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

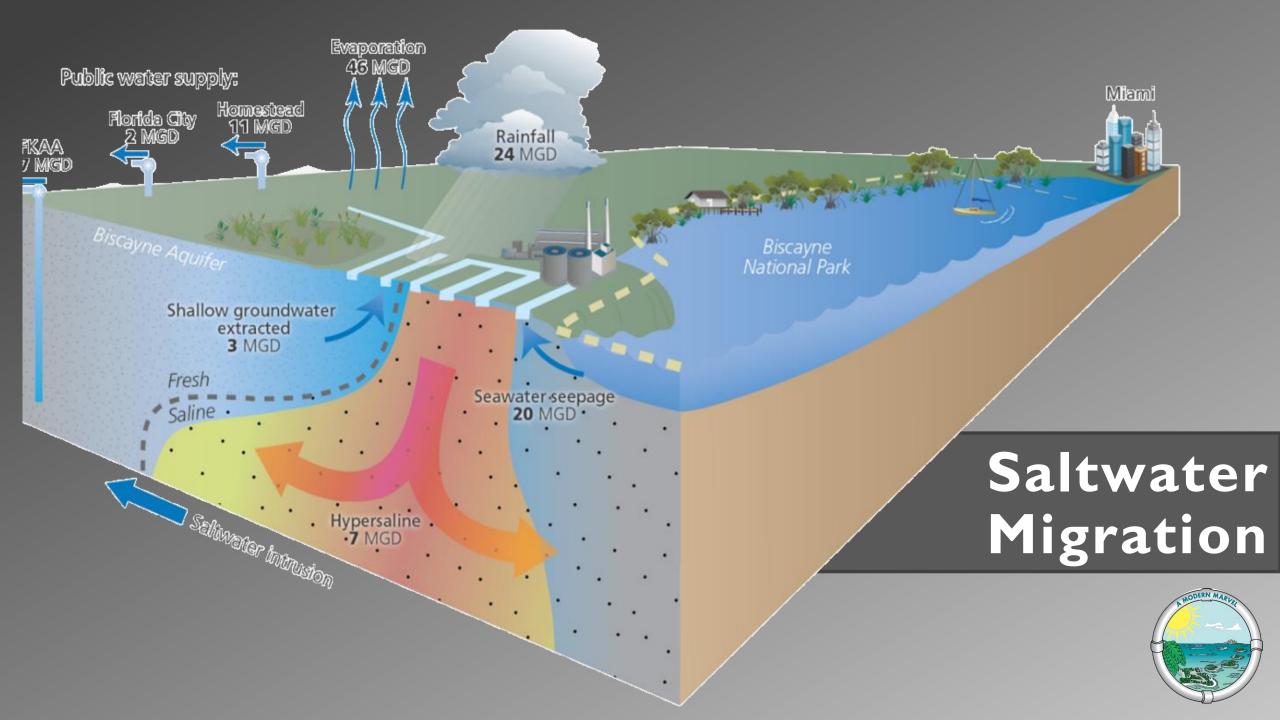
Marathon



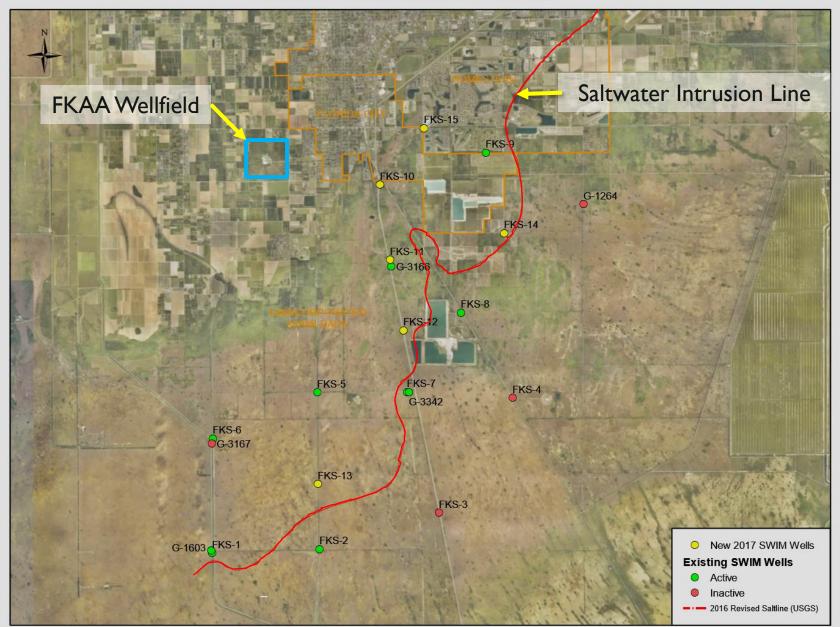


FKAA Water Treatment Plant



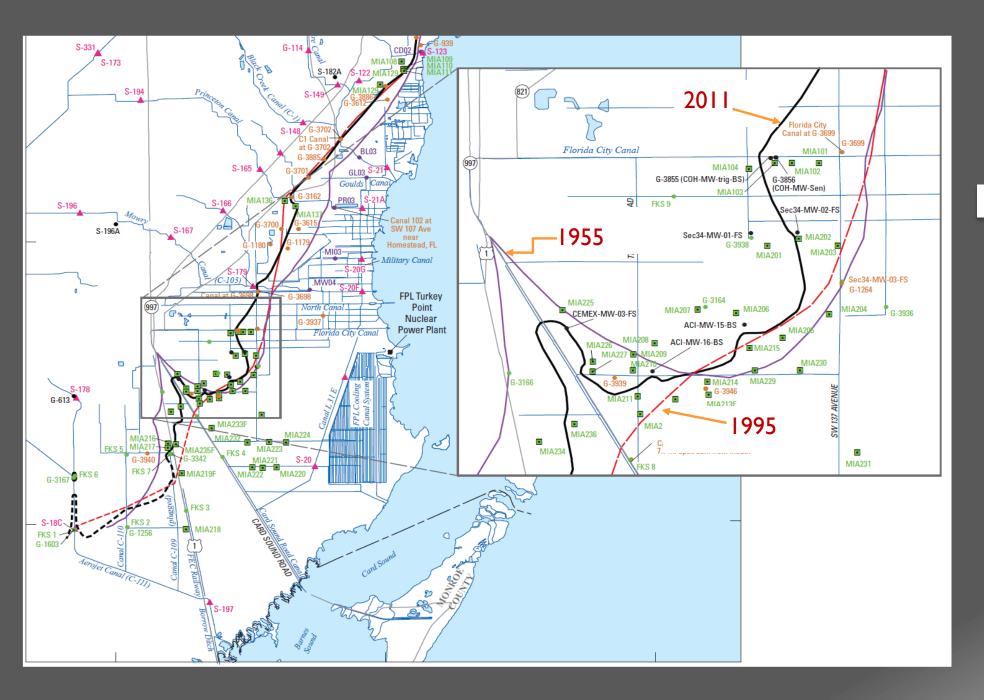


FKAA Salt Water Intrusion Monitoring Wells



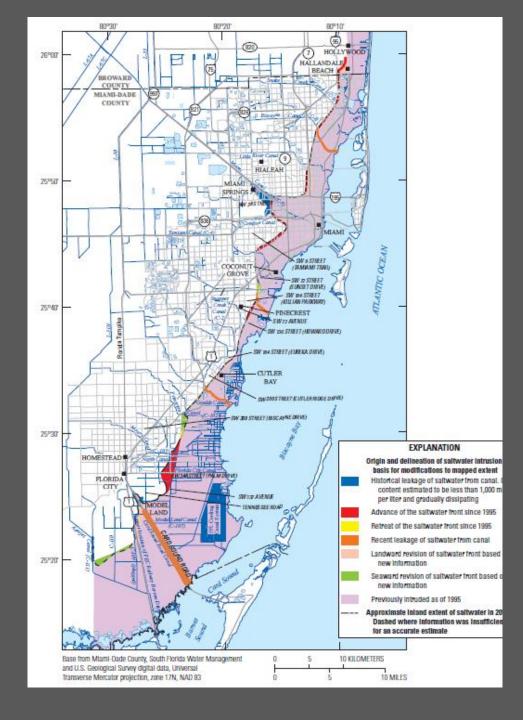
SWIM Well Program





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





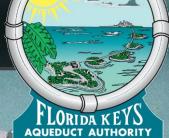
Future Considerations

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



QUESTIONS?

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MODERN MAL