Real-Time Springs Monitoring: First Magnitude Springs Dashboards

Water Quality Monitoring Program

How is the water?

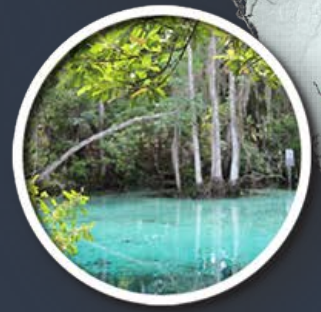
Real-Time Springs

WEEKI WACHEE SPRINGS

CHASSAHOWITZKA SPRINGS

RAINBOW SPRINGS

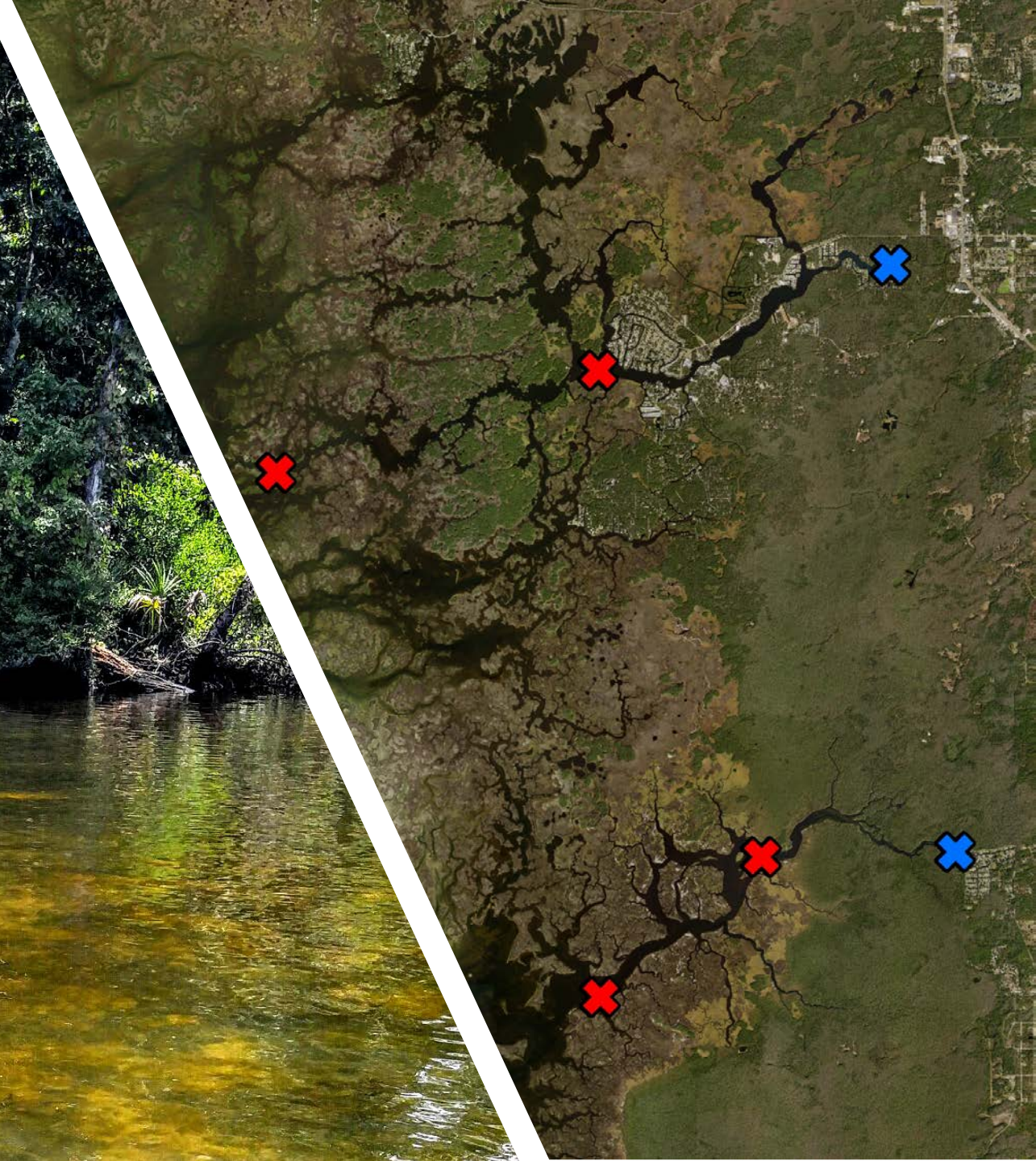
CRYSTAL RIVER/ KINGS BAY



HOMOSASSA SPRINGS

Continuous Offshore Monitoring

- pH
- Depth
- Salinity
- Temperature
- Dissolved Oxygen
- Specific Conductance
- Turbidity
- Chlorophyll

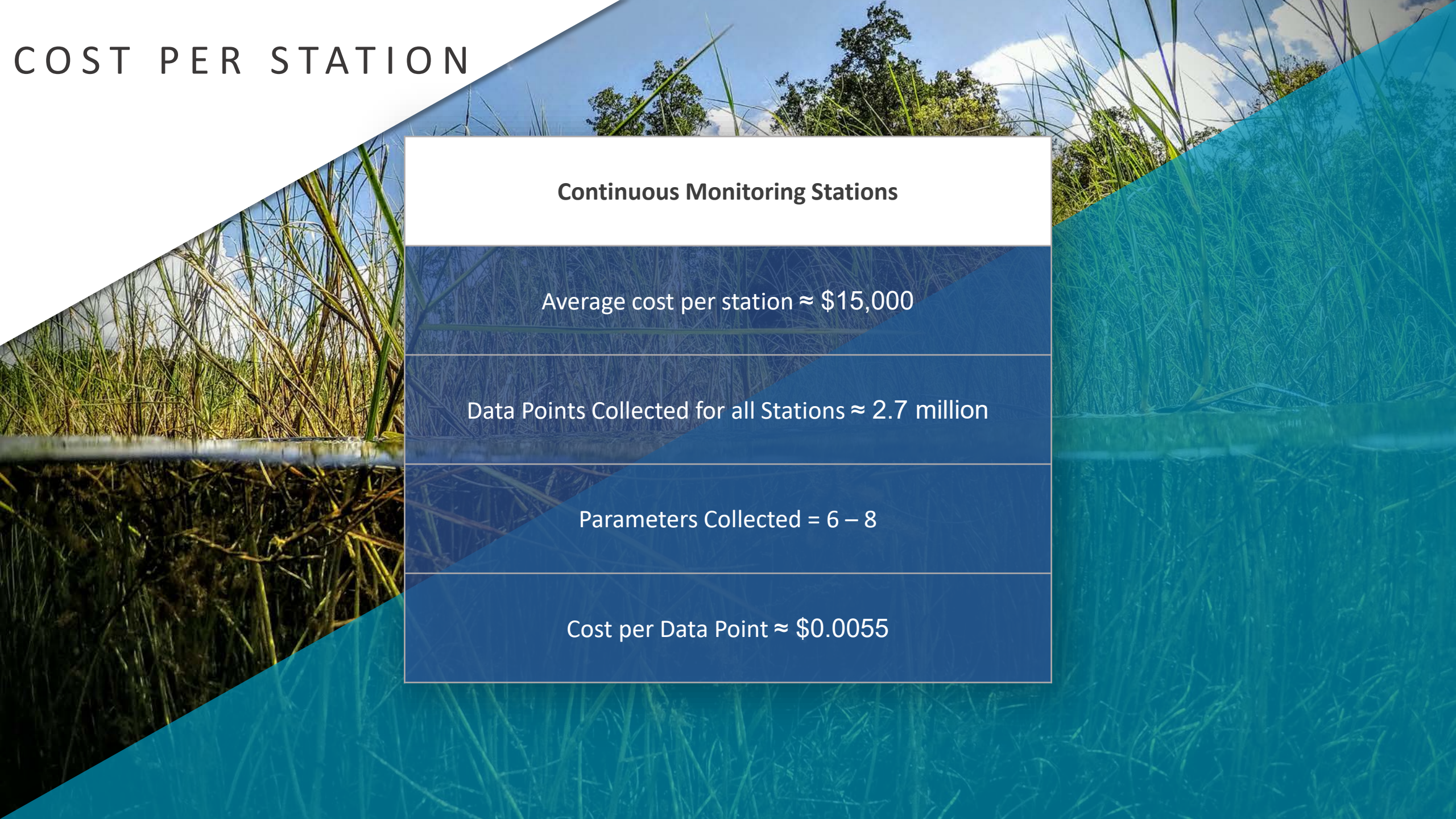


SRWMD

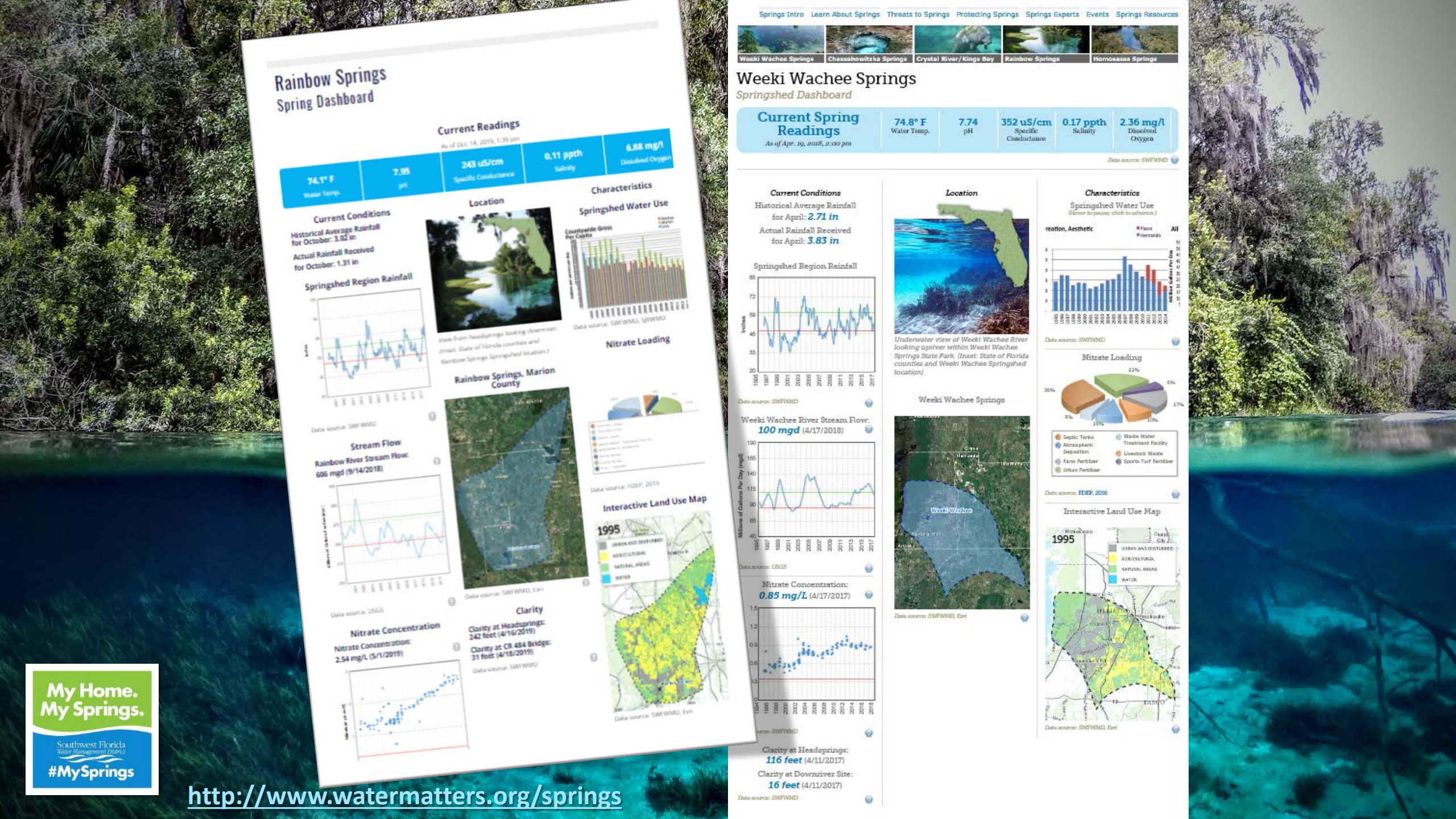
SWFWMD

SJRWMD

COST PER STATION



Continuous Monitoring Stations
Average cost per station ≈ $15,000
Data Points Collected for all Stations ≈ 2.7 million
Parameters Collected = 6 – 8
Cost per Data Point ≈ $0.0055



My Home. My Springs.
Southwest Florida Water Management District
#MySprings

http://www.watermatters.org/springs

Chassahowitzka Springs

Spring Dashboard

Current Readings

As of Jan. 15, 2020, 10:53 am

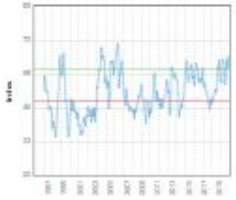
72.8° F	7.42	1683 uS/cm	0.85 ppth	5.22 mg/l
Water Temp.	pH	Specific Conductance	Salinity	Dissolved Oxygen

Current Conditions

Historical Average Rainfall for January: 2.71 in

Actual Rainfall Received for January: 0.60 in

Springshed Region Rainfall



Location

View of Chassahowitzka River looking downriver from headsprings. (Inset: State of Florida counties and Chassahowitzka Springshed location.)

Characteristics

Springshed Water Use

Data source: SWFWMD

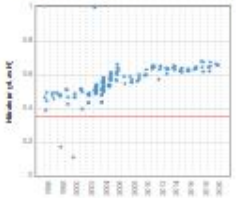
Nitrate Loading

Chassahowitzka Springs, Citrus County

Data source: USGS

Nitrate Concentration

Nitrate Concentration: 0.66 mg/L (10/9/2019)



Data source: SWFWMD

Data source: SWFWMD, Esri

Clarity

Clarity at Headsprings: 8 feet (8/20/2019)

Clarity at Downriver Site: 5 feet (7/11/2019)

Data source: SWFWMD

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Springs in West-Central Florida

My Home. My Springs.

Southwest Florida Water Management District

#MySprings

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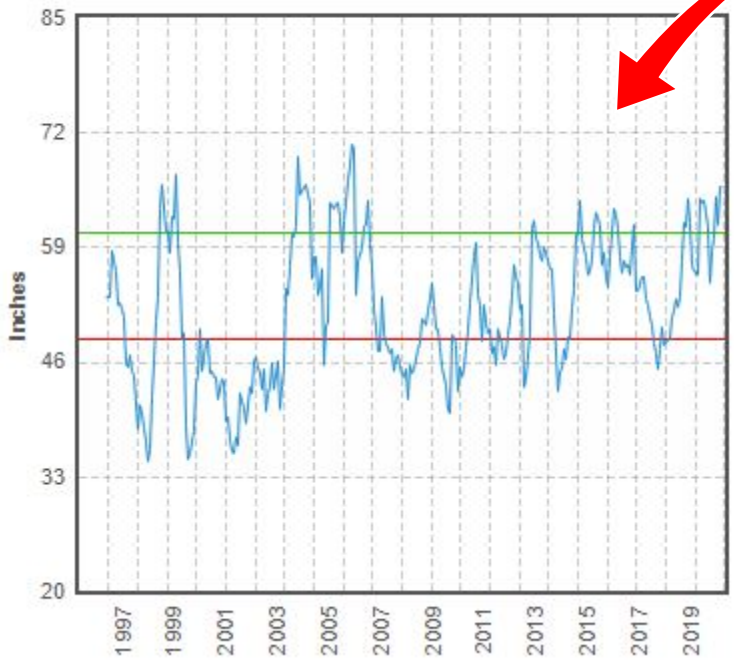

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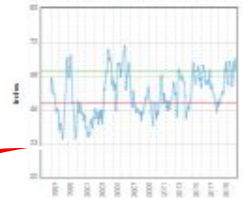
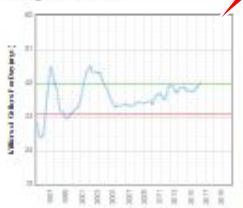


Data source: SWFWMD

Stream Flow

Chassahowitzka River Stream Flow: 44 mgd (8/27/2018)



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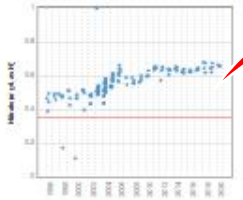

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Clarity …nriver Site: 5 fe… 1/2019)

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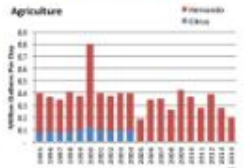

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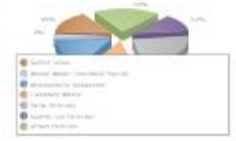
Ni…



Data source: FDEP, 2016

Interactive Land Use Map

Data source: SWFWMD, Esri

Springs in West-Central Florida

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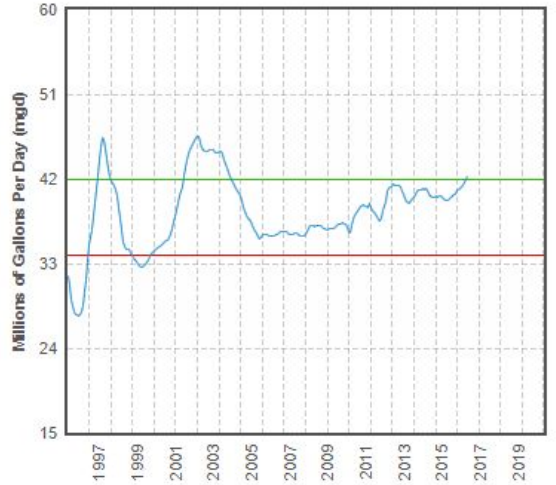

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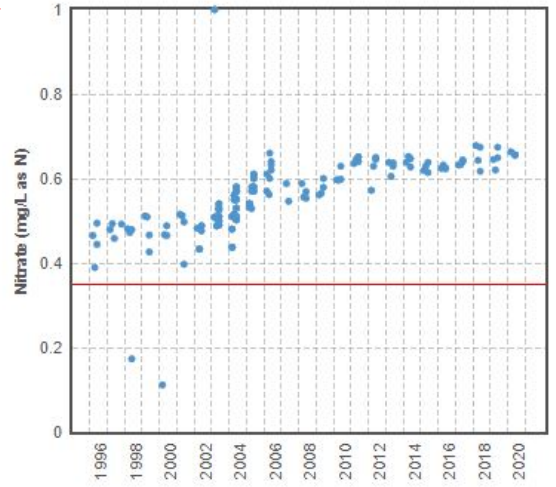

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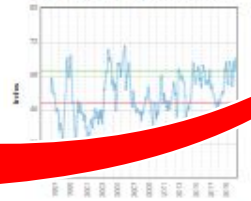

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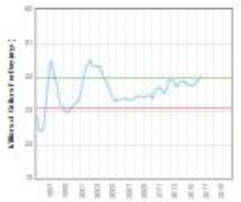

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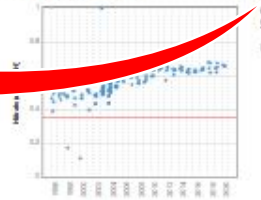

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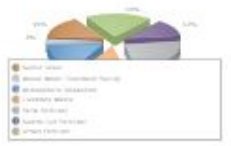

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Springs in West-Central Florida

Chassahowitzka Springs, Citrus County

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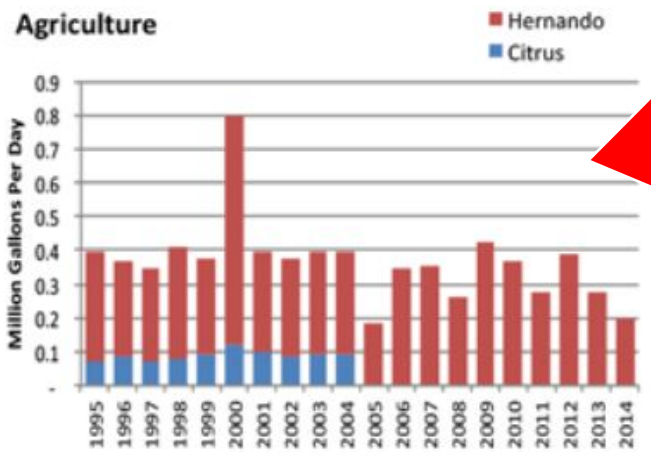
Springshed Water Use



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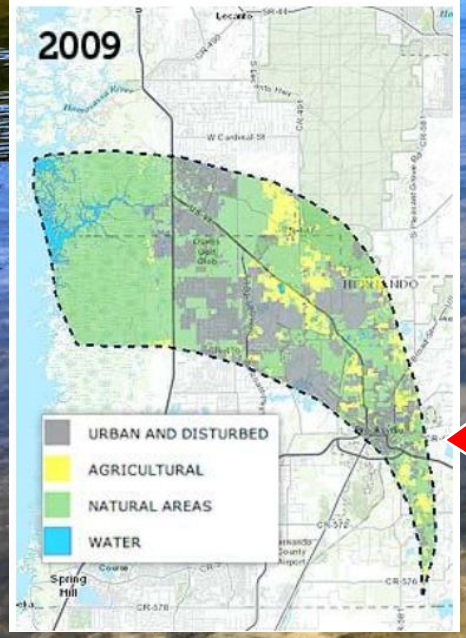

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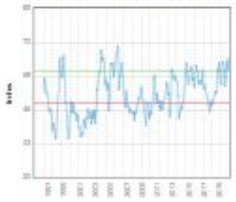

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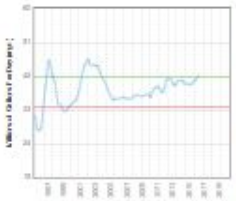

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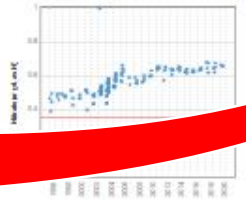

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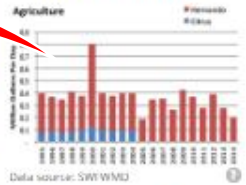

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Springs in West-Central Florida

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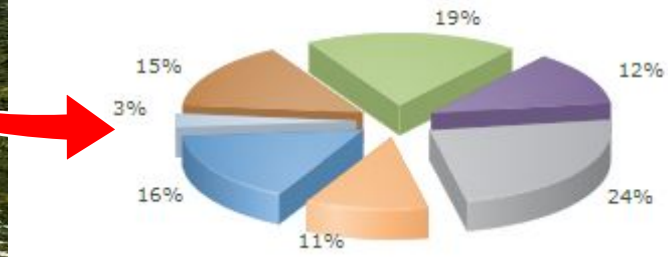


Dashboard

Visitors

2019

Pageviews

Kings Bay: 15172
Chassahowitzka: 15146
Weeki Wachee: 5552
Rainbow: 3551
Homosassa: 3324

All 50 States

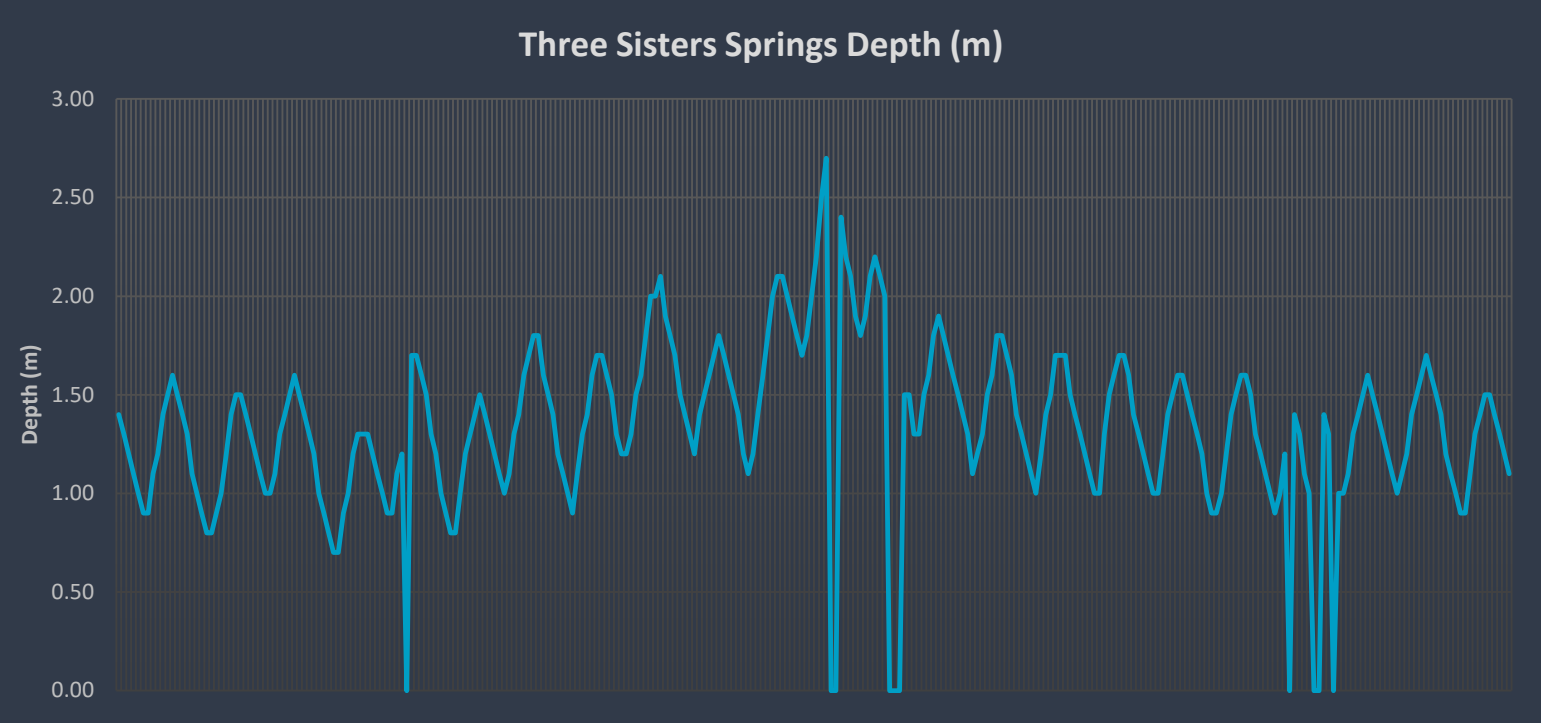
Florida: 72%
Georgia
Texas

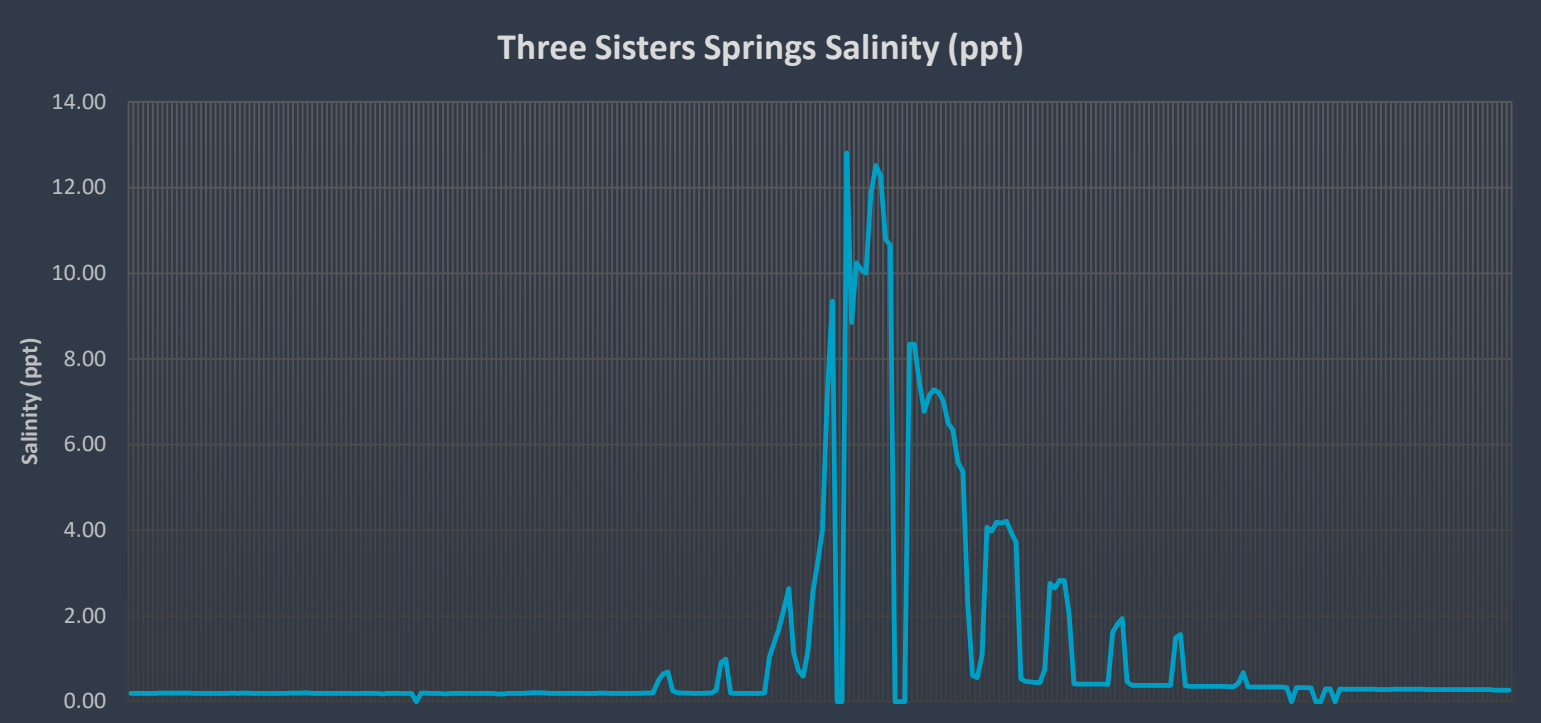
59 Countries

Canada
UK
Germany
Netherlands
Philippines
France
India
Peru
Brazil

Hurricane Hermine

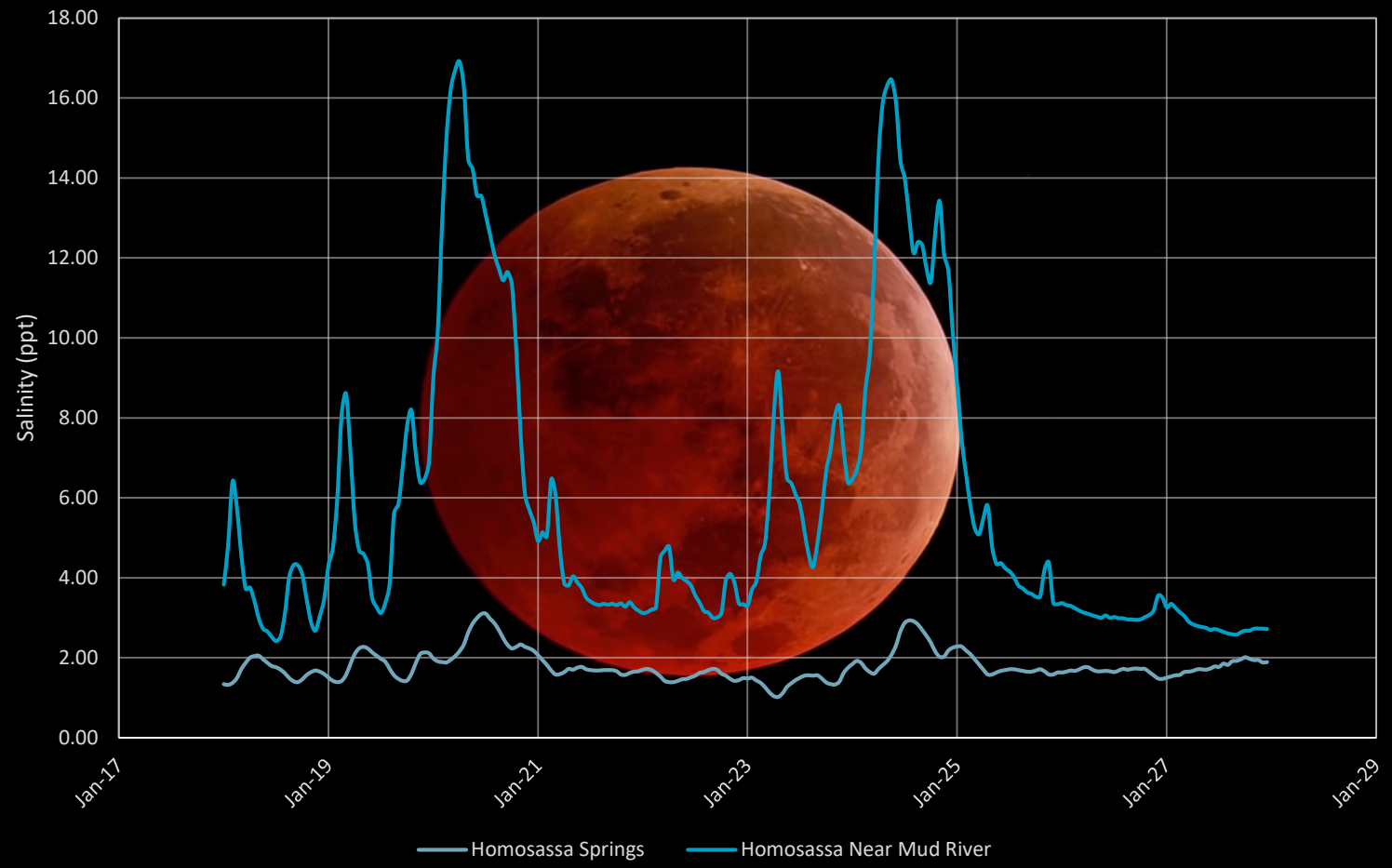
August 27, 2016 –September 8, 2016





Lunar Eclipse

January 21, 2019



It's My Life's Work

#WorkForOurWater