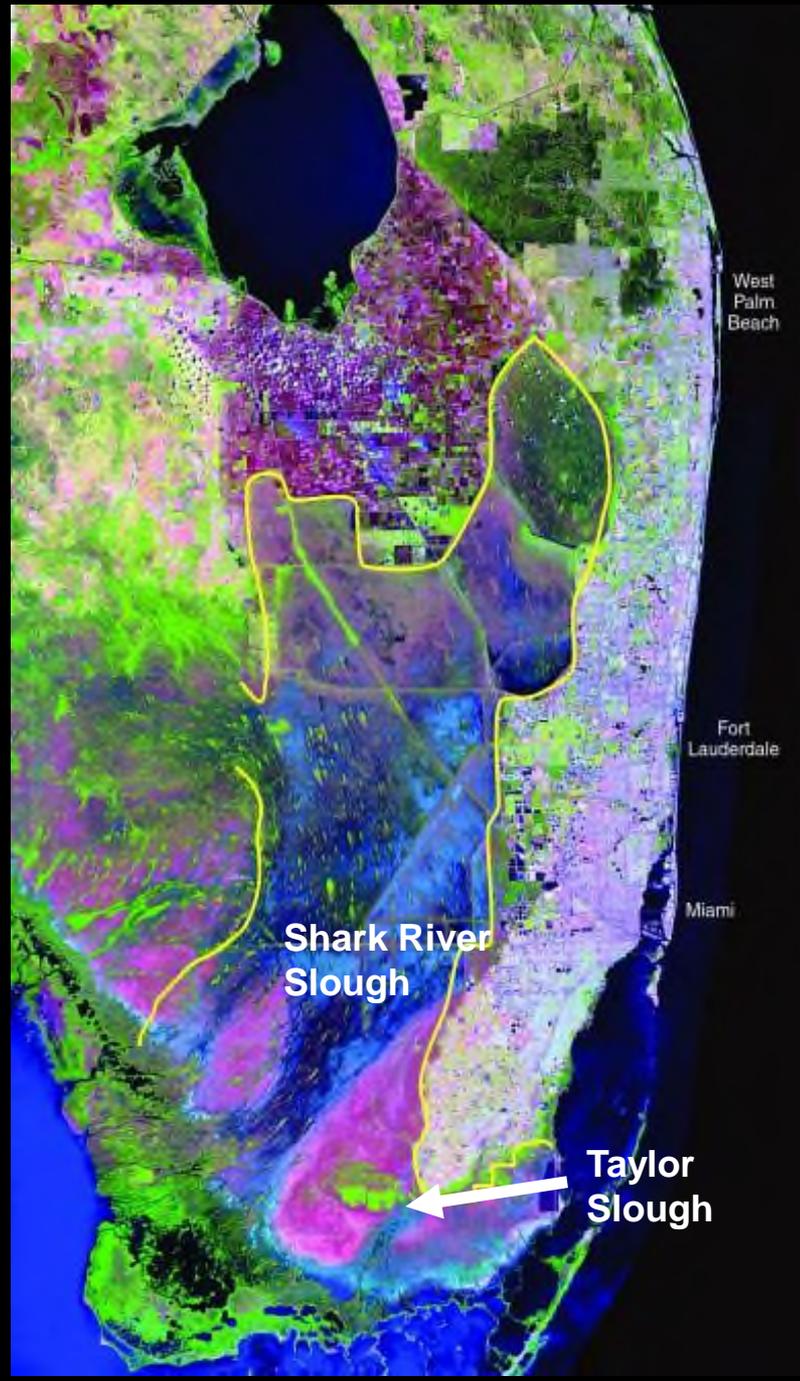
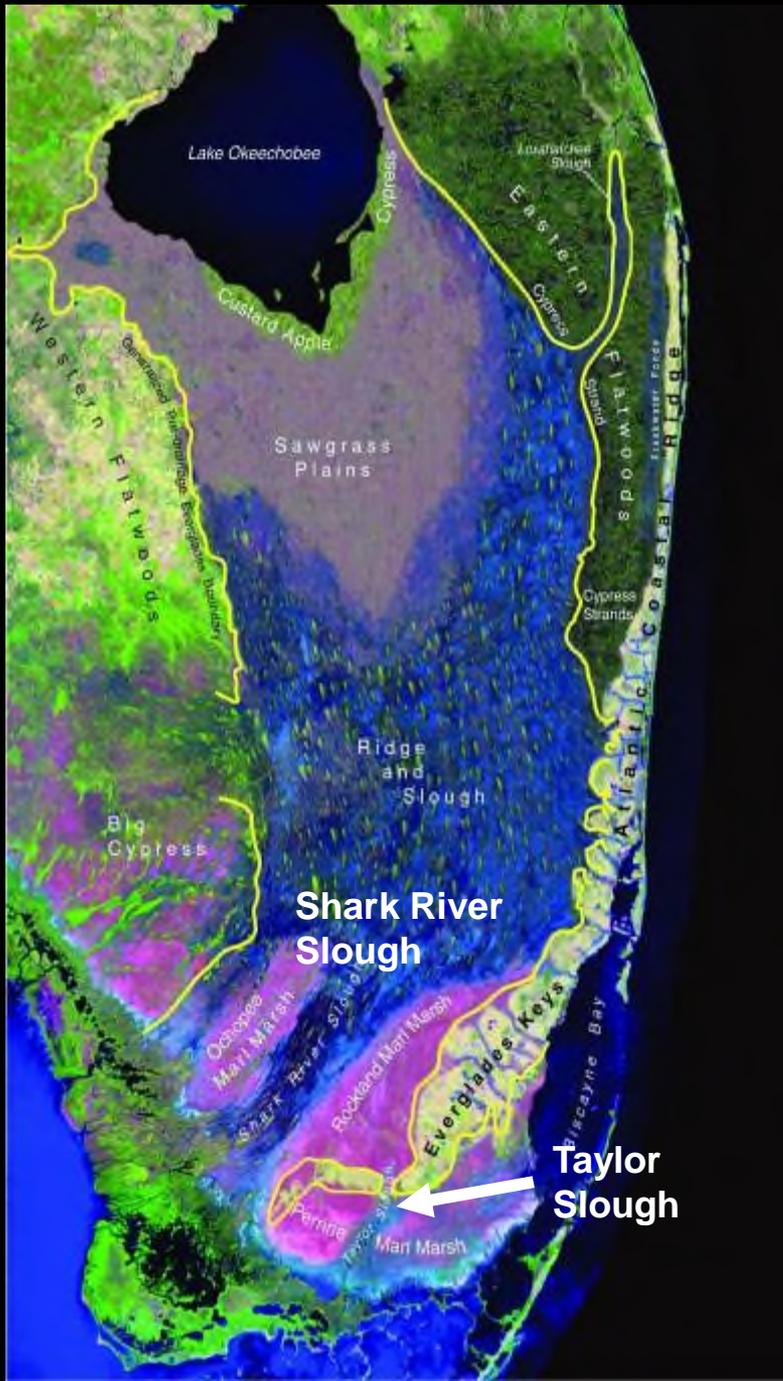
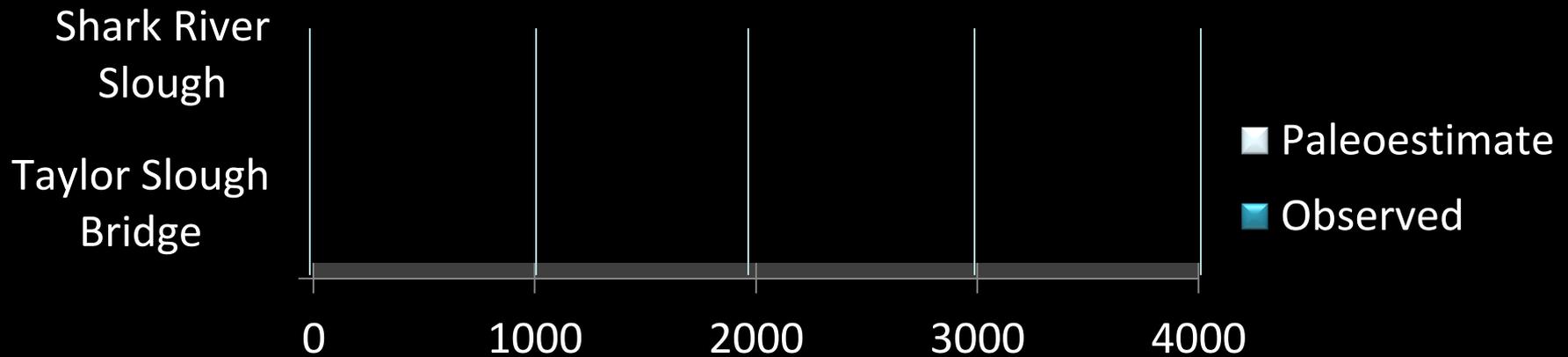


C) FLORIDA BAY HYDROLOGY

Susan Gray, Ph.D., Applied Sciences Bureau Chief
Water Resources Division



Current Observed Flow Compared to Pre-Drainage

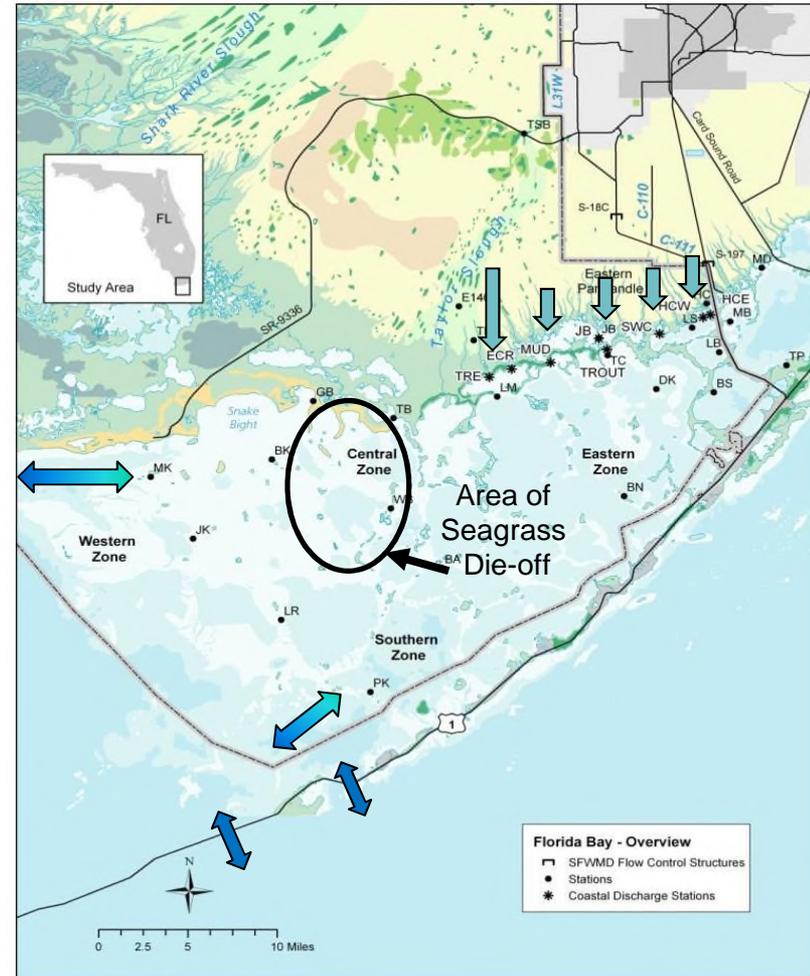
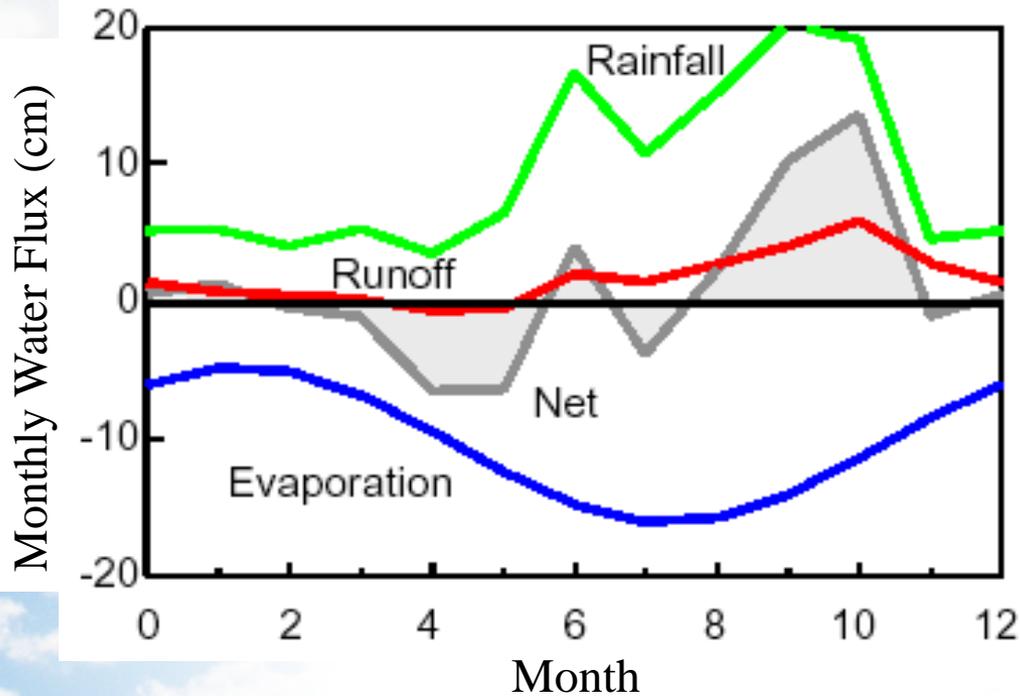


Flow (million m³ per year)

Factors Affecting Salinity in Florida Bay

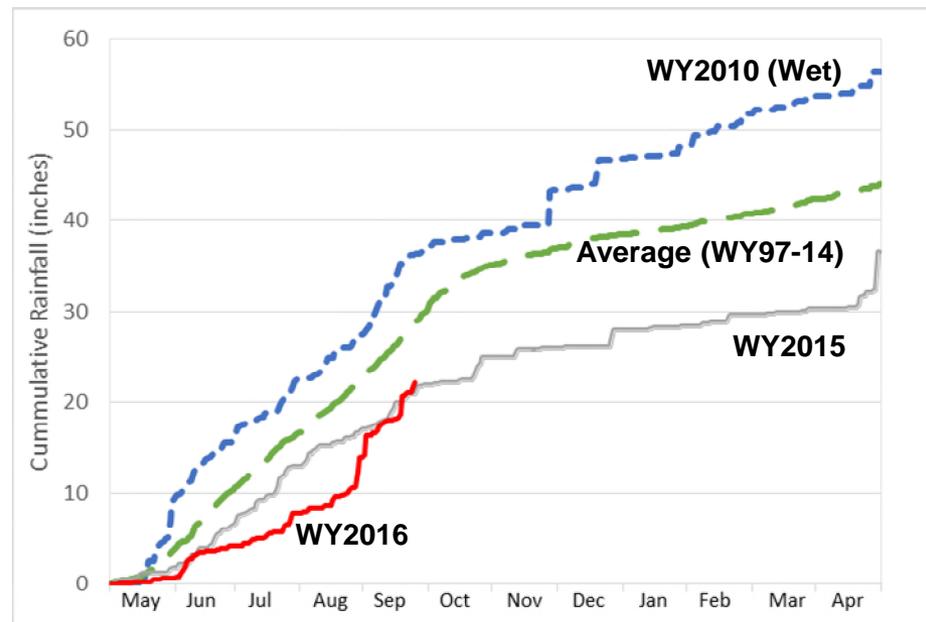
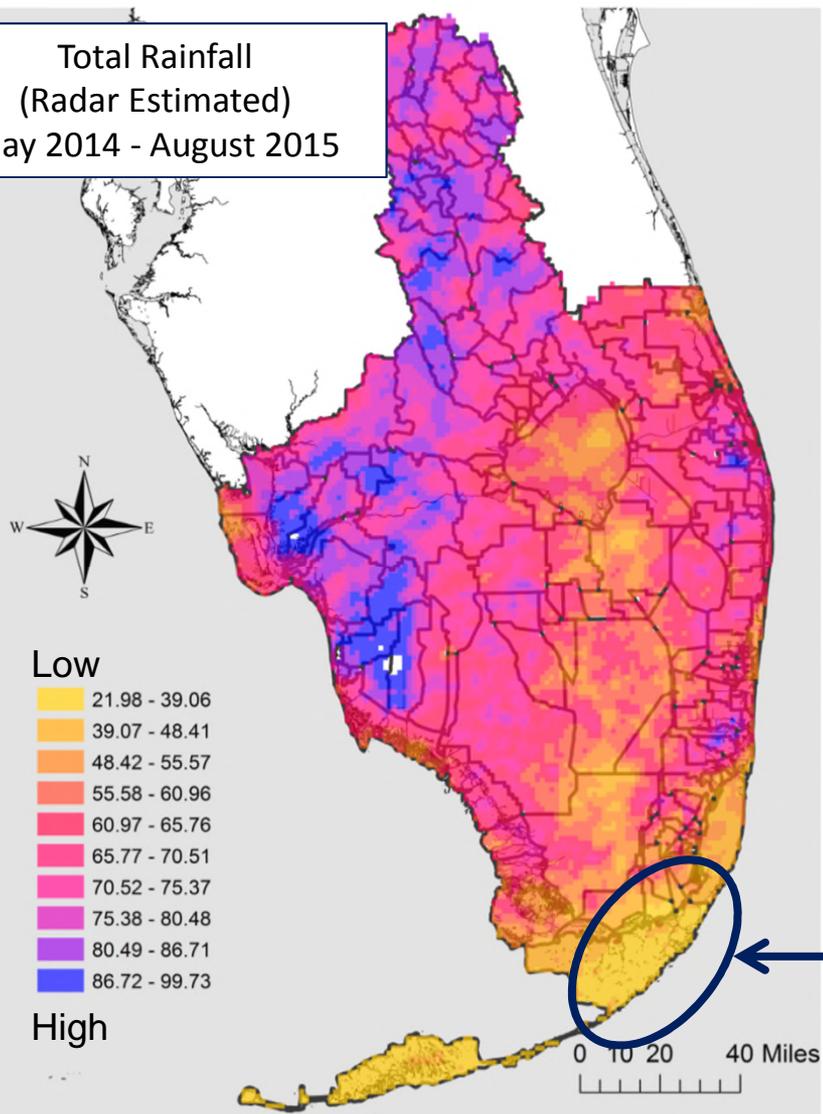
➤ Freshwater budget

- **Sources:** precipitation, freshwater flow from coast (stream, sheet, ground)
- **Sinks:** evaporation
- **Mixing:** tide and wind driven across complex boundaries



WY2015 – WY2016 Conditions - District Rainfall Distribution

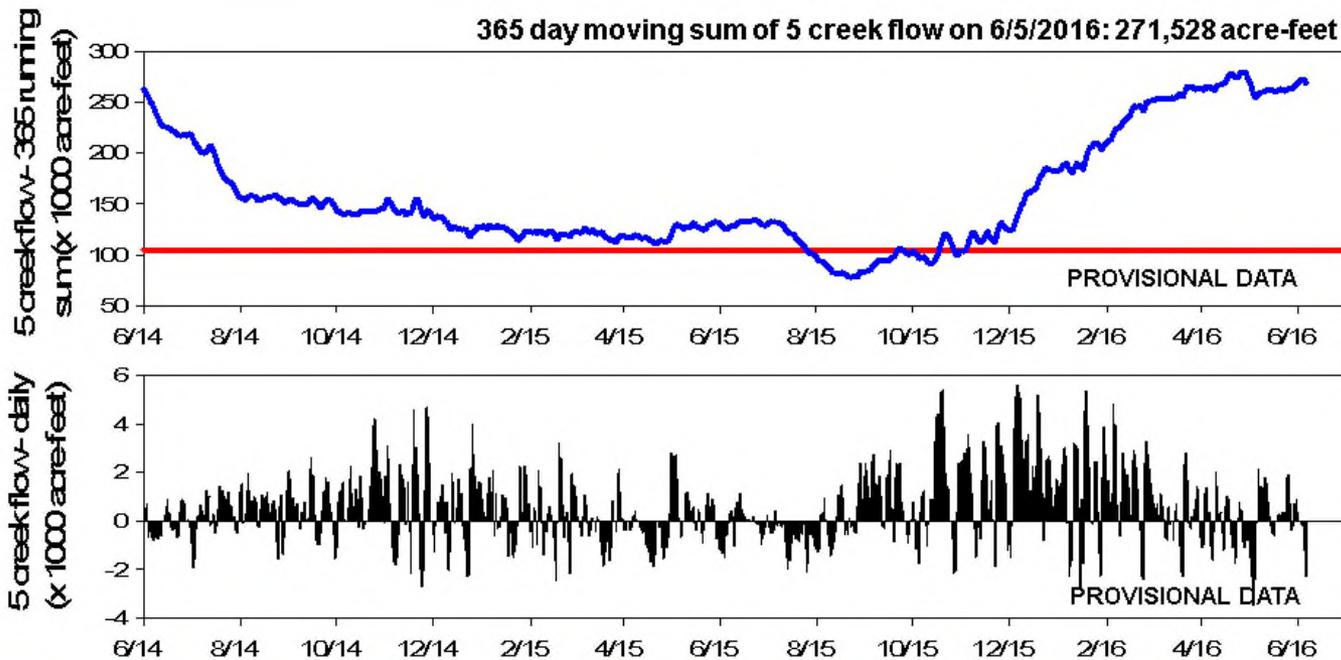
Total Rainfall
(Radar Estimated)
May 2014 - August 2015



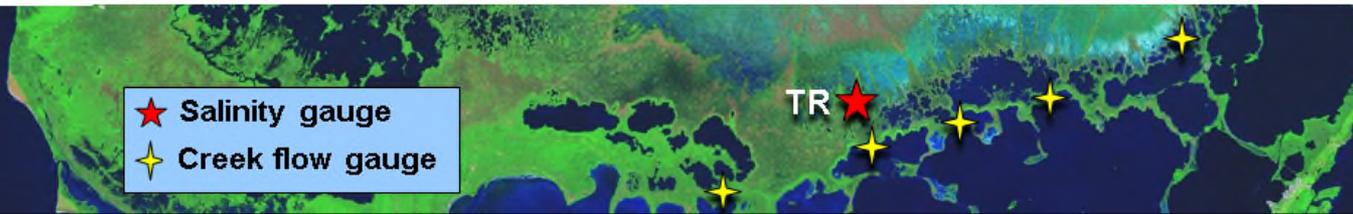
- Taylor Slough and Florida Bay received the lowest amounts of rainfall
- 25-35 inches compared to 50-60 inches (wet year)

Current Florida Bay Inflow

5 Creek Cumulative Flow and Florida Bay MFL Flow Criteria Tracking

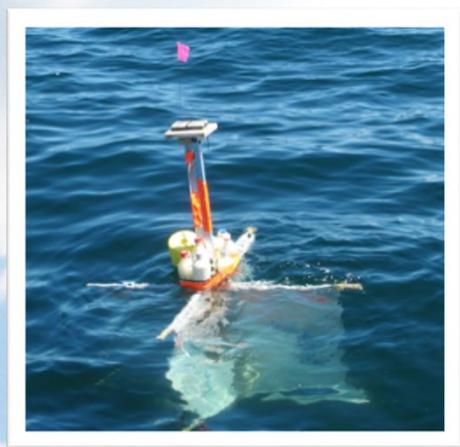
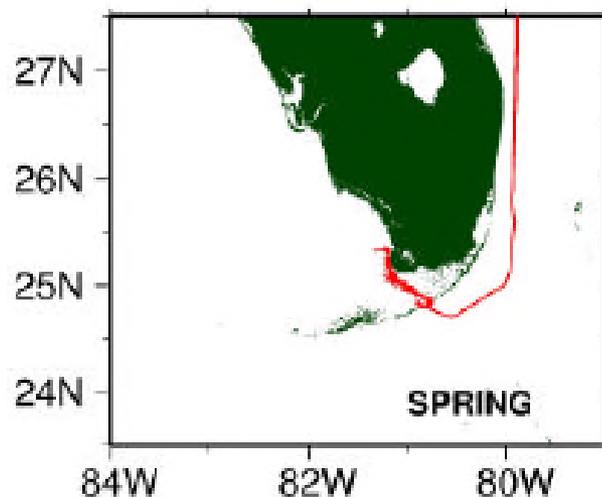
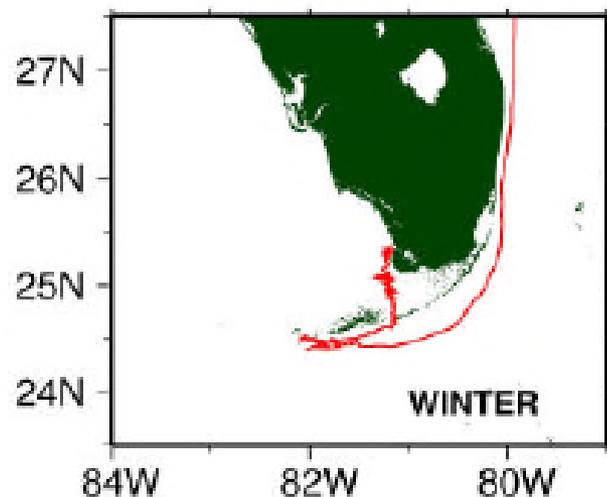
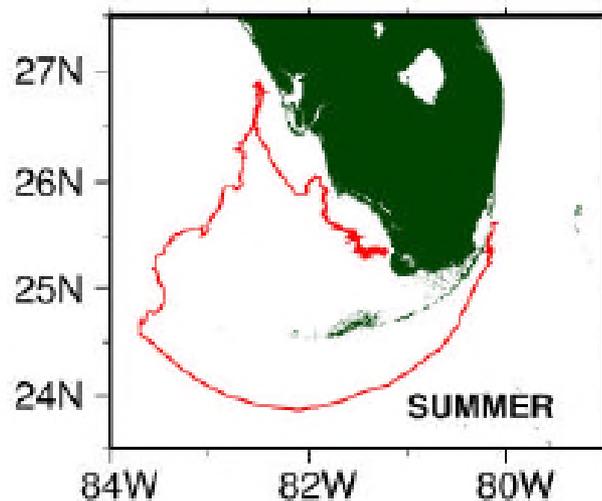
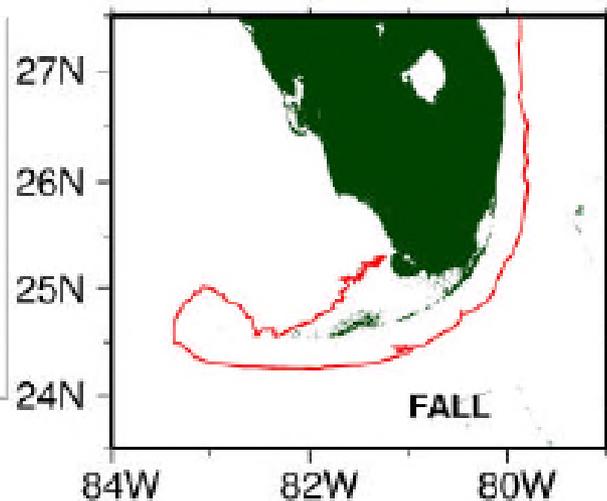


- The 365 day running sum of the cumulative flow from the 5 creeks feeding Florida Bay increased very slightly to 271,528 acre-feet last week (6/5/16), which is above the average 365 day running sum for the 5 creek flow of 257,628 acre-feet.
- The weekly cumulative flow from the 5 creeks decreased to 524 acre-feet.
- Creek flow is provisional data from the USGS and is highly variable.

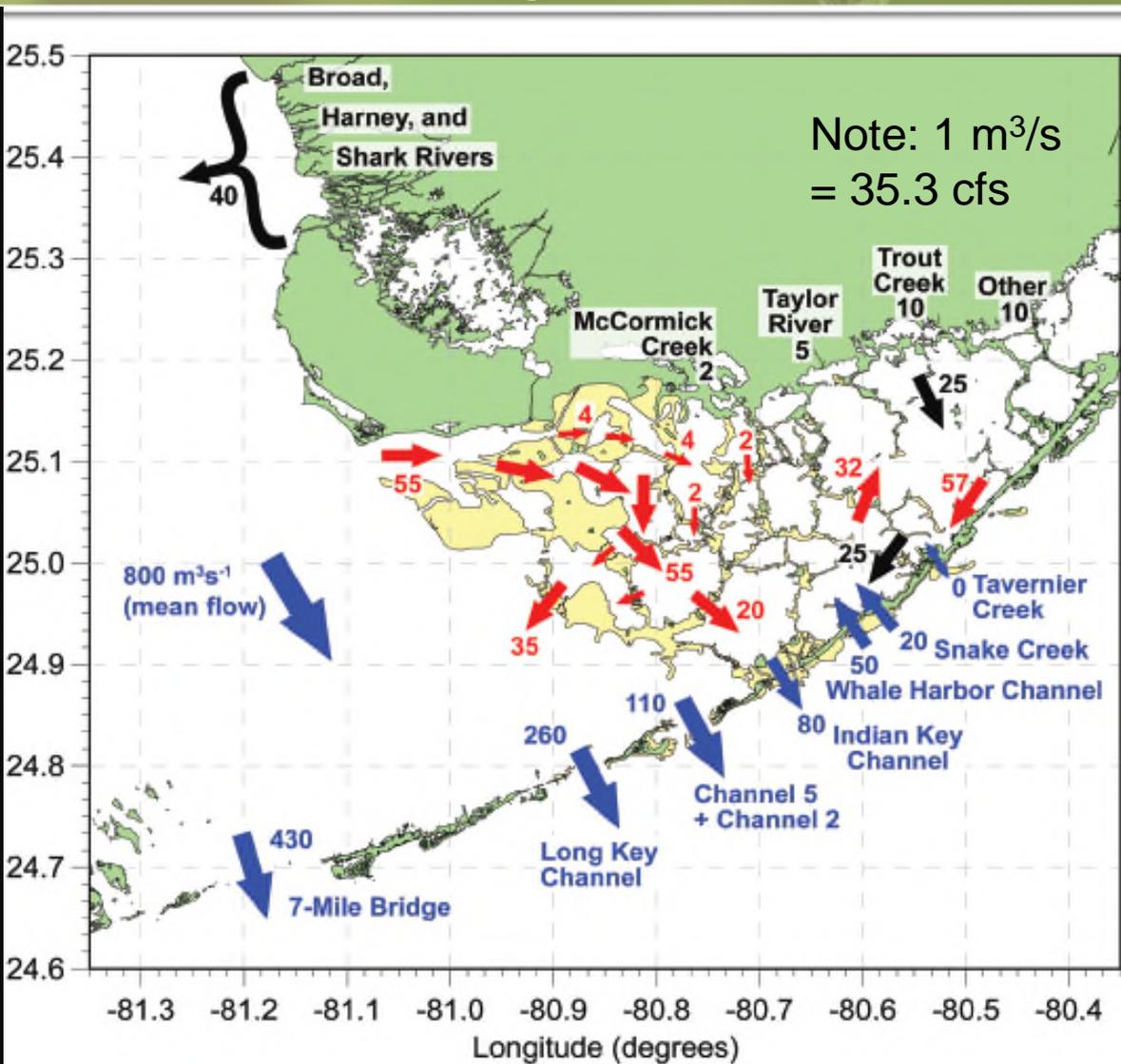
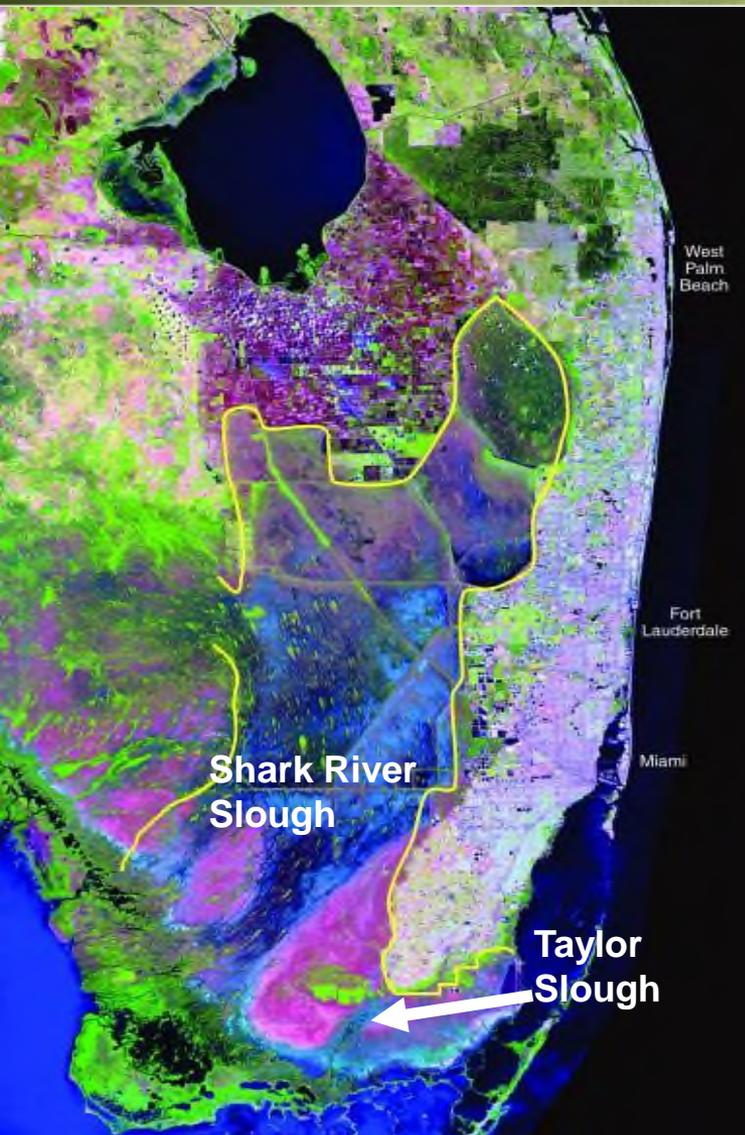


Shark River Slough Surface Drifters

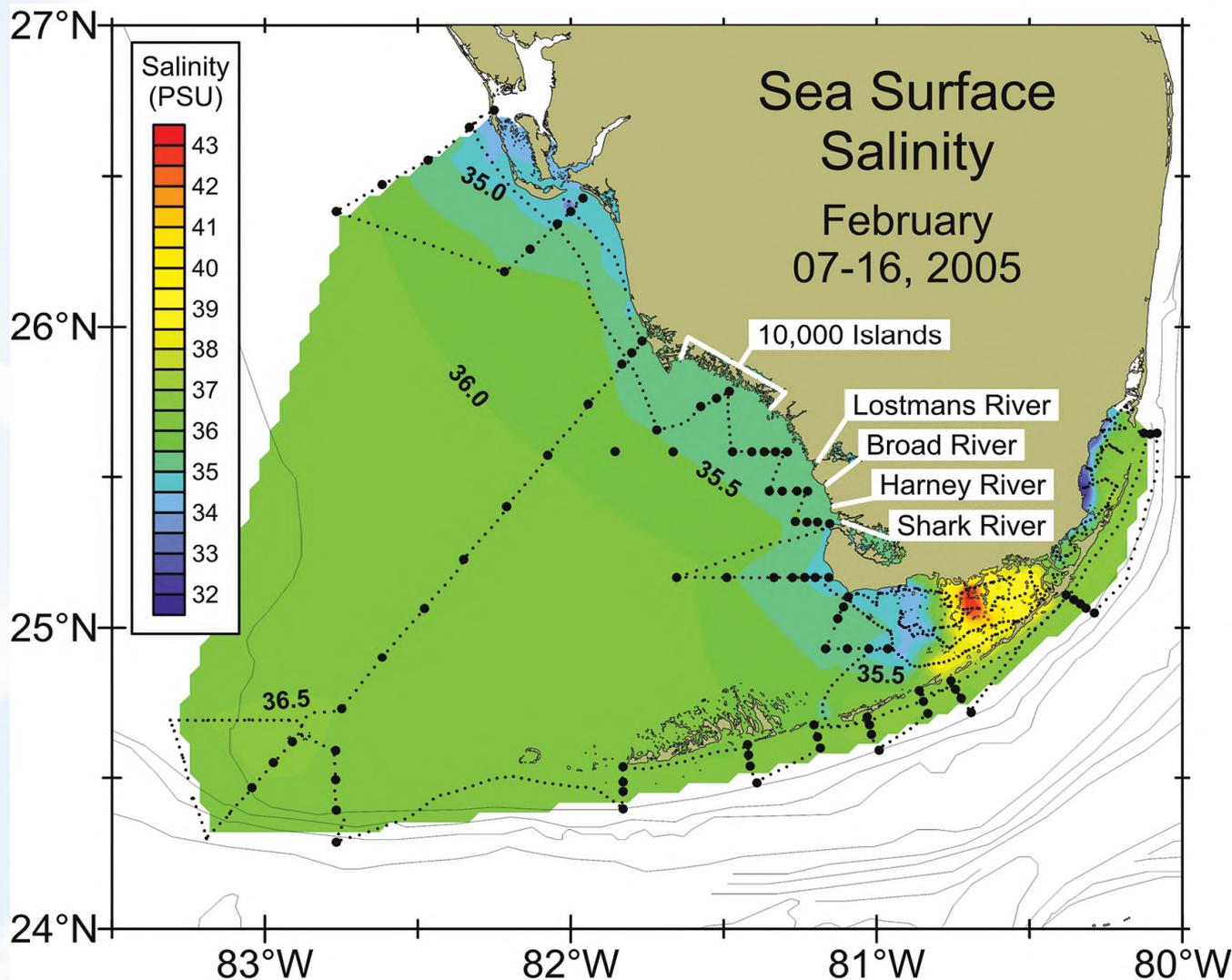
Typical
Surface
Ocean
Drifters



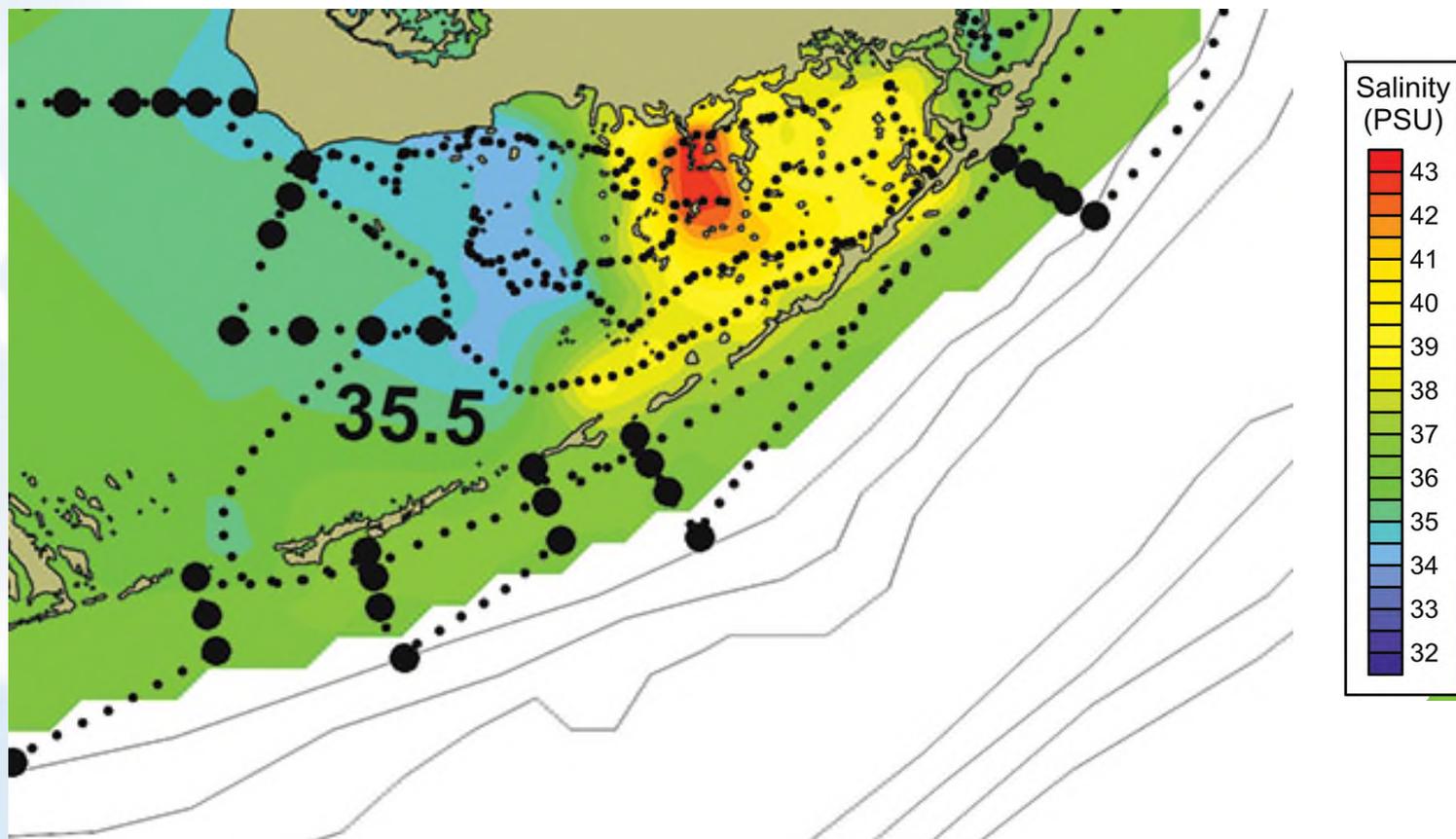
Circulation and Water Renewal of Florida Bay



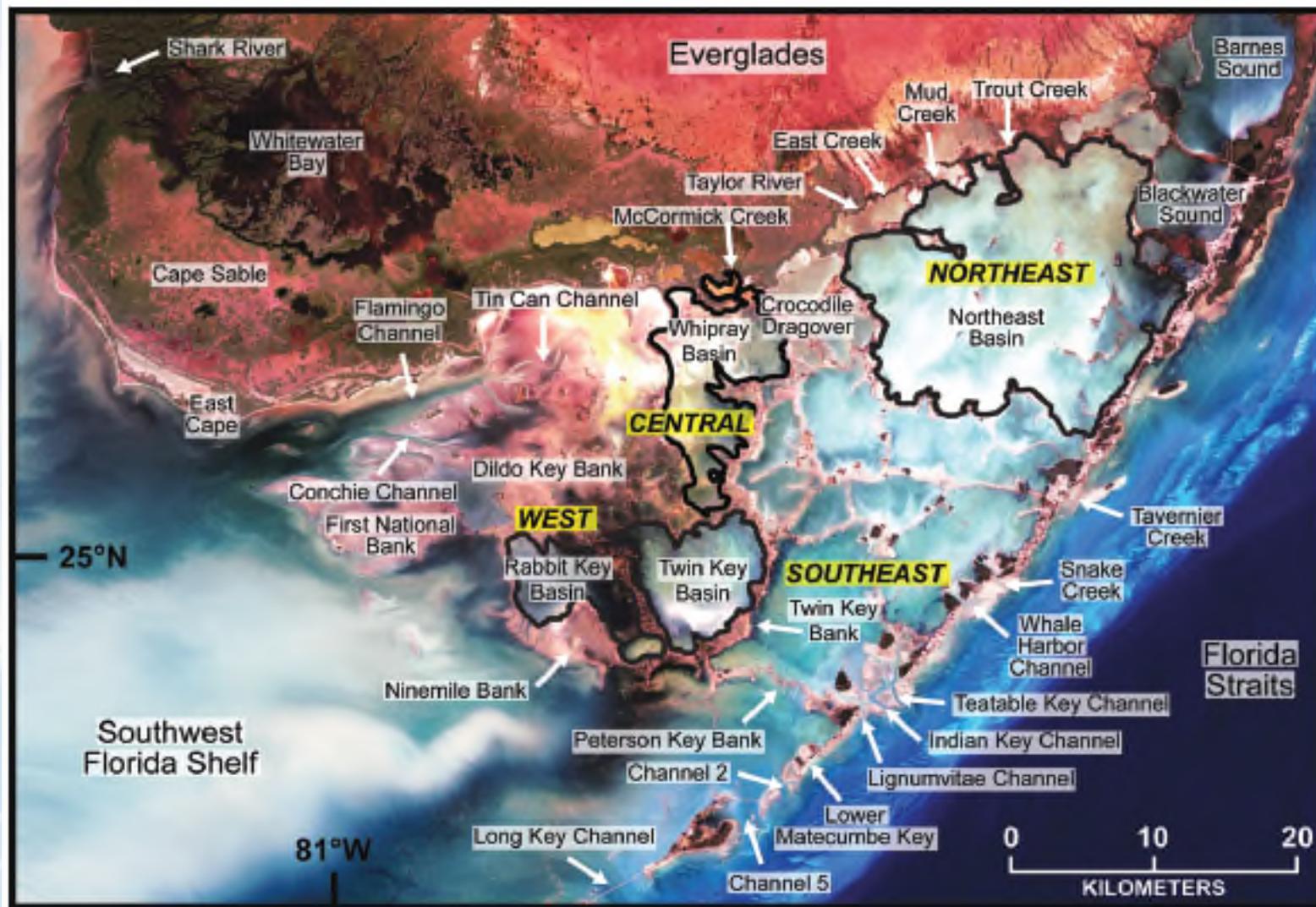
Circulation and Water Renewal of Florida Bay



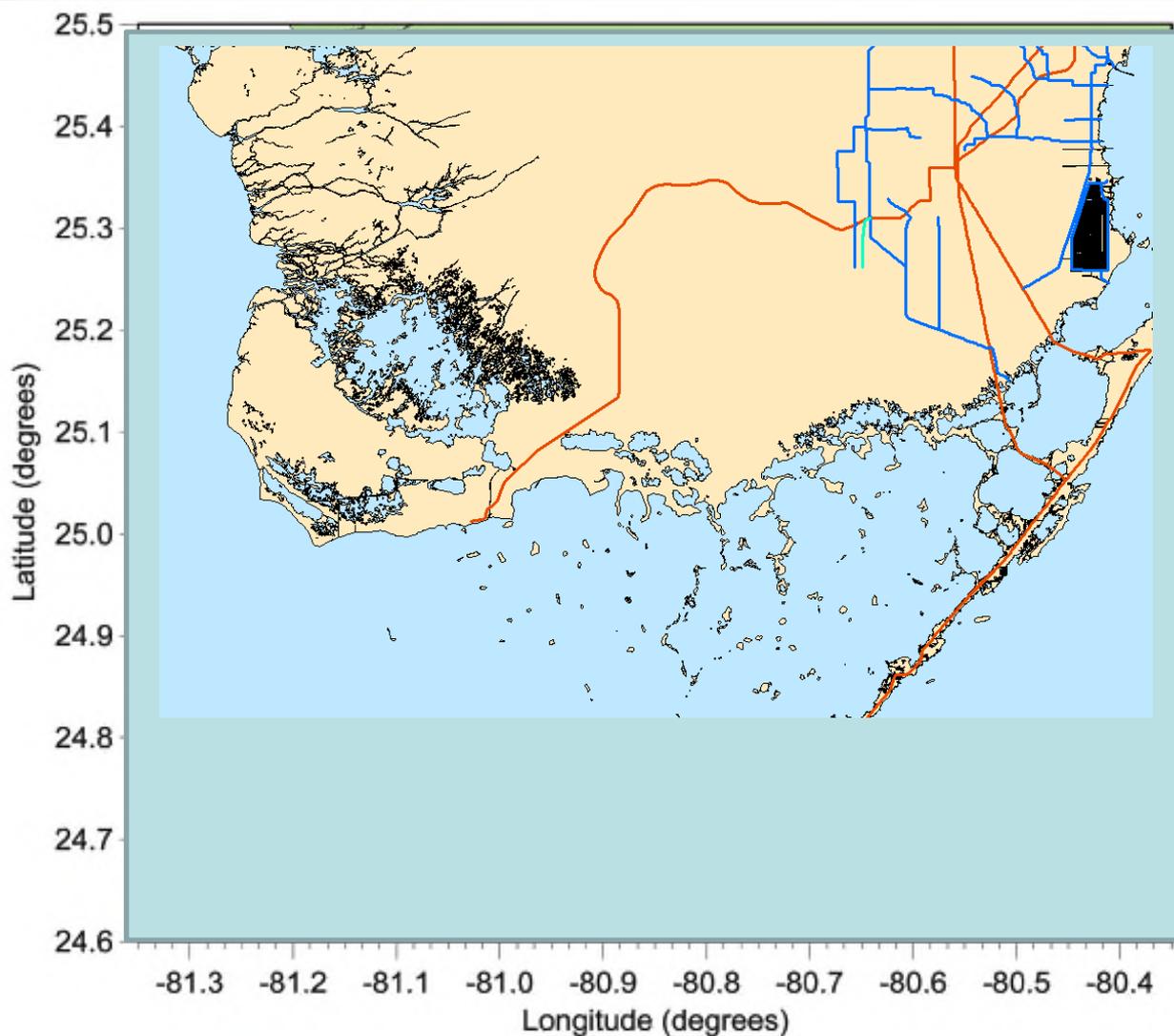
Circulation and Water Renewal of Florida Bay



Florida Bay inflows, basins, and channels influence internal circulation patterns



Florida Bay Circulation Patterns



Note: $1 \text{ m}^3/\text{s}$
= 35.3 cfs



Questions?