

# Variations in Sea Levels - Implications for Water Management

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[sfwmd.gov](http://sfwmd.gov)

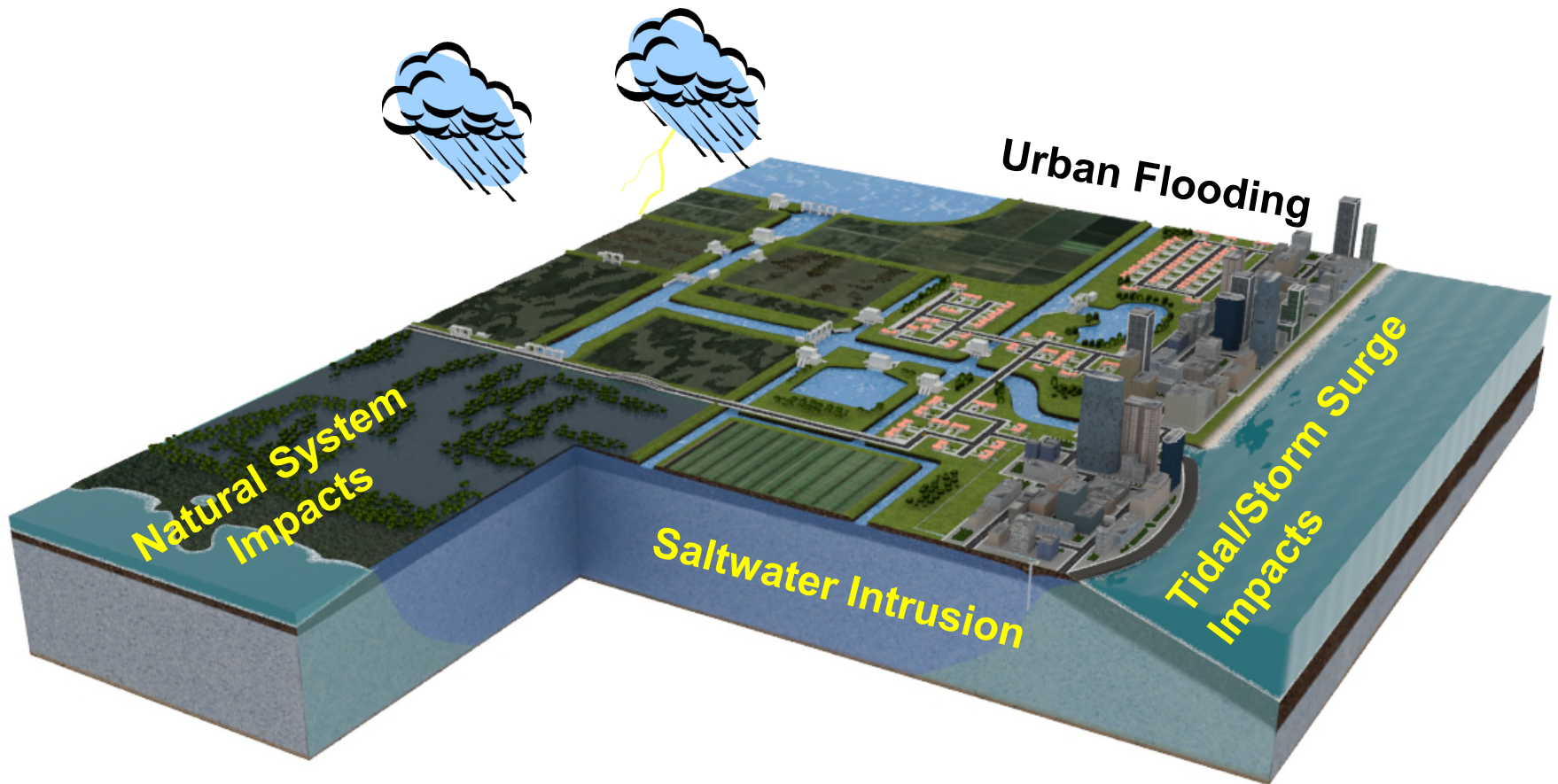
Workshop on the Effects of Gulf Stream Variations  
on Sea Levels along the Eastern Coast

FAU CES

Held at SFWMD Headquarters – May 9, 2017

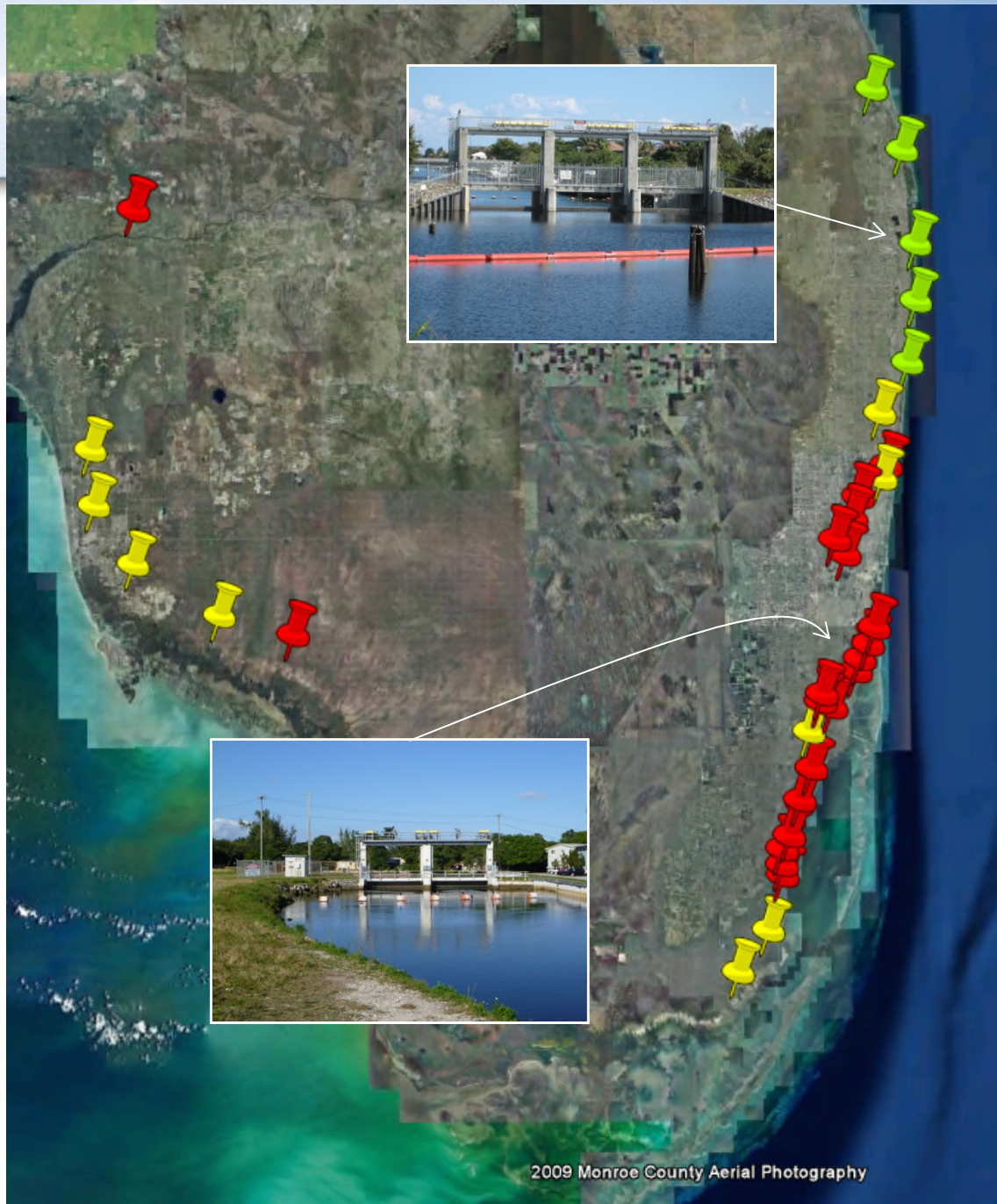
[sfwmd.gov](http://sfwmd.gov)

# Regional Water Management System



# Exposure & Vulnerability

- Most vulnerable structures are in Miami-Dade County Broward counties

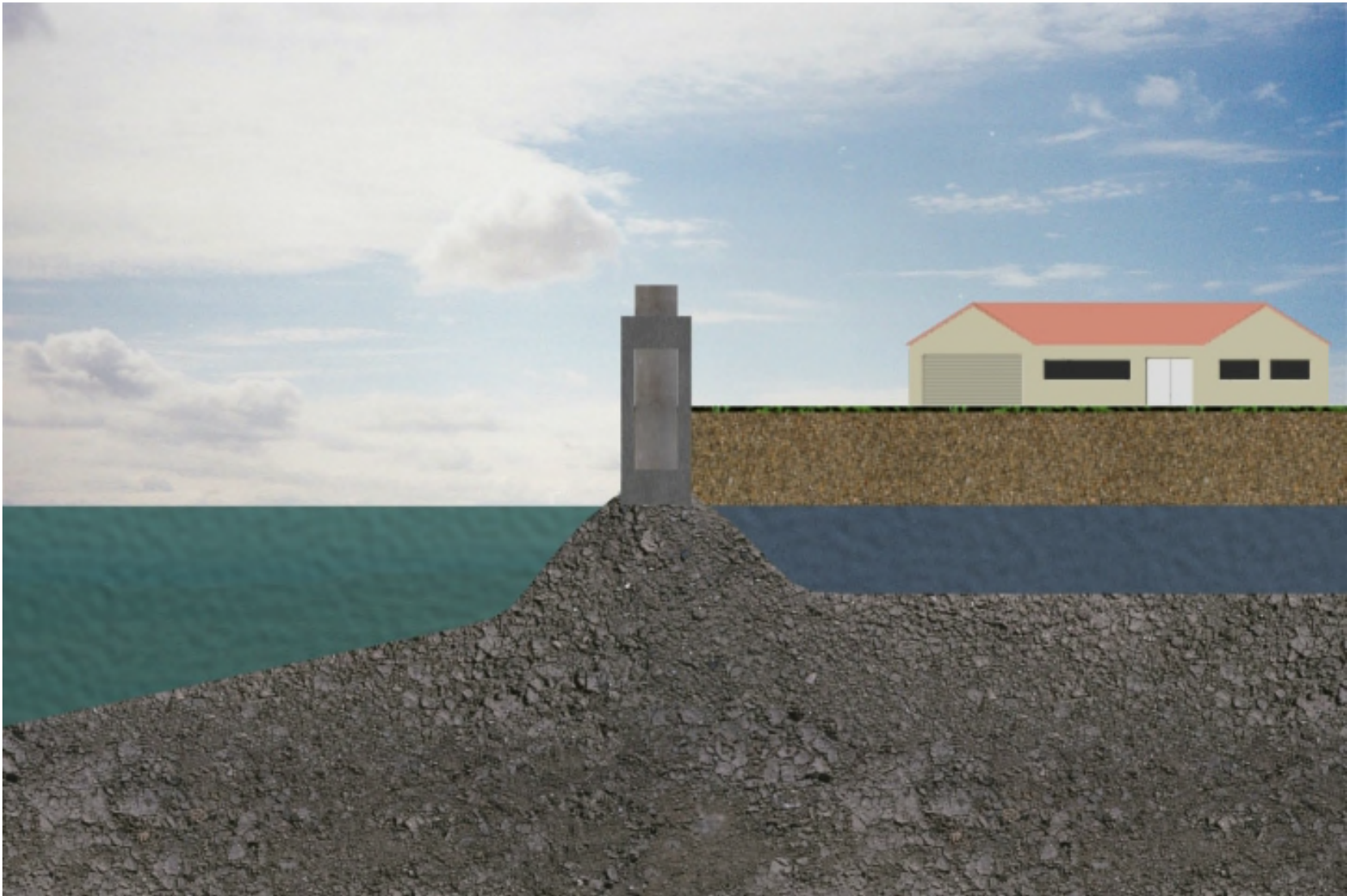


# Regional Water Control System

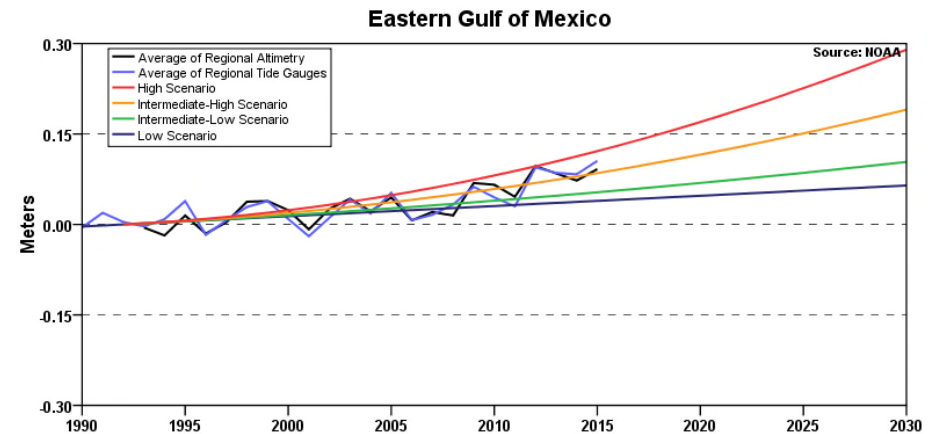
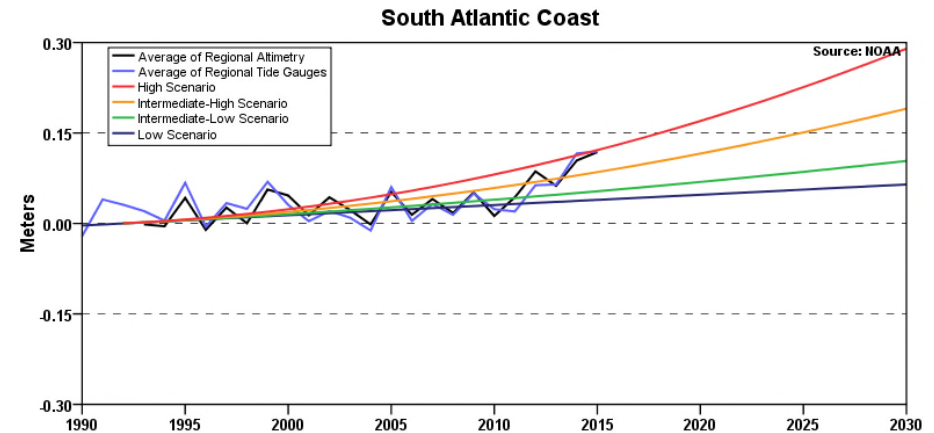
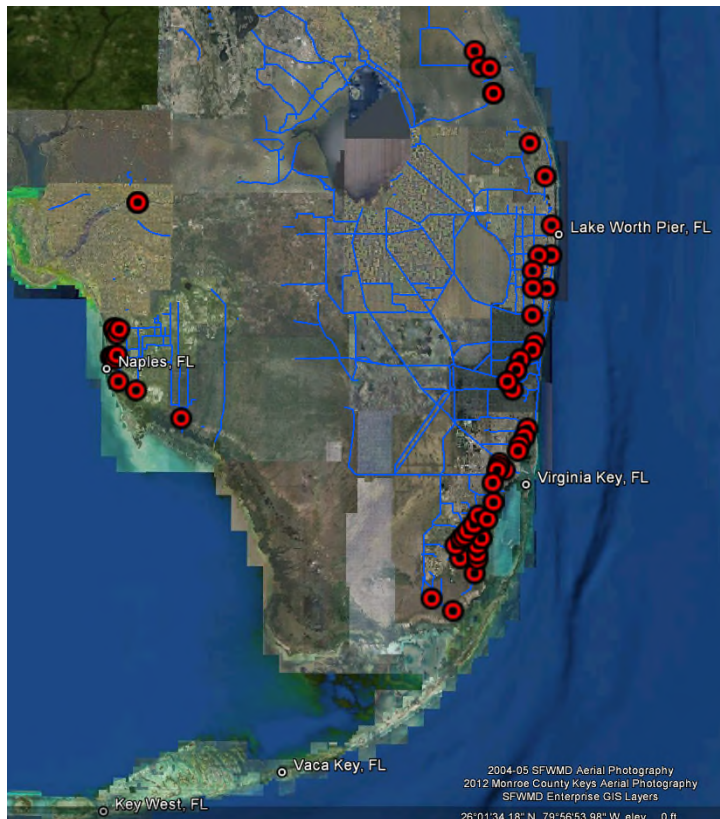
## Regional Coastal Water Control Structures



# Flood risk due to rising sea levels

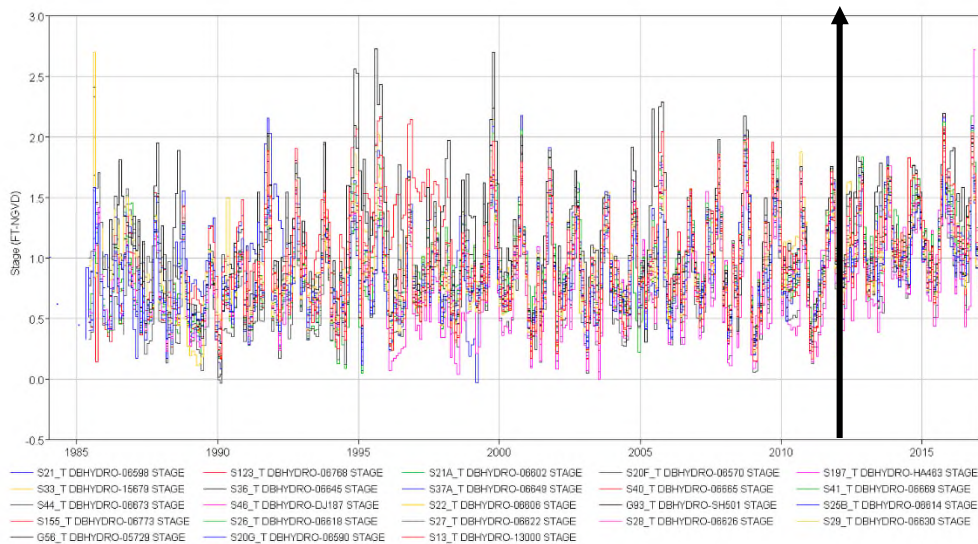


# Recent Sea Level Variations

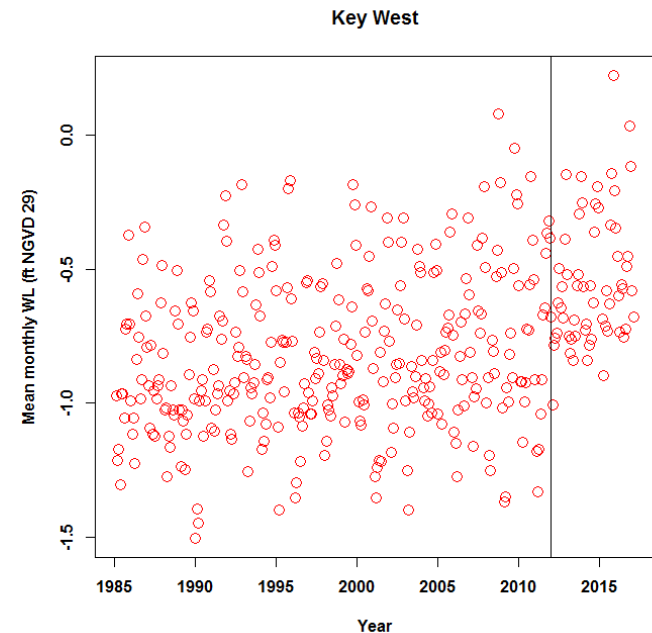
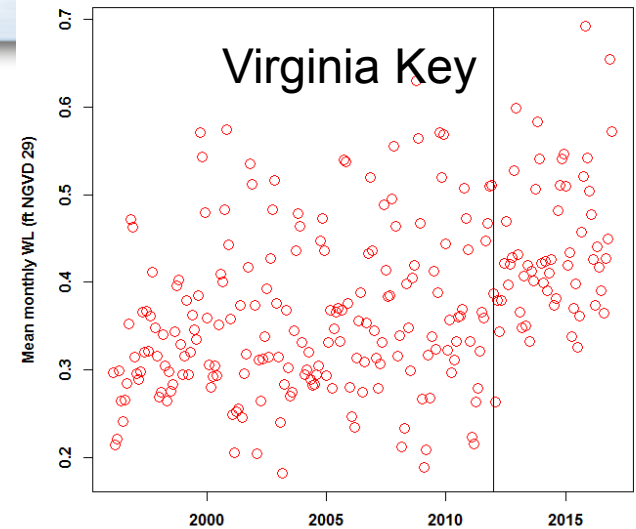


# Mean Monthly Sea Levels

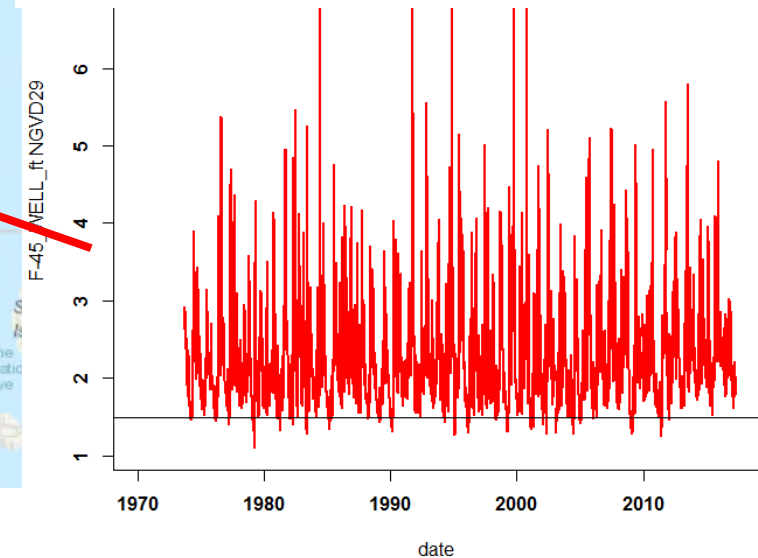
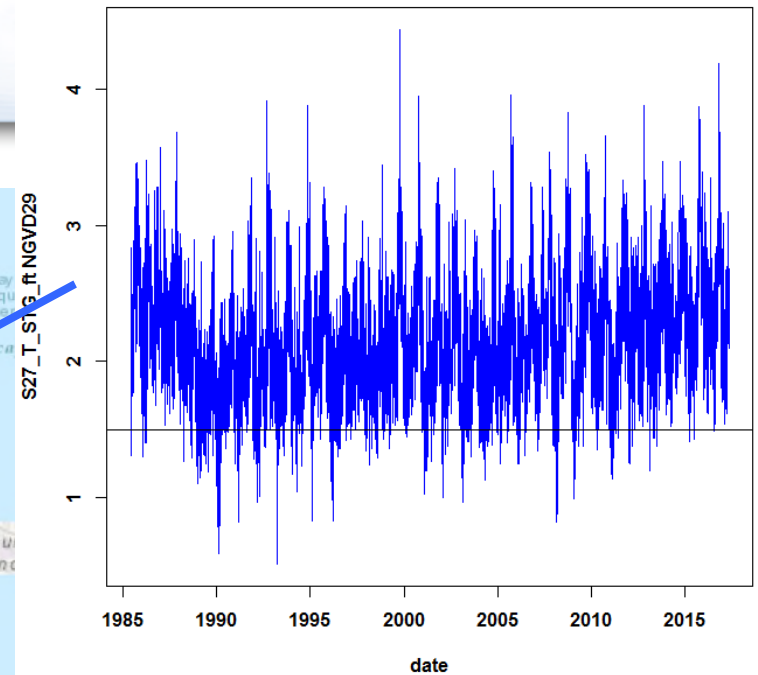
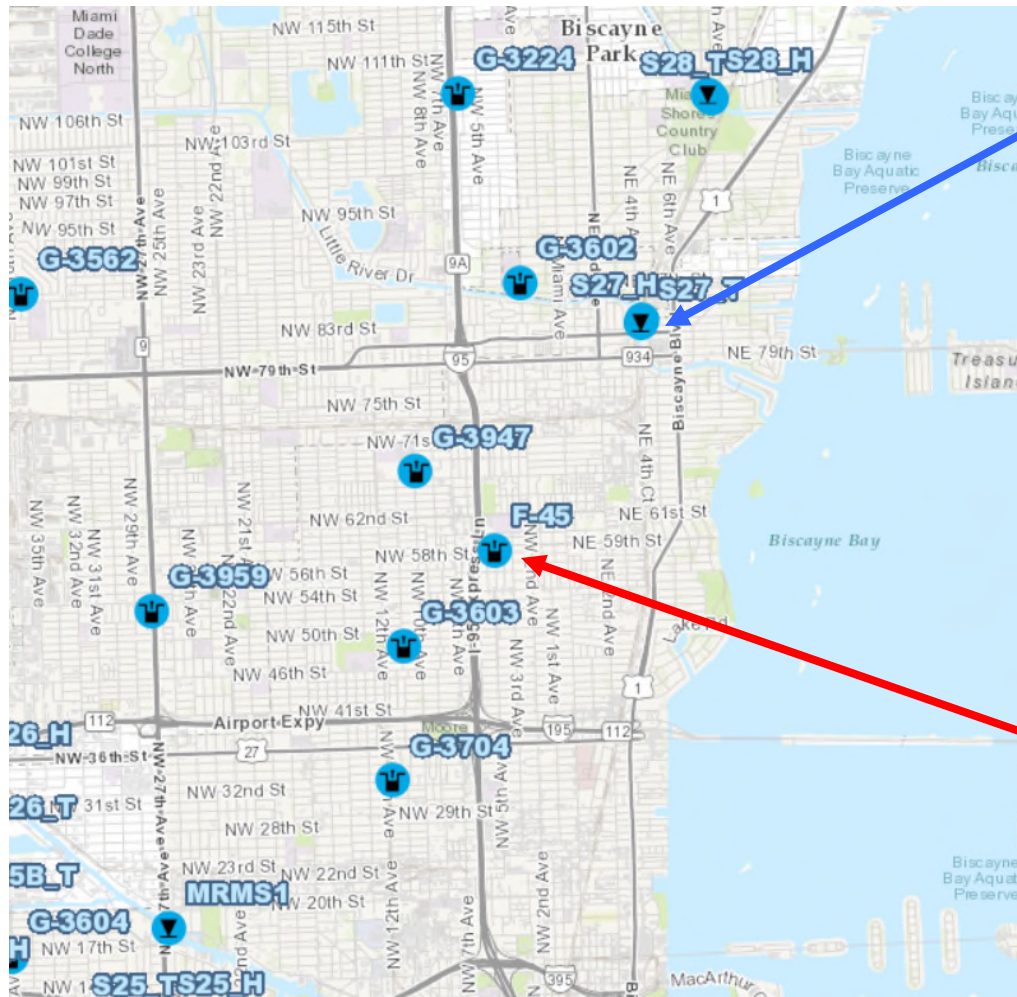
Ocean side of water control structure  
On East Coast

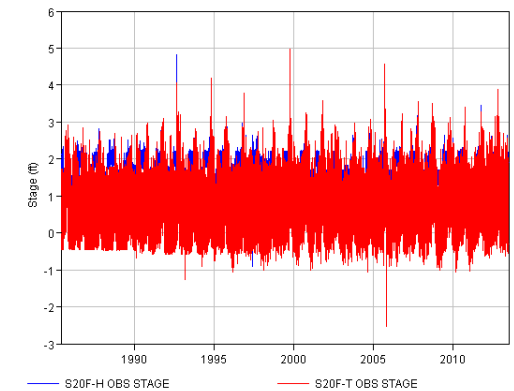
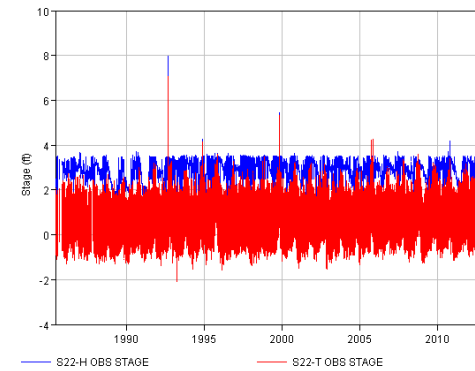
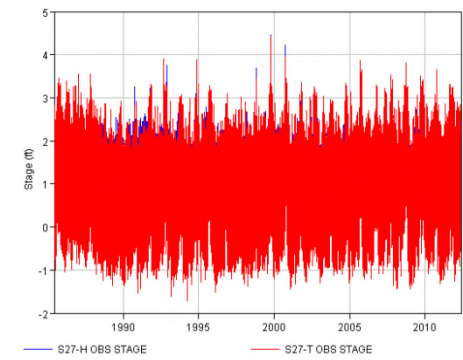
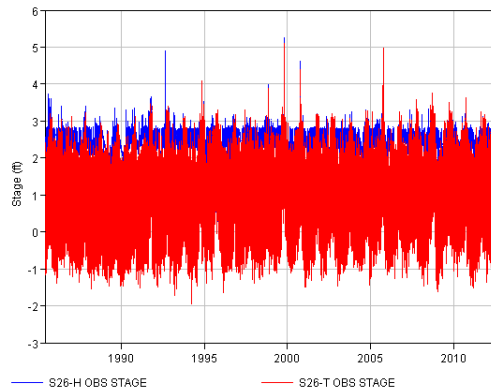


What happened after 2012?

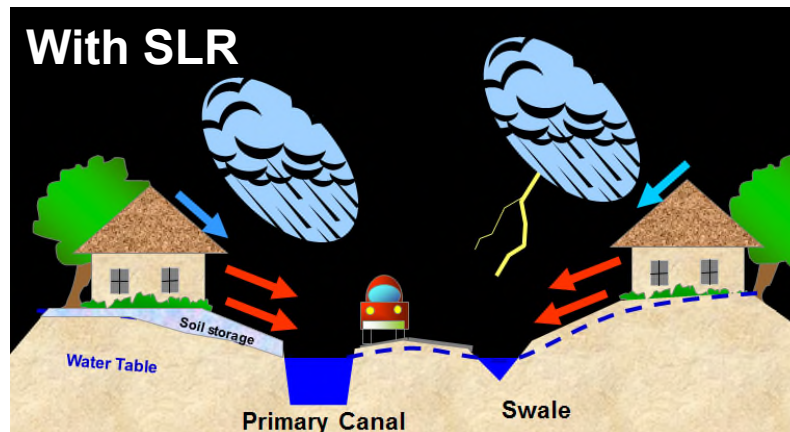
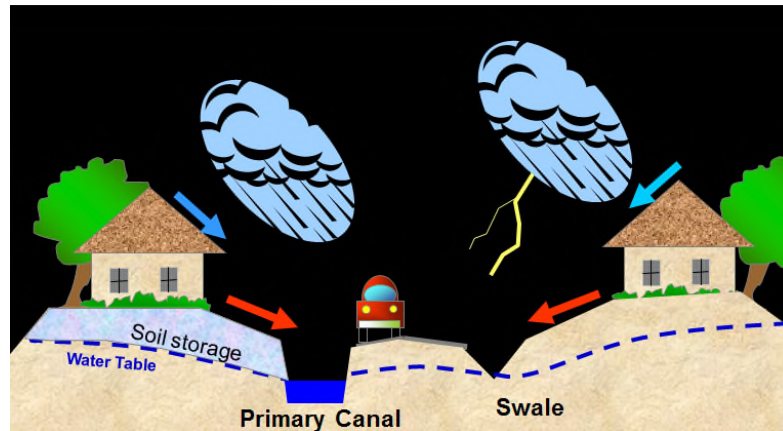


# Recent Trends in GW

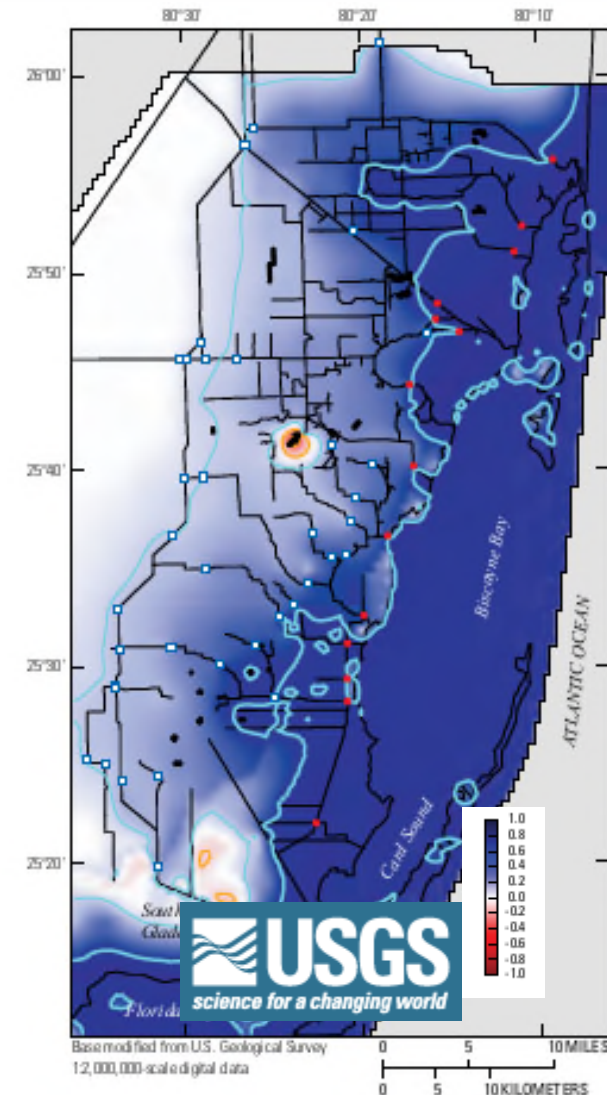




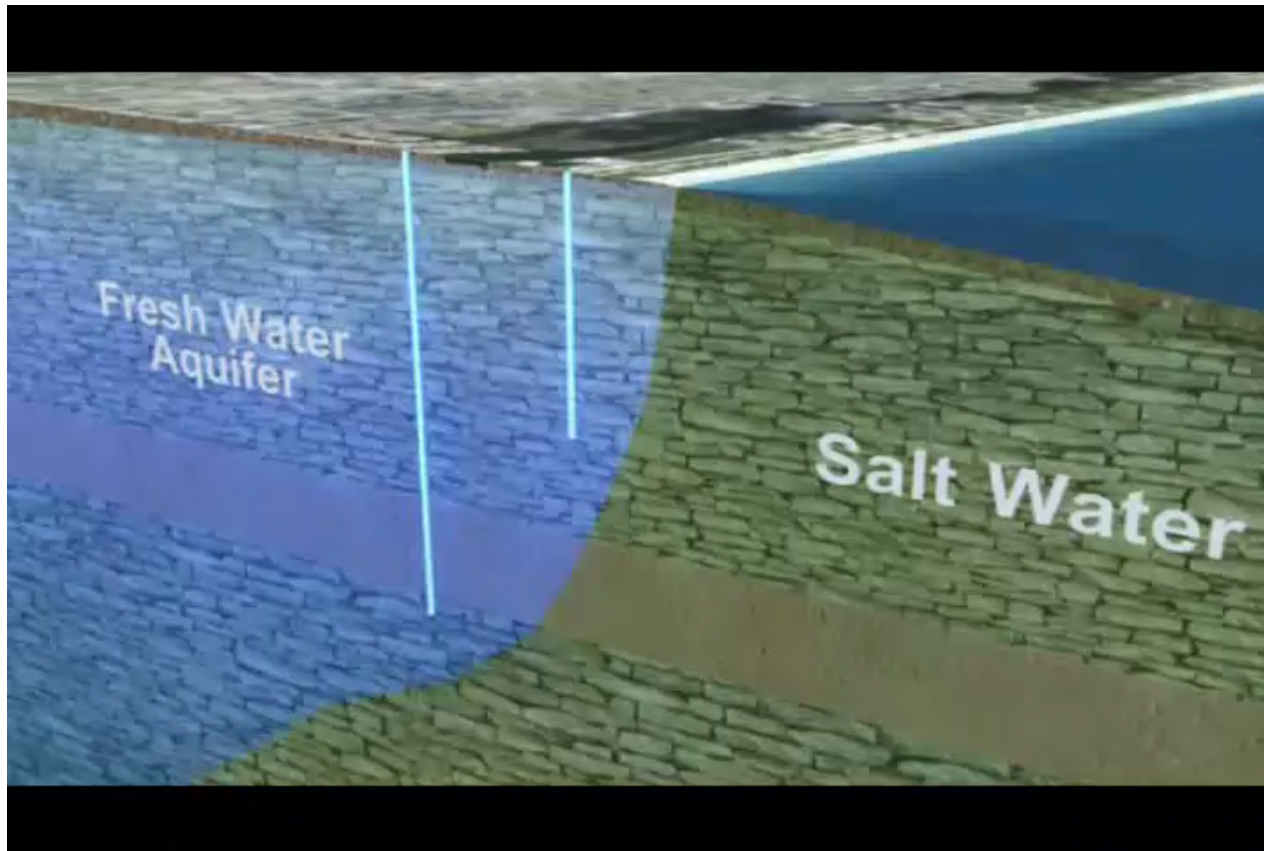
# Non-uniform water table increase: modeling (USGS/M-D WSD) results



Higher water table  
& more runoff

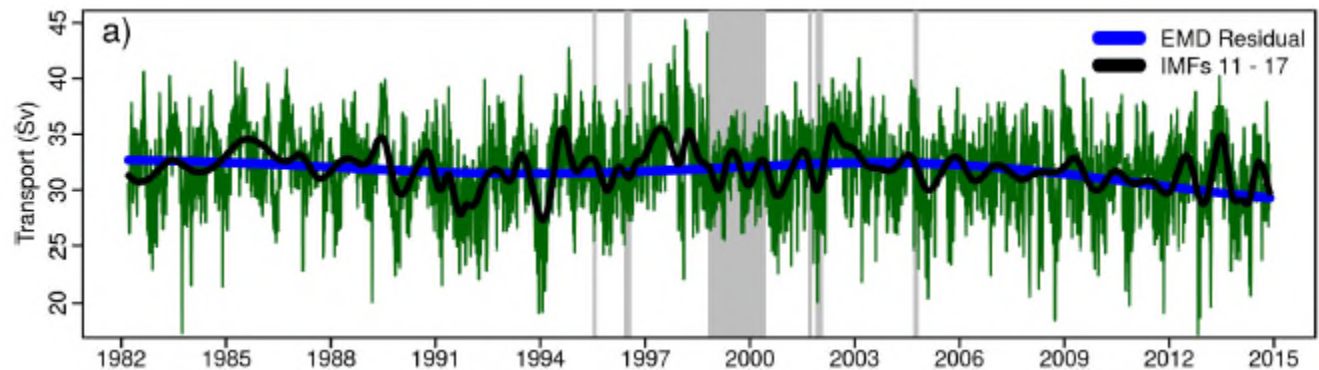
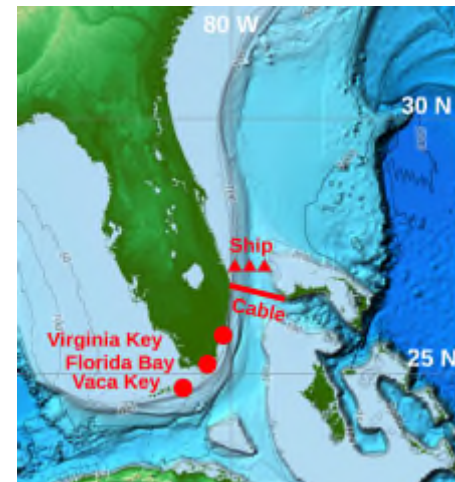


# Will Sea Level Rise Accelerate Saltwater Intrusion?



Credit: K. Cunningham USGS

# Decline in Florida Current Transport?



# Latest Regional Sea Level Projections

