#### Turkey Point Update

## Florida Keys Aqueduct Authority

## Wellfield Protection

Presented To: Key West City Commission

Date: June 15, 2021

By: Kerry G Shelby

FLORIDA KEYS AQUEDUCT AUTHORITY

Florida Keys Aqueduct Authority

### FLORIDA KEYS

FKAA Water Treatment Plant

Key West

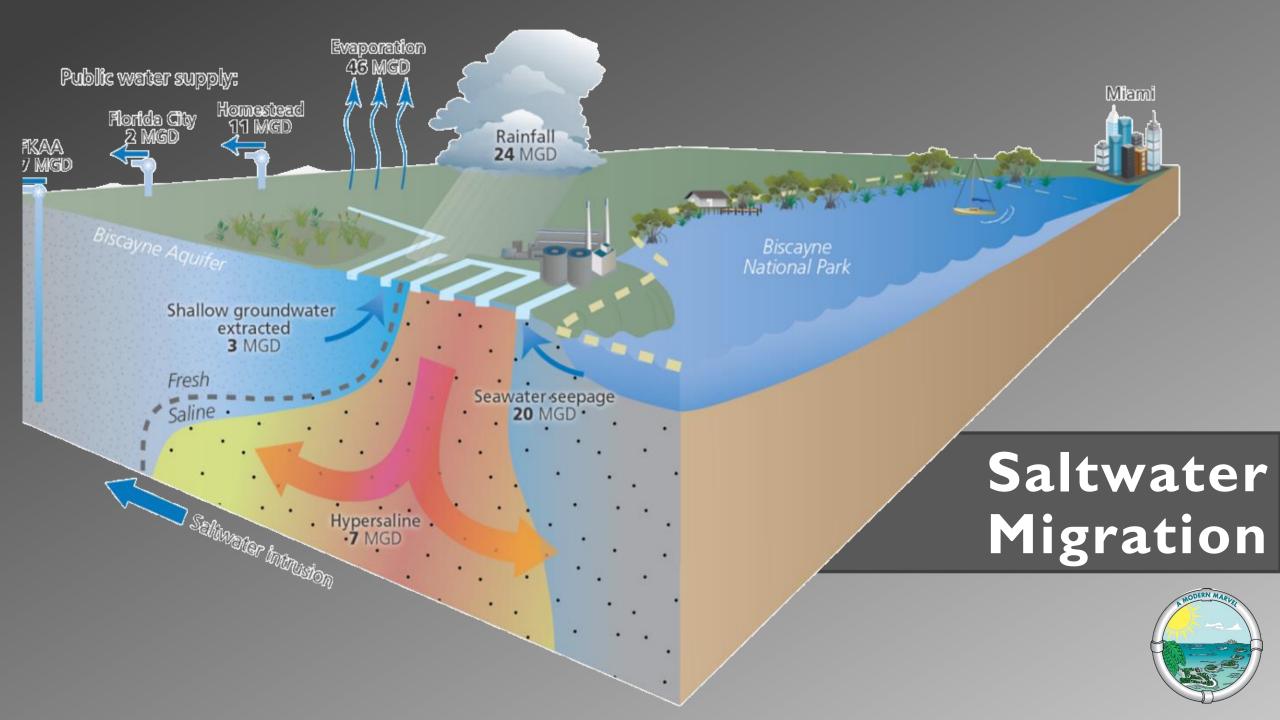
Marathon



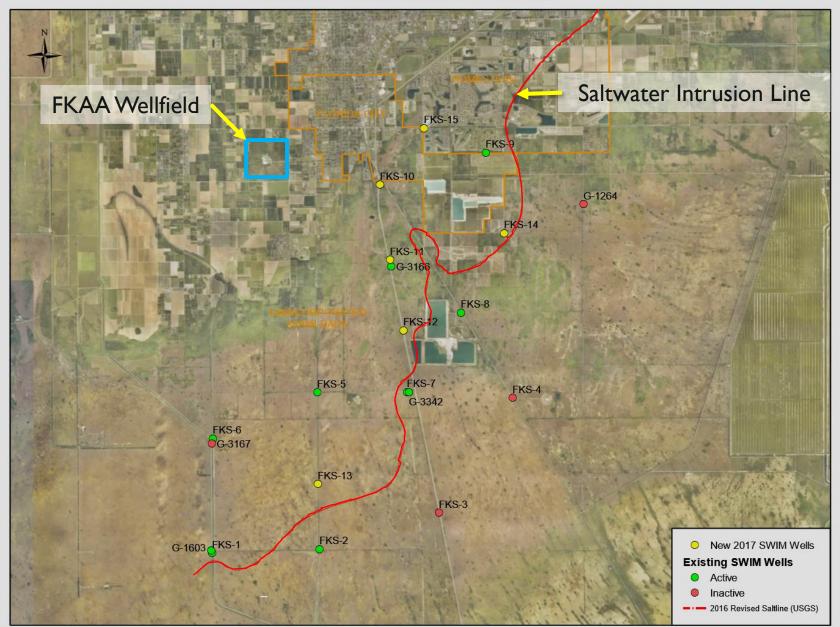


## FKAA Water Treatment Plant



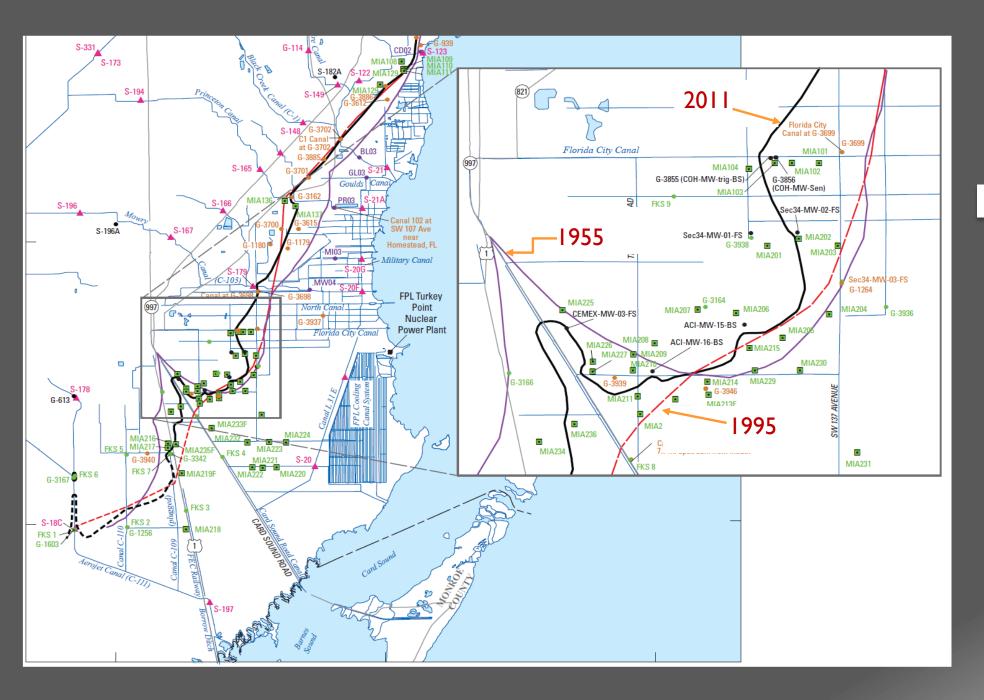


FKAA Salt Water Intrusion Monitoring Wells



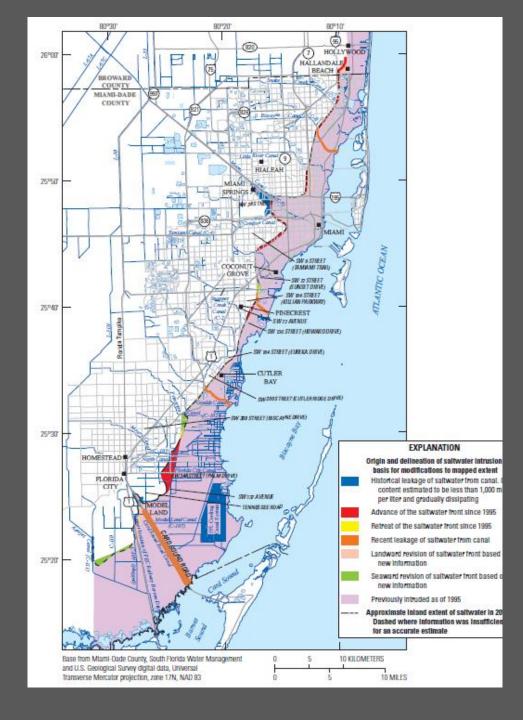
### SWIM Well Program





### Saltwater Intrusion Is Not New





### Saltwater Front Changes Over Time



Biscayne Bay

Turkey

Point

Cooling

Canals

9.5 Miles

**Turkey Point** 

FKAA Wellfield



# COOLING CANAL SYSTEM (CCS)



#### Tracer Indicates That CCS Is Responsible For Some Saltwater Intrusion

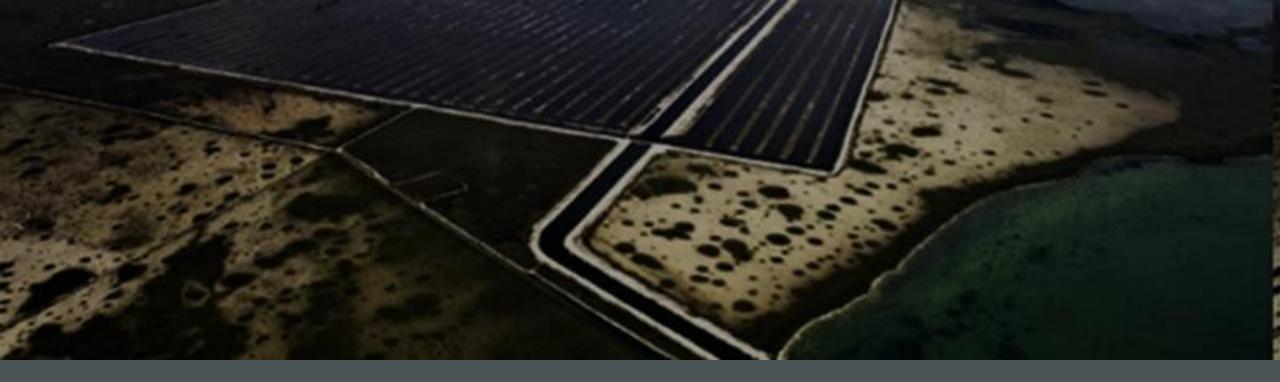




### **Enforcement Actions**

- FDEP Consent Order
- Miami-Dade Consent Order





### Remediation

- Add water to the CCS (Freshen)
- Extract hypersaline water from aquifer
- Inject into the Boulder Zone



### The Authority's Position

Remediation has NOT been determined to be effective at this time

The CCS Should be DECOMMISSIONED in favor of cooling towers

Extension or expansion permits should NOT be issued until the plume is retracted





### FDEP Discharge Permit Renewal

Background

• Litigation Status





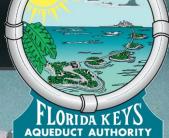
### **Future Considerations**

- Move the Wellfield
- Change Treatment Types
- Interconnect to Another Wellfield



### QUESTIONS?

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MODERN MAL