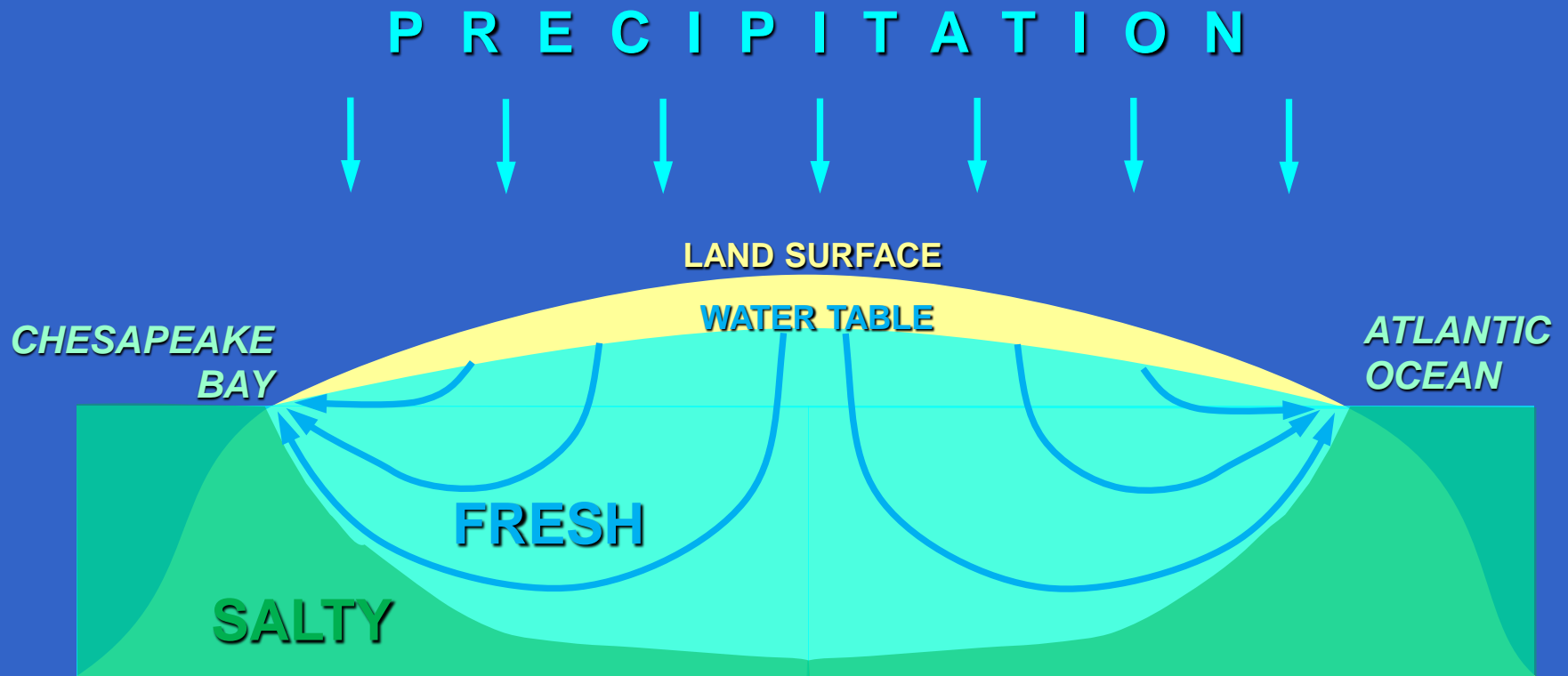


# *Eastern Shore Well-Logging Program 2018 Progress*

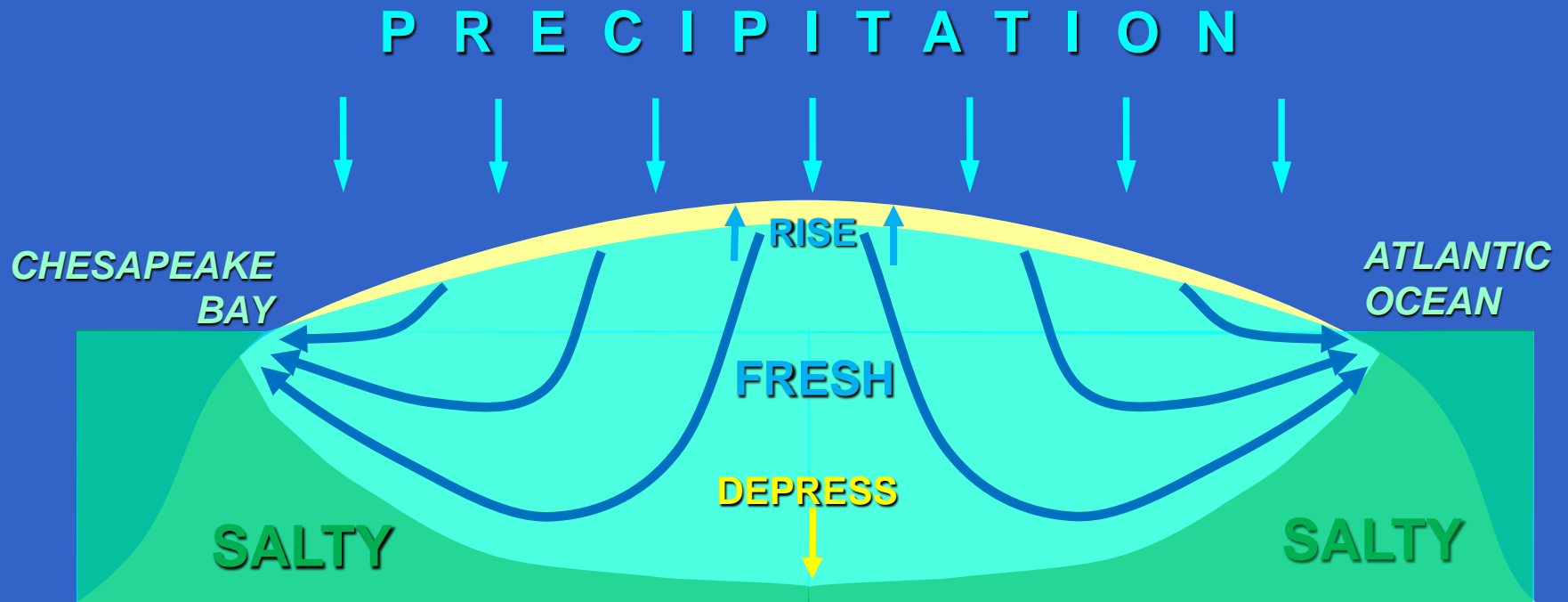
- **fourth annual logging run**
- **review background concepts**
- **log-analysis results**
- **possible early trends emerging**

# *Groundwater Flow*

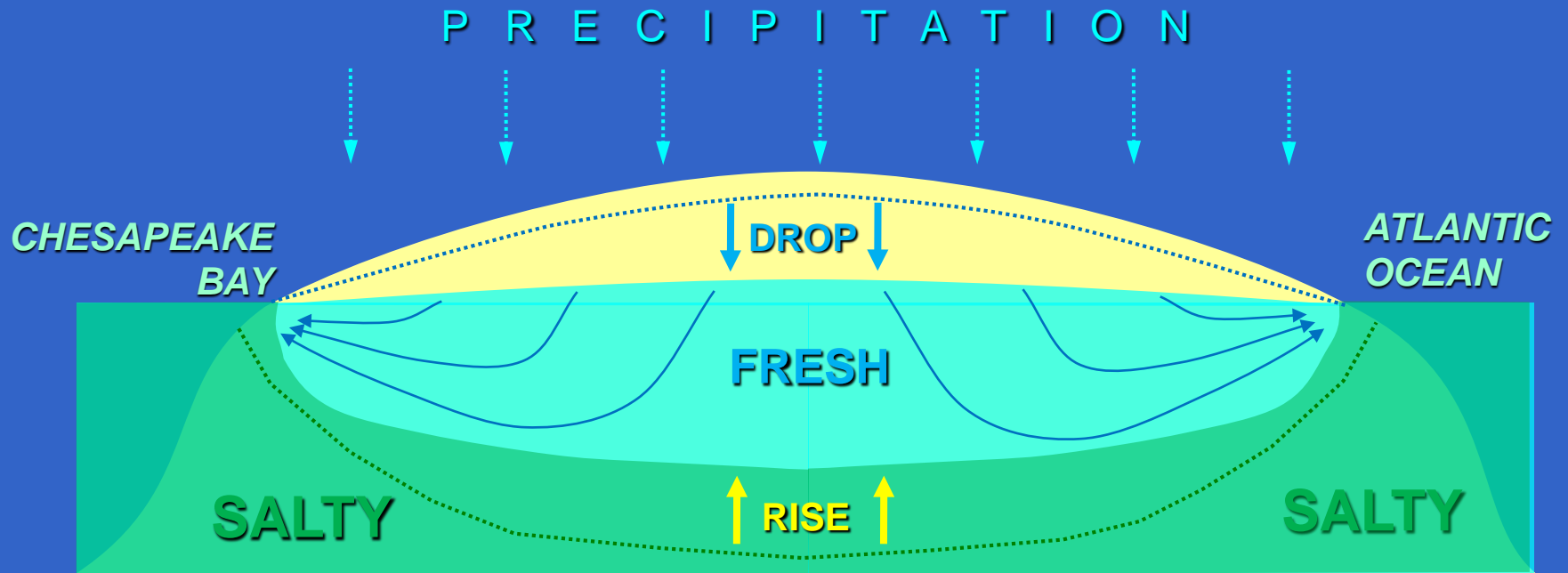


**\*\*\* VERTICAL SCALE GREATLY EXAGGERATED \*\*\***

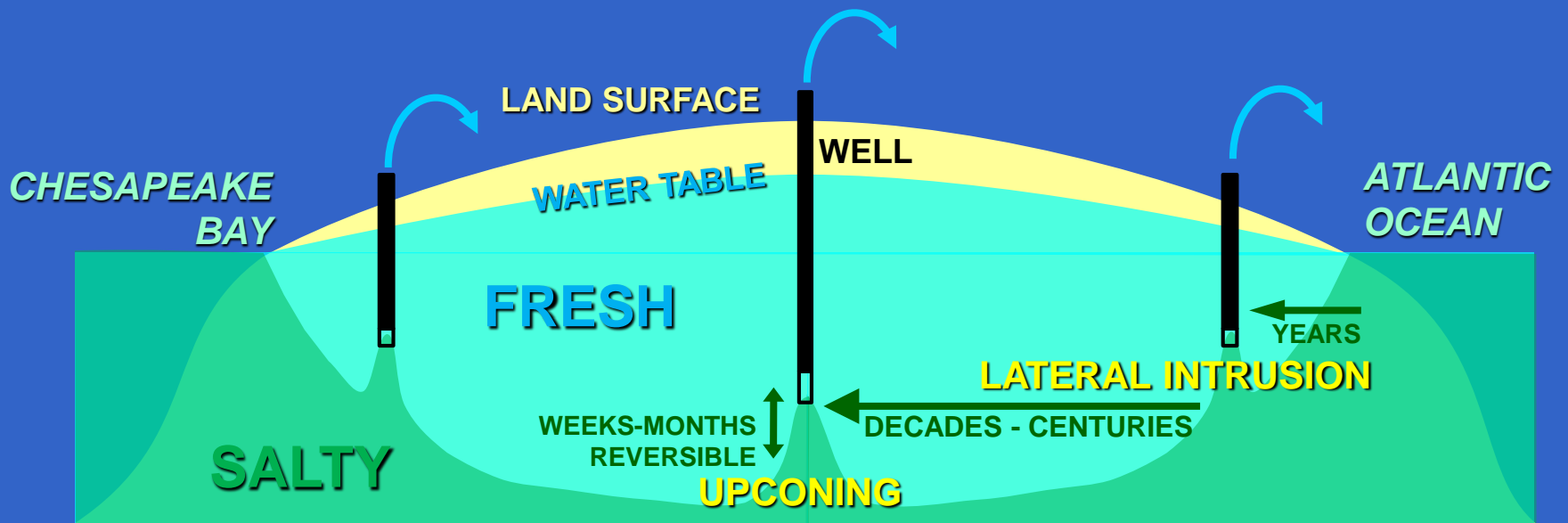
# *High Recharge or Low Withdrawal*



# *Low Recharge or High Withdrawal*

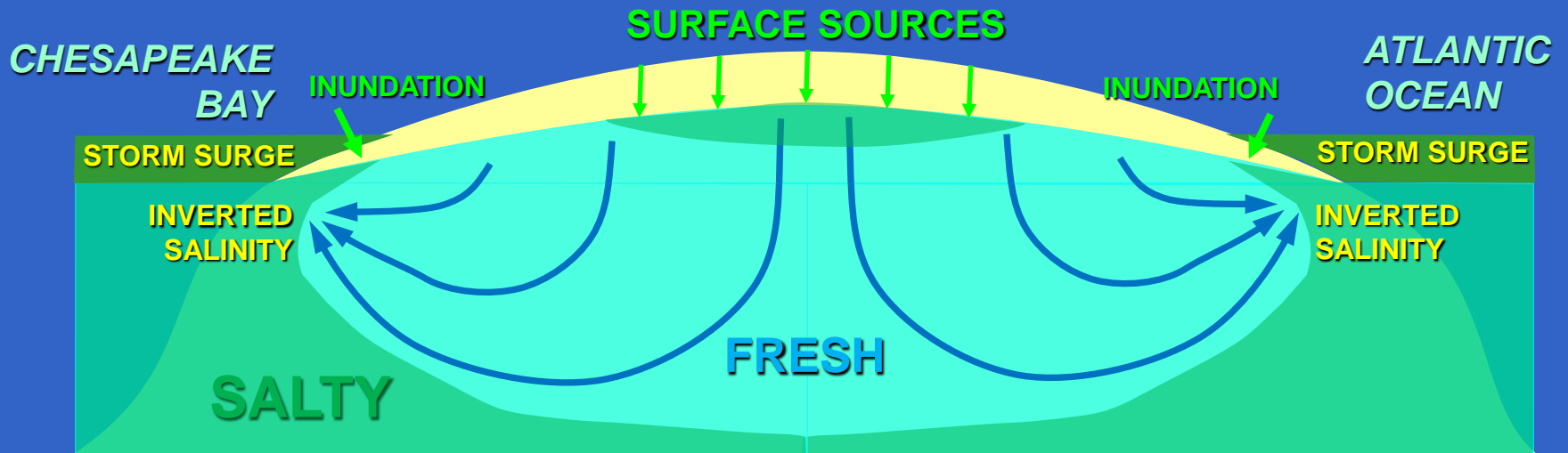


# *Pumping-Induced Saltwater Movement*



**\*\*\* VERTICAL SCALE GREATLY EXAGGERATED \*\*\***

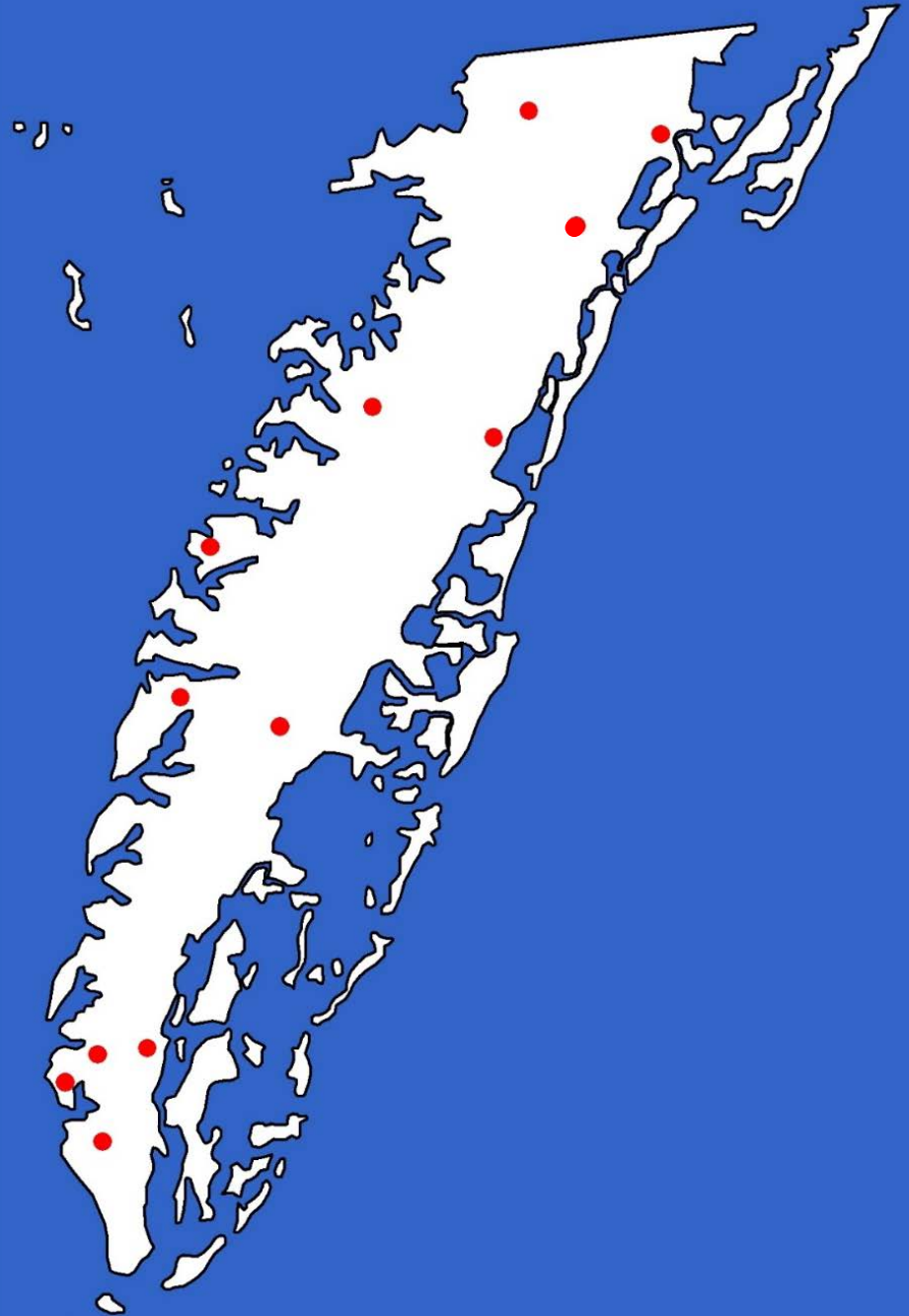
# Shallow Water-Quality Changes



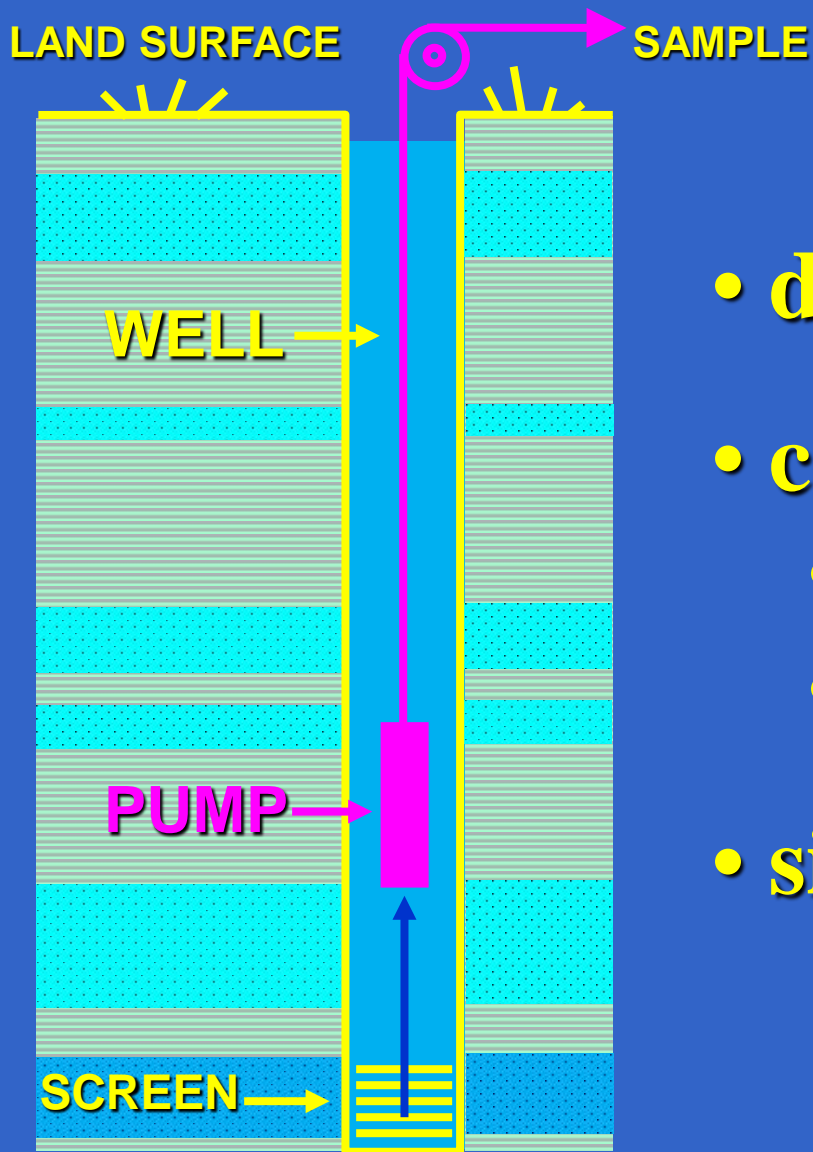
\*\*\* VERTICAL SCALE GREATLY EXAGGERATED \*\*\*

# *Saltwater Monitoring Well-Logging Network*

- 12 USGS-DEQ observation wells
- sampled 2003
- logged 2008, 2016, 2017, 2018



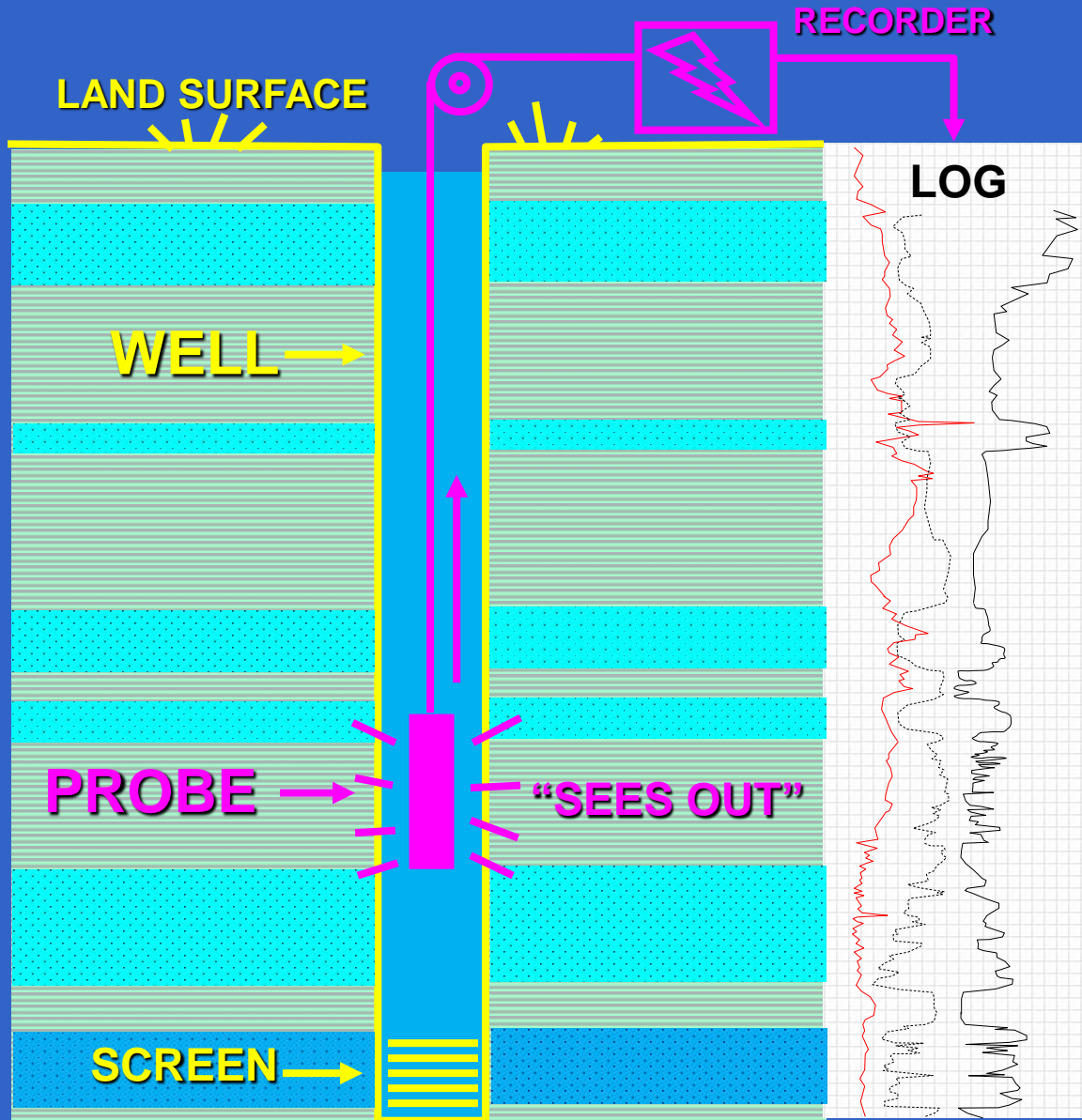
# *Well-Sample Monitoring*



- direct observation
- costly
  - slow sample collection
  - lab analyses
- single water zone

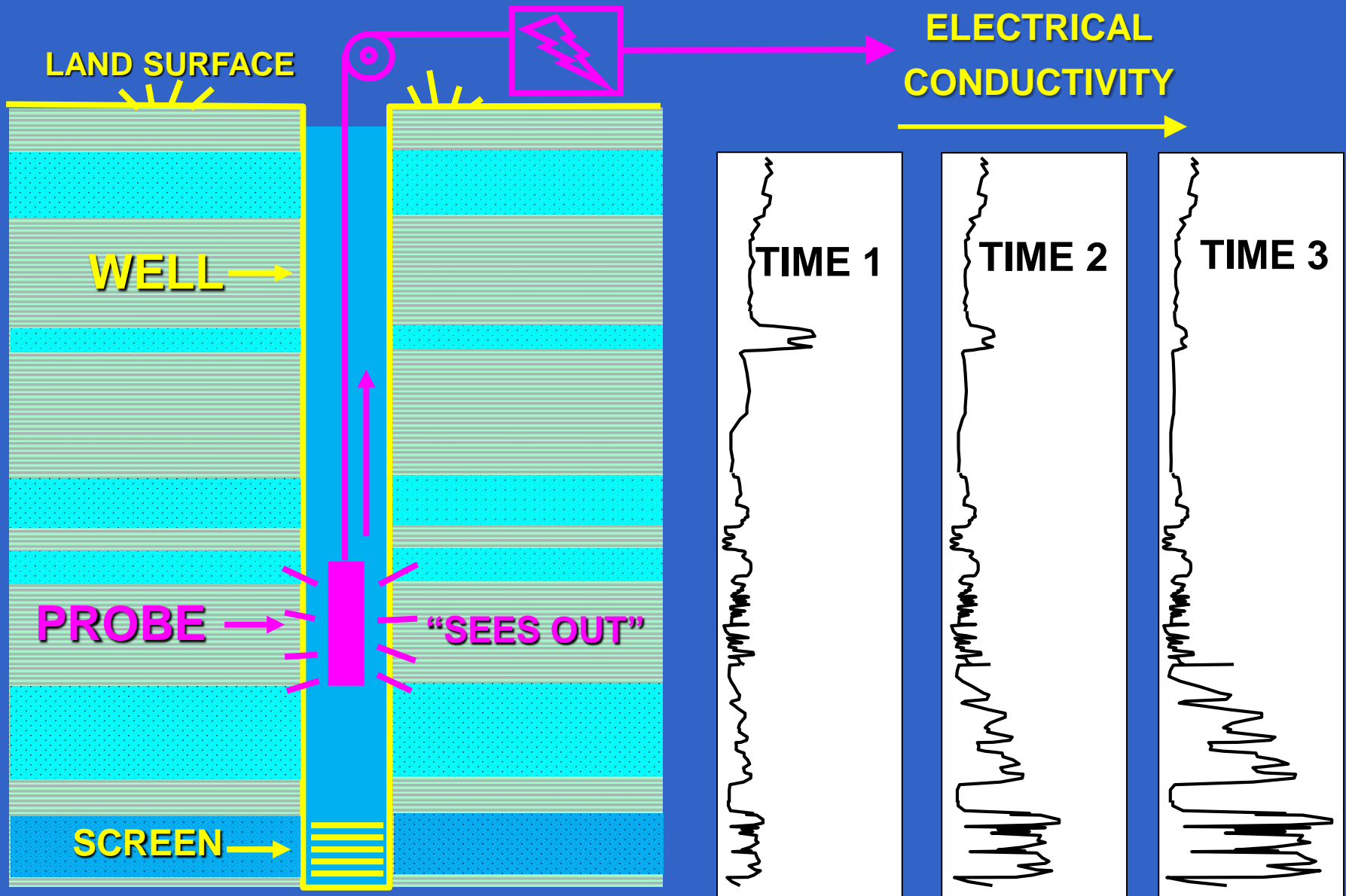


# Well-Log Monitoring

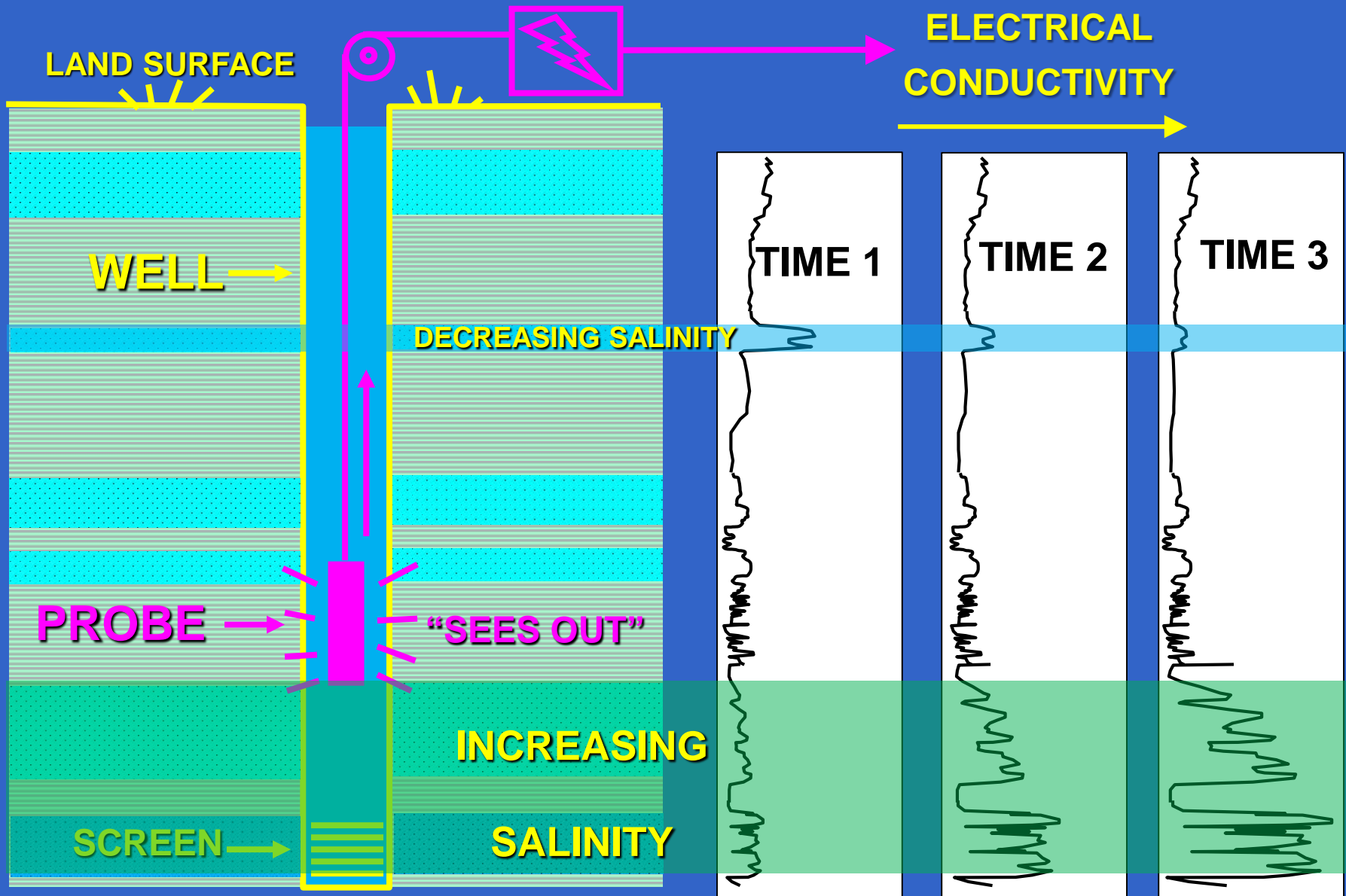


- low cost
  - fast field method
  - no lab
- entire profile
- indirect observation
- only shows changes in salinity over time

# Well-Log Monitoring

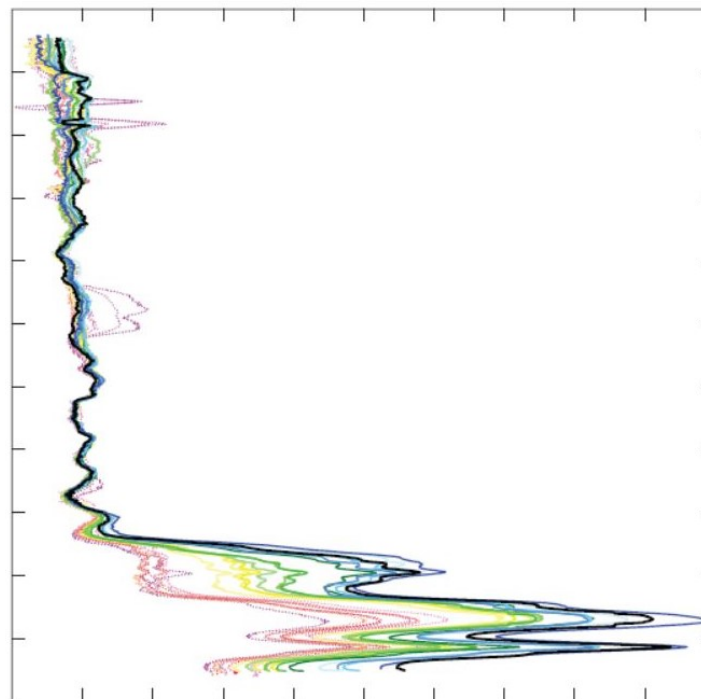


# Well-Log Monitoring



**Collection, Processing, and Quality Assurance  
of Time-Series Electromagnetic-Induction Log  
Datasets, 1995–2016, South Florida**

***Basis of  
Method***



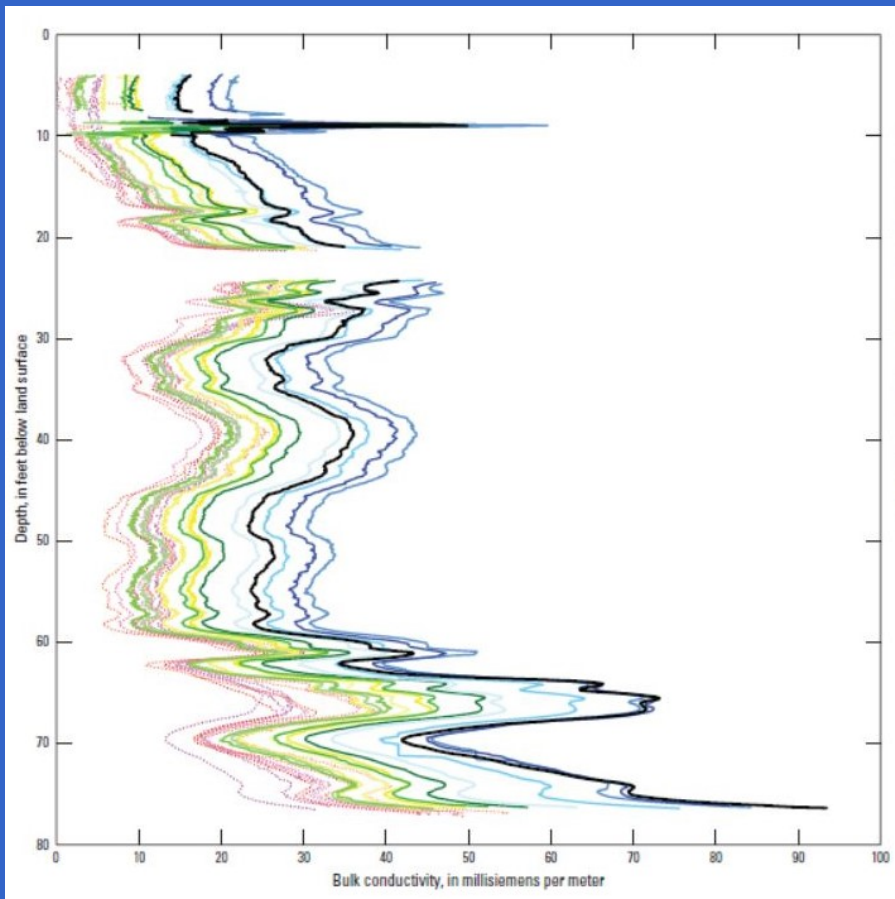
Open-File Report 2016–1194

U.S. Department of the Interior  
U.S. Geological Survey

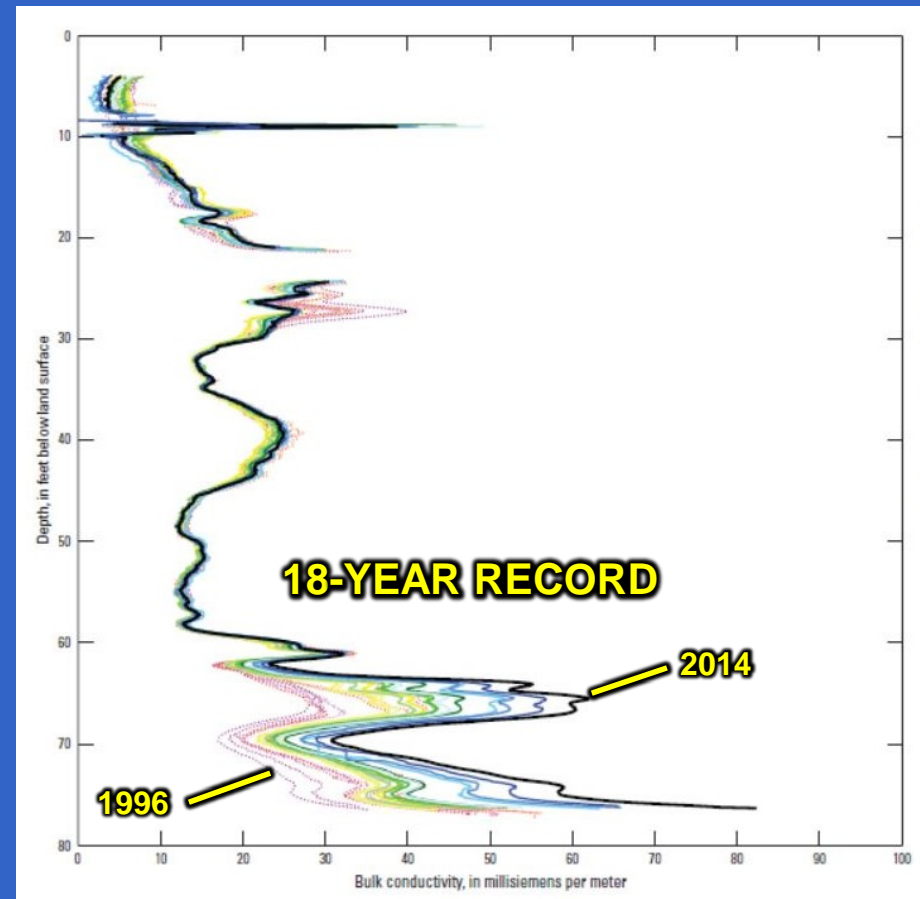
***USGS  
Open-File Report  
2016-1194***

# South Florida Well Logging

## UNADJUSTED LOGS



## ADJUSTED LOGS



# New Online Log-Data Resource



## USGS GeoLog Locator

The U.S. Geological Survey (USGS) GeoLog Locator is a web-based tool for storage and retrieval of borehole-geophysical logs and related data files. USGS scientists can upload, format, and transfer borehole-geophysical logs and data files to the GeoLog Locator database which can then be searched and explored by users through this web page.

[Find Out More >](#)

Watch the following video to learn more about the GeoLog Locator and how to use it.

USGS GeoLog Locator

1,910 sites 7,957 geologies

U.S. Department of the Interior | U.S. Geological Survey | Home | About | Open Government | No Fear Act | FOIA

### Searching the GeoLog Database

Searching the GeoLog database is done through a map interface. Site and log file criteria can be chosen to narrow your search. Log data files matching your criteria can be viewed directly or downloaded.

