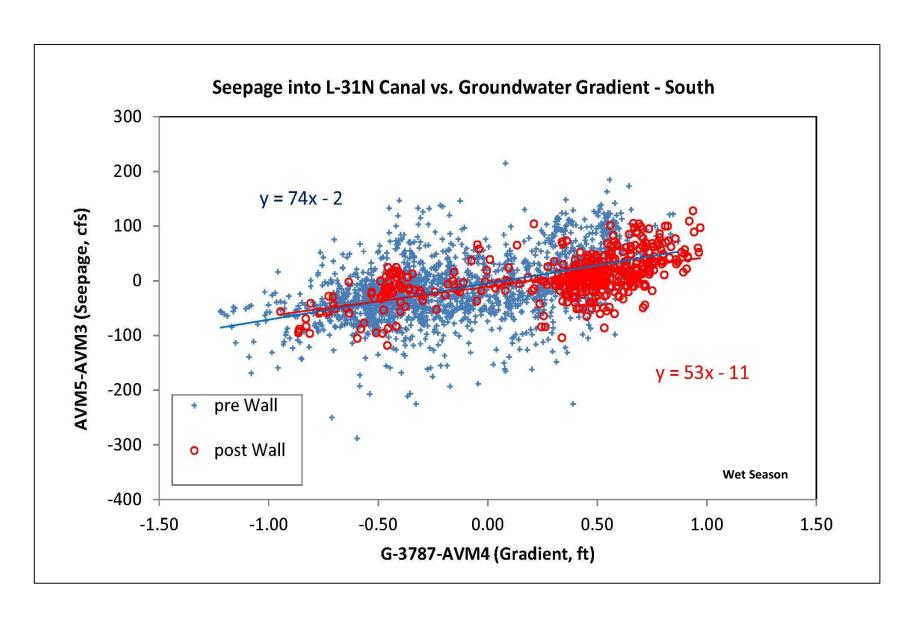
Seepage into the L-31N Canal between S-335 and Mile 3 vs. stage difference between the ENP and canal at mile 1 (with 2 miles of barrier constructed)



# Seepage into the L-31N Canal between S-335 and Mile 3 vs. stage difference between the ENP and canal Mile 1



Seepage into the L-31N Canal between Mile 3 and Mile 5 vs. stage difference between the ENP and canal at mile 4 (with 2 miles of barrier constructed)



# Seepage into the L-31N Canal between Mile 3 and Mile 5 vs. stage difference between the ENP and canal Mile 4

