

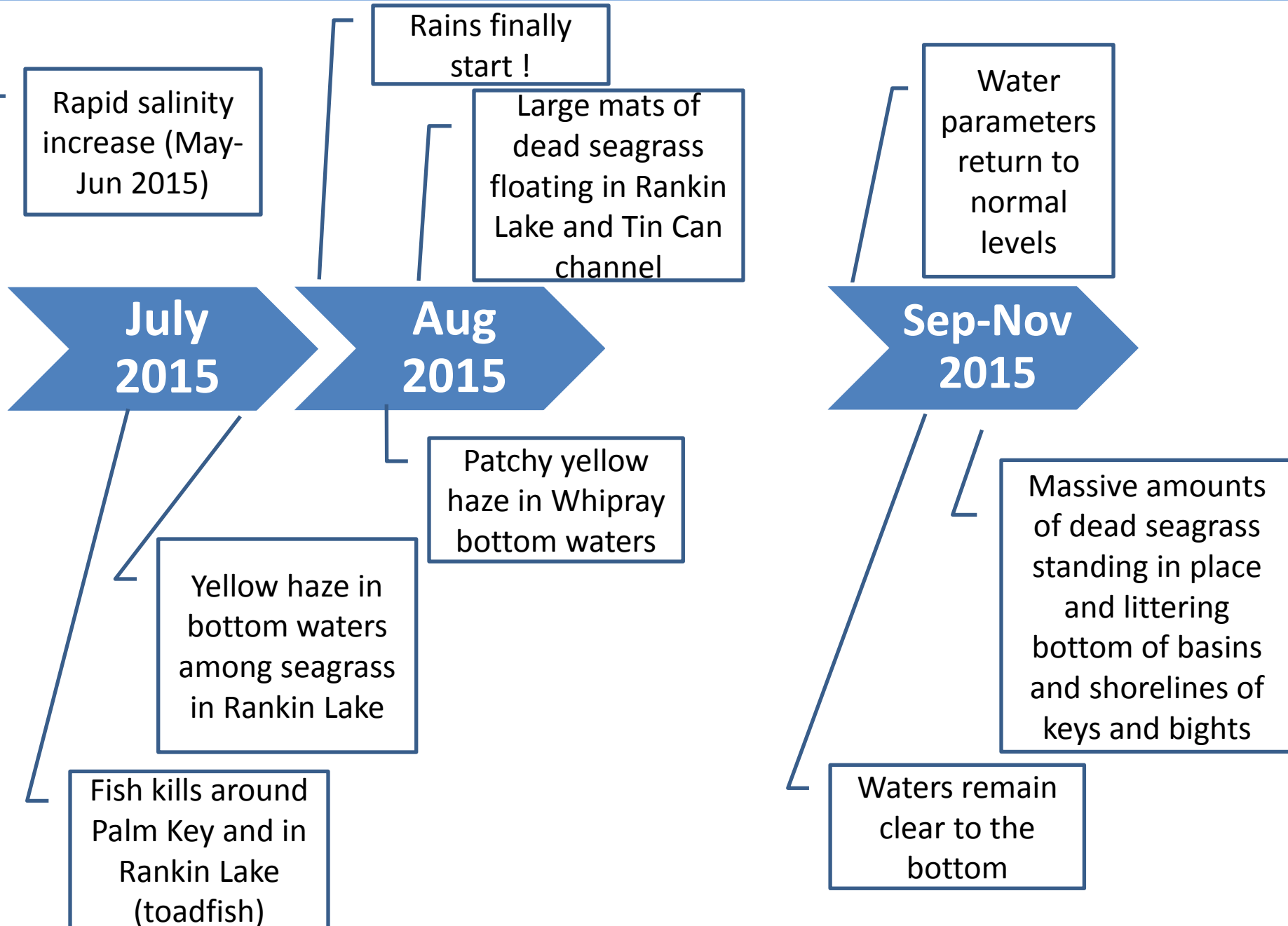


## Florida Bay 2015 seagrass die-off Extent and characteristics.

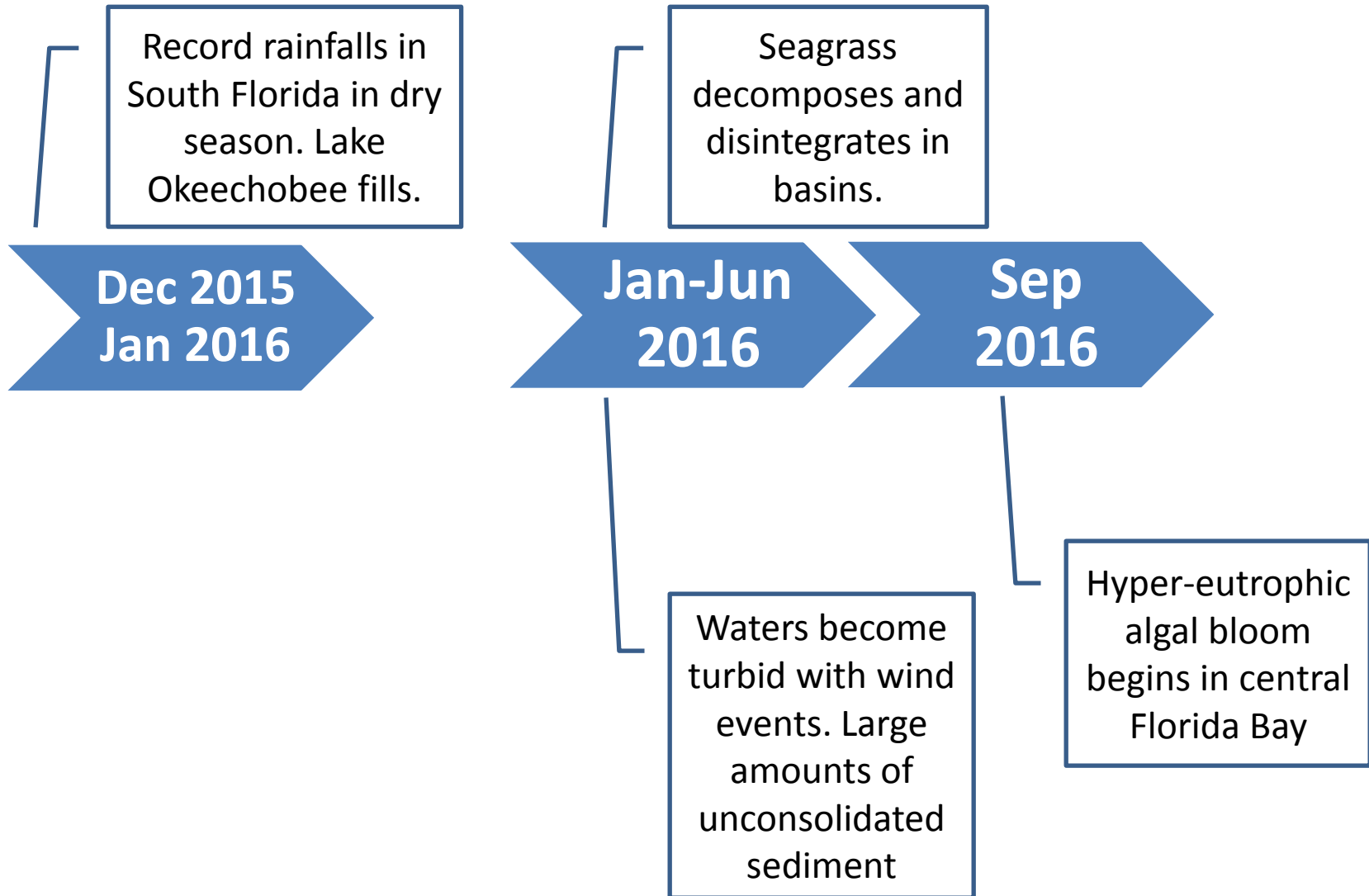
Christopher Kavanagh, Vicki McGee-Absten, Zachary Fratto, Matt Patterson, Michelle Tongue.

**Everglades National Park, South Florida Natural Resources  
Florida Bay Interagency Science Center, Key Largo, Florida**

# GEER 2017: Florida Bay Seagrass Die-off Session



# GEER 2017: Florida Bay Seagrass Die-off Session

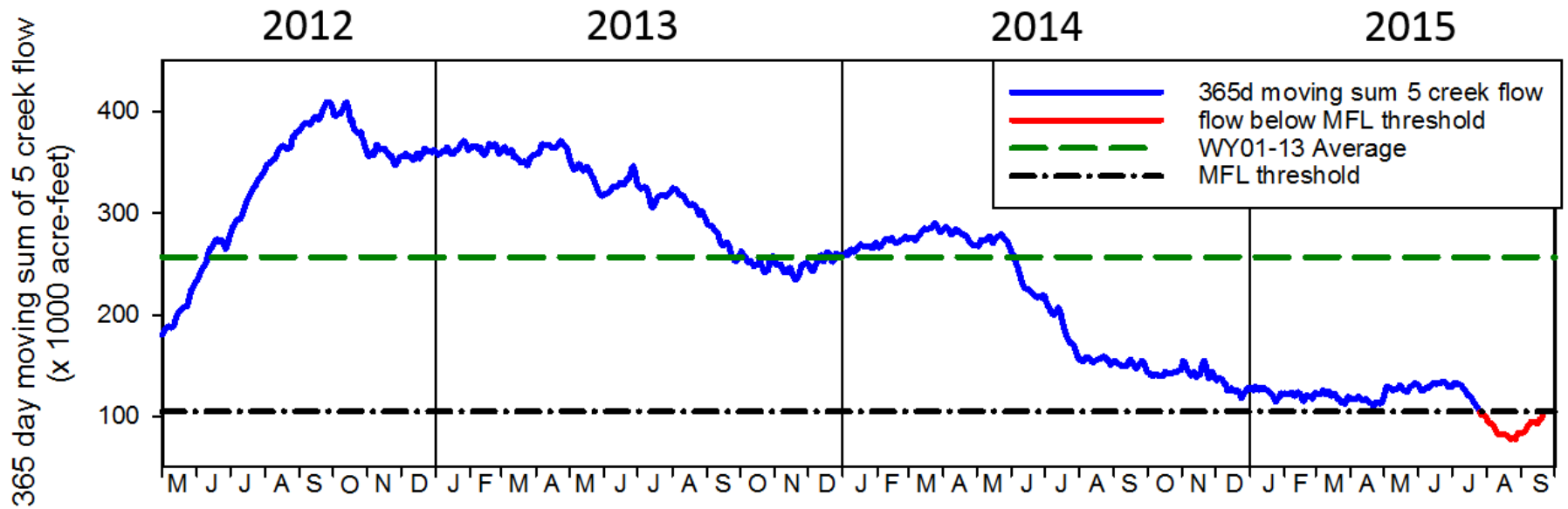




## CONTRIBUTING FACTORS:

- **High *Thalassia* Biomass**
- **Diminished freshwater input**
- **Delay in seasonal rainfall**
- **Calm windless days**
- **High water temperature**
- **Exceptional Hypersalinity**
- **Low dissolved oxygen**
- **High sediment sulfide concentrations**

# GEER 2017: Florida Bay Seagrass Die-off Session





# GEER 2017: Florida Bay Seagrass Die-off Session



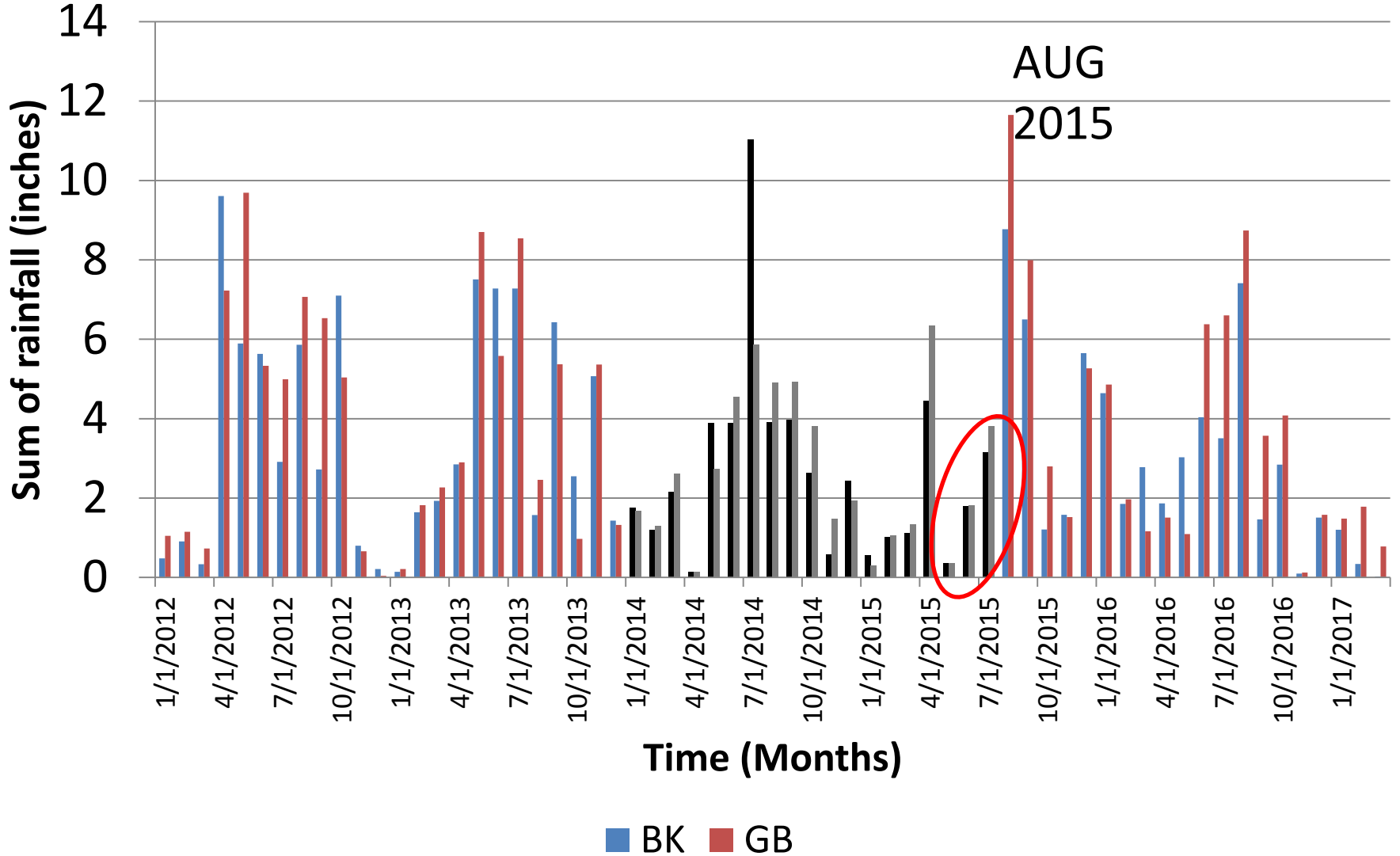
**Garfield Bight** ★

**Buoy Key** ★

# GEER 2017: Florida Bay Seagrass Die-off Session



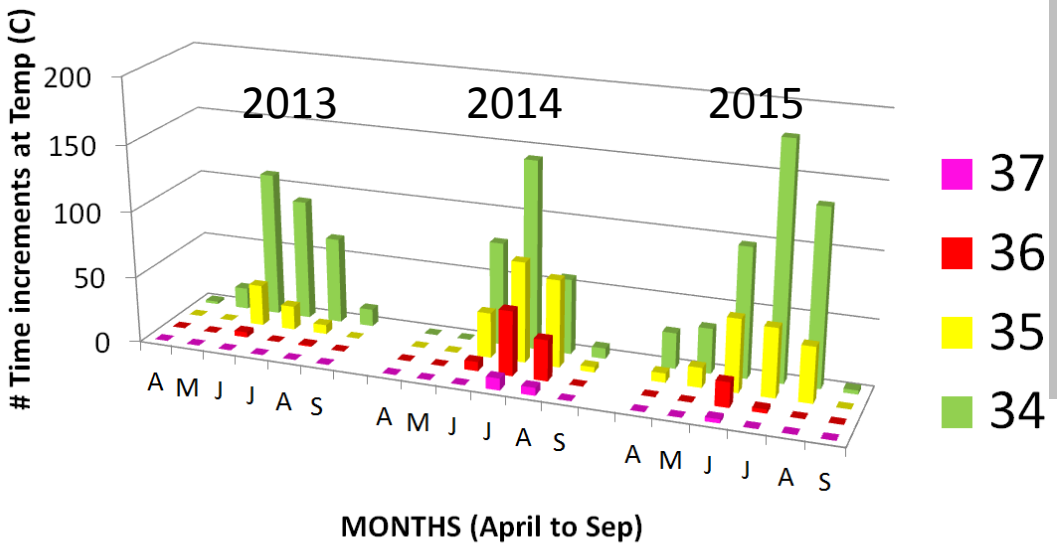
## Station rain gauge - monthly sums (2012 to 2017)



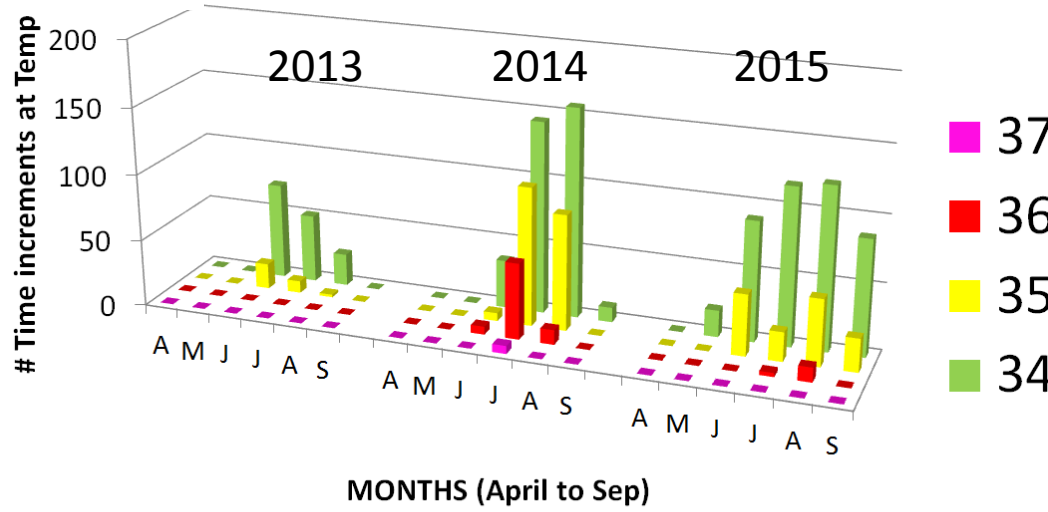
# GEER 2017: Florida Bay Seagrass Die-off Session



## Buoy Key Station Water Temperature



## Garfield Bight Station Water Temperature

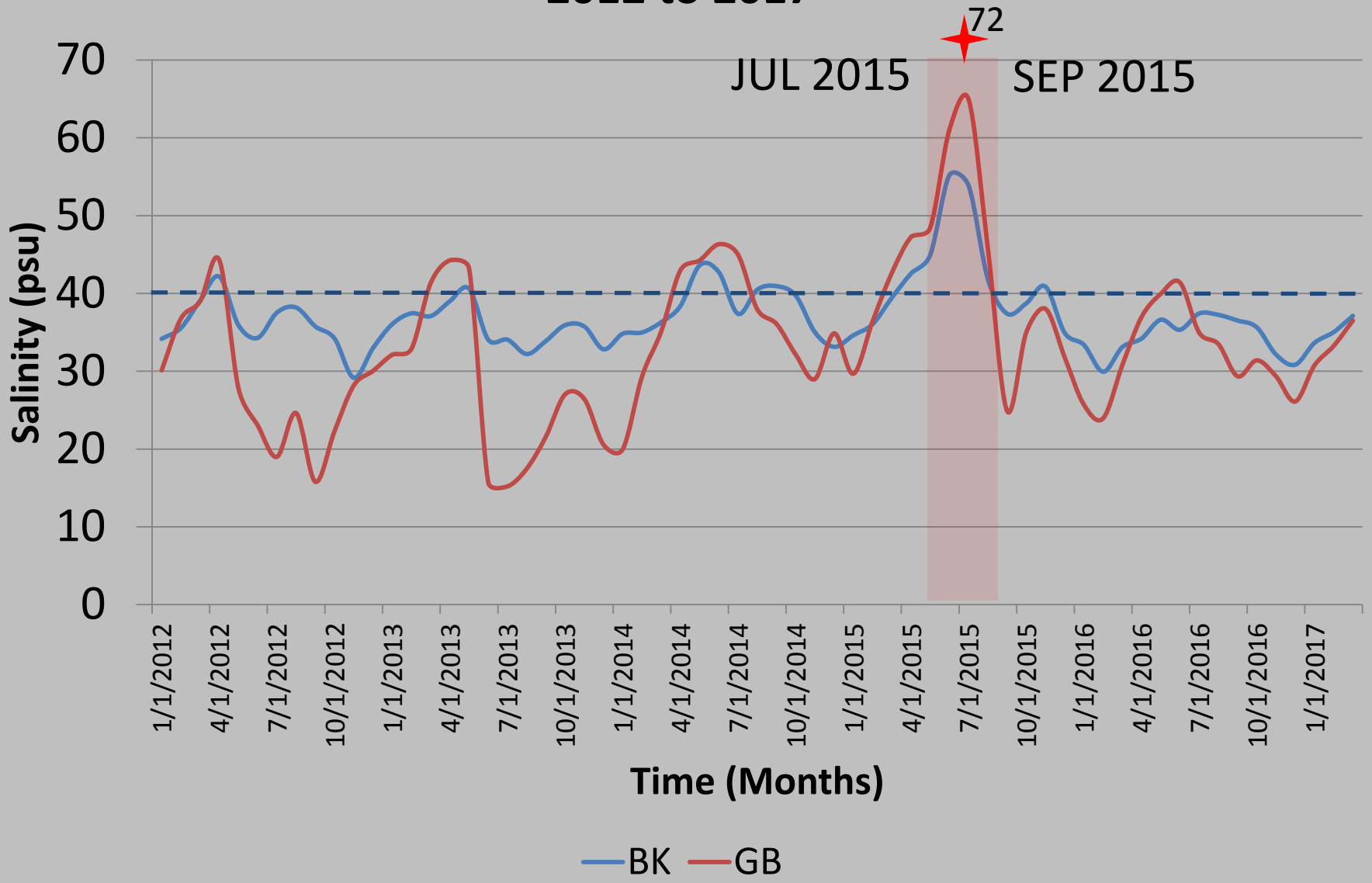




# GEER 2017: Florida Bay Seagrass Die-off Session



## Monthly Average Salinity 2012 to 2017





## Rankin Lake Dissolved Oxygen

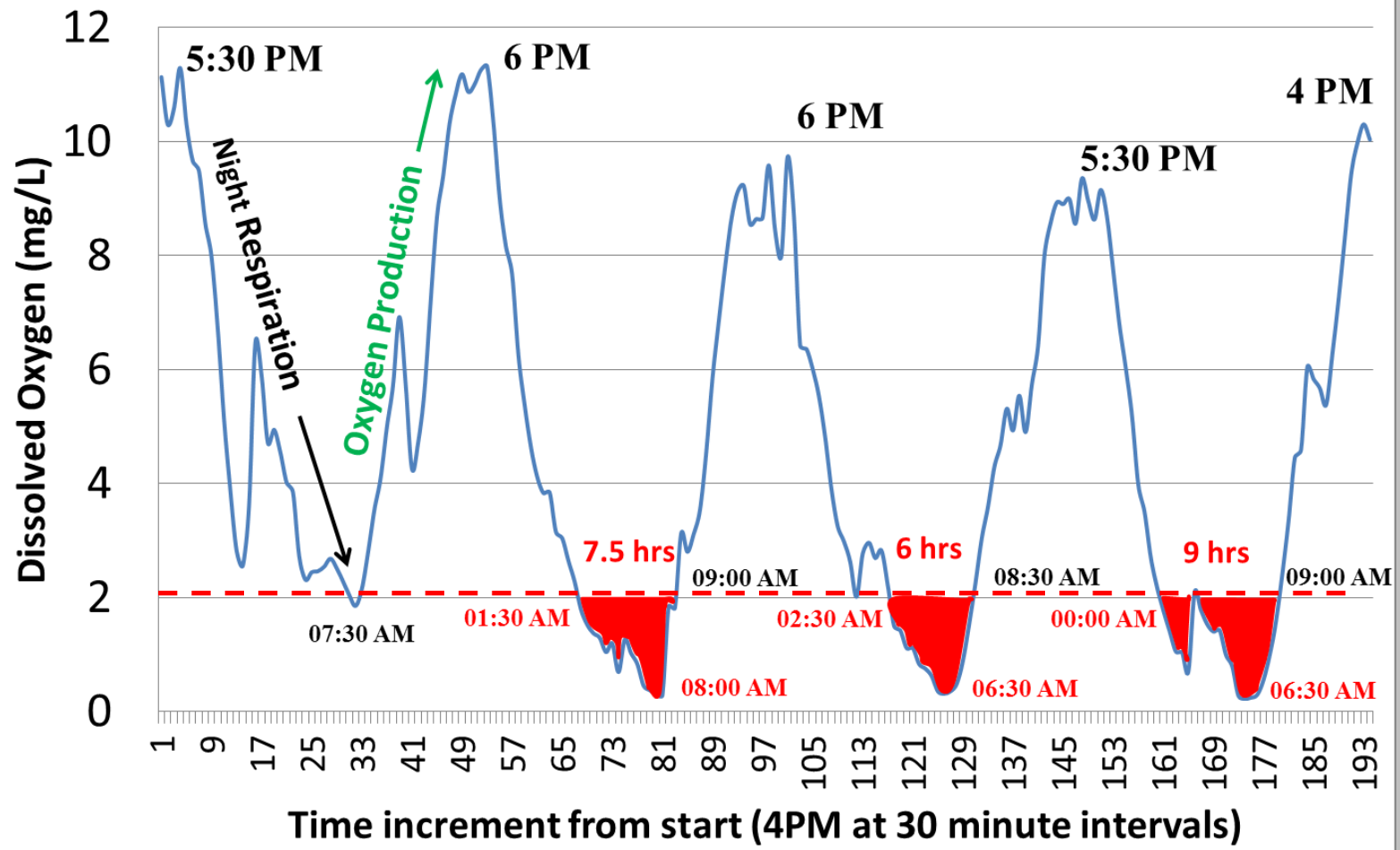
Rankin July 30, 2015



# GEER 2017: Florida Bay Seagrass Die-off Session



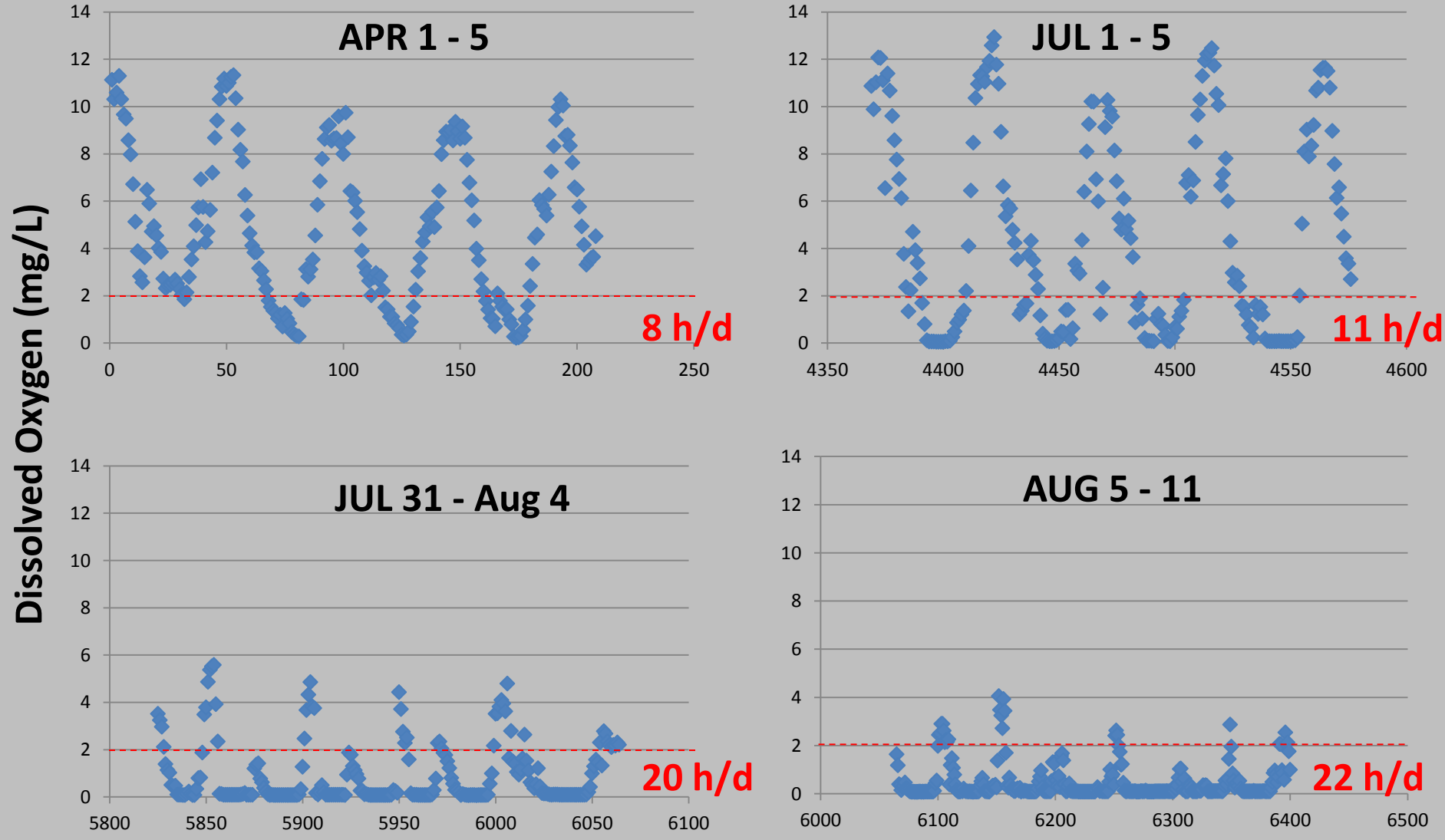
## Bouy Key Dissolved Oxygen April 2015 (96 hours)



# GEER 2017: Florida Bay Seagrass Die-off Session



## Buoy Key Station 2015 Hypoxia through time



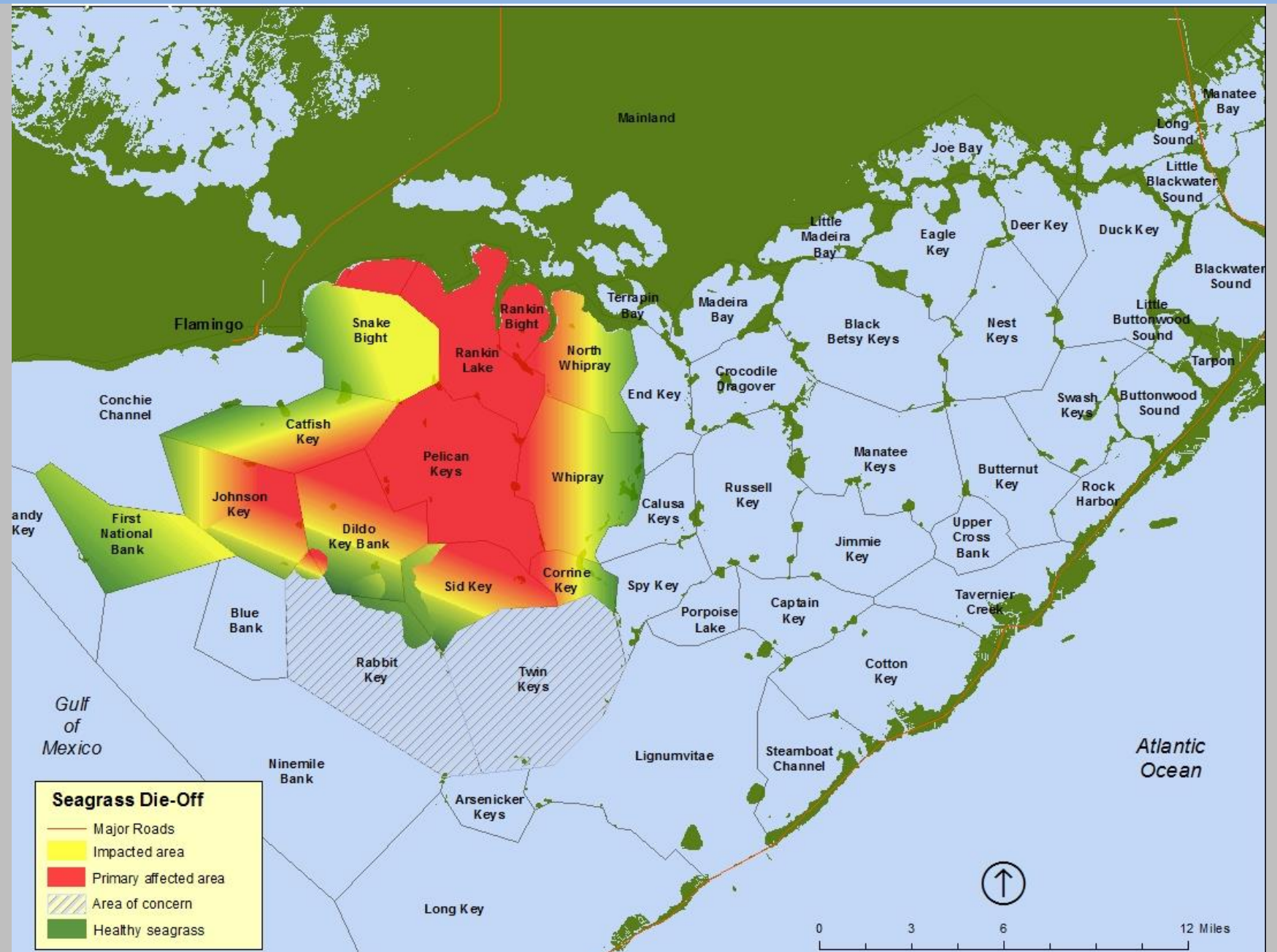
# GEER 2017: Florida Bay Seagrass Die-off Session



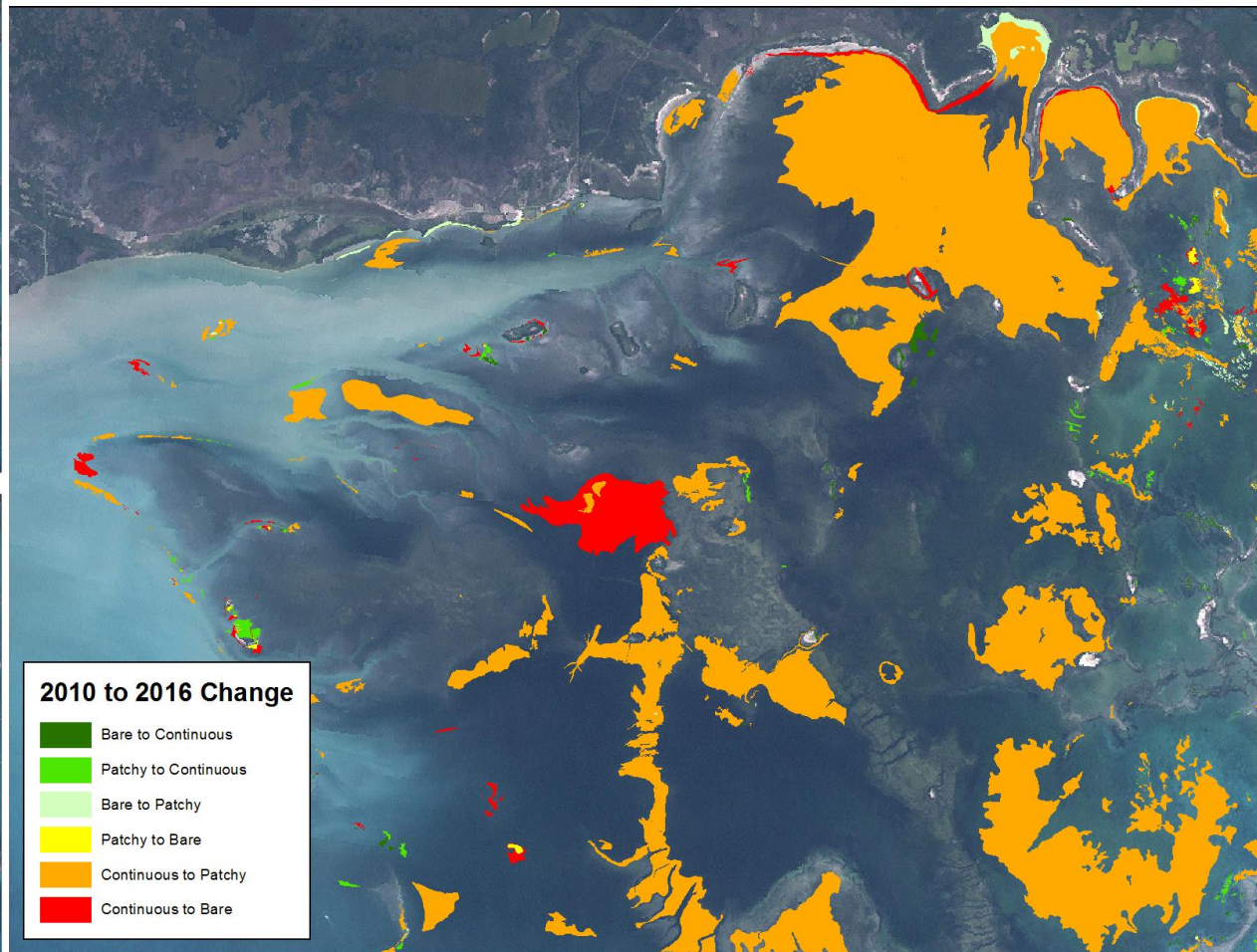
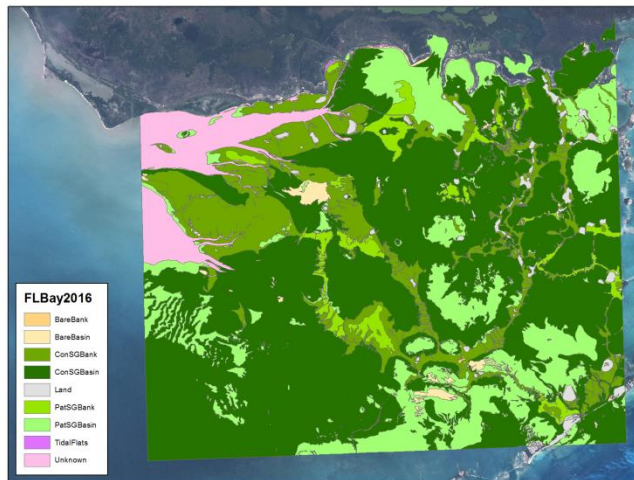
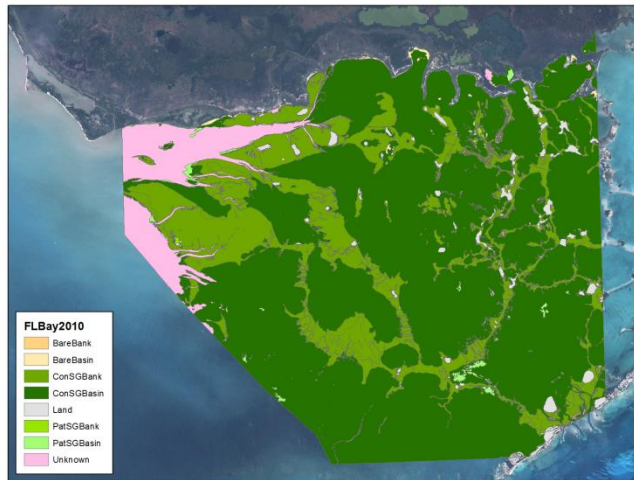
# GEER 2017: Florida Bay Seagrass Die-off Session



# GEER 2017: Florida Bay Seagrass Die-off Session



# GEER 2017: Florida Bay Seagrass Die-off Session



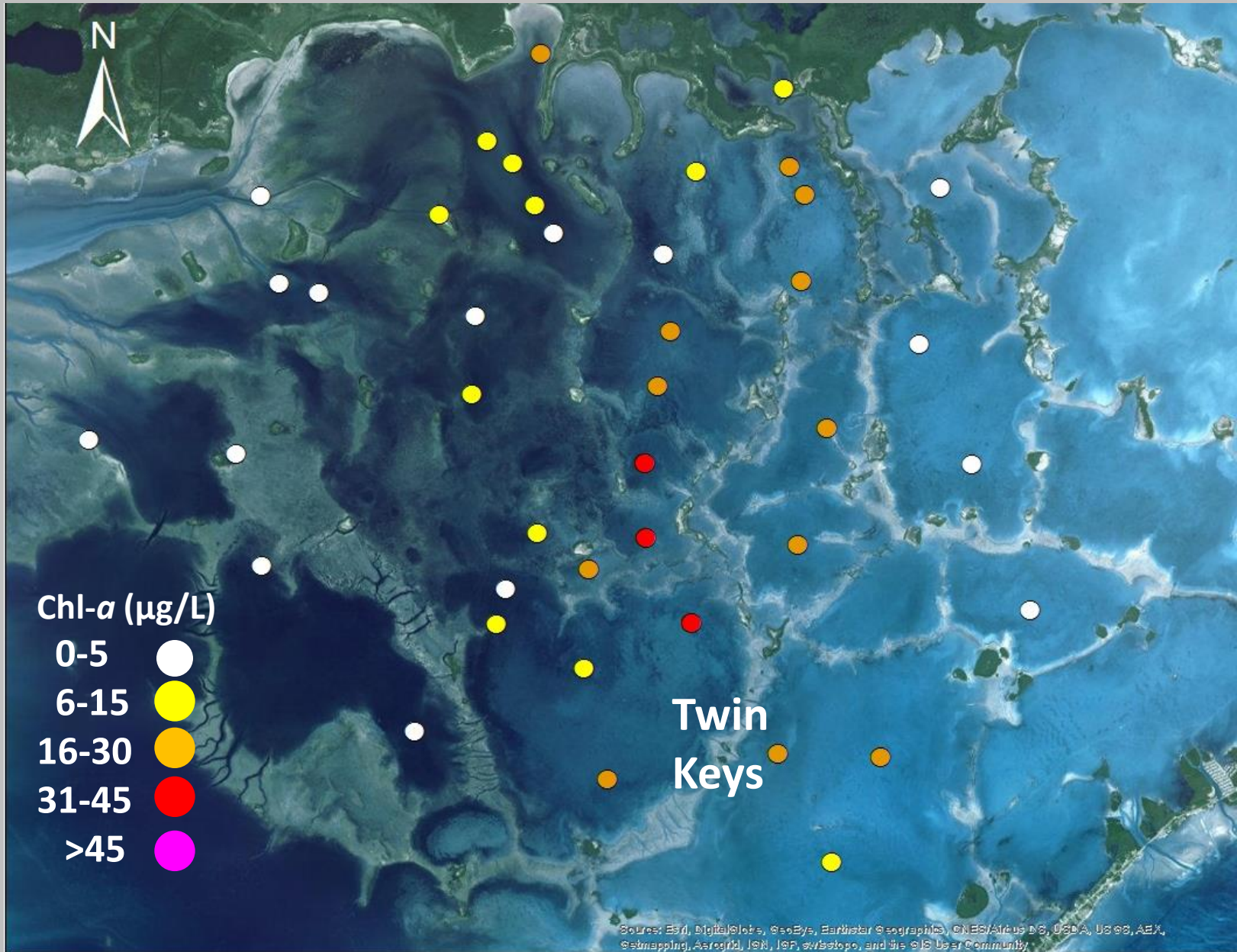
Thanks to Liz Johnsey and Carol Cheatham Rhodes of FWRI, St. Petersburg for imagery analysis.



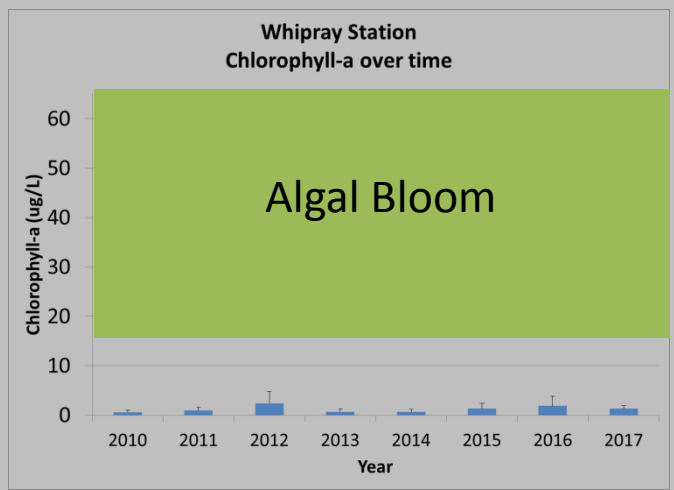
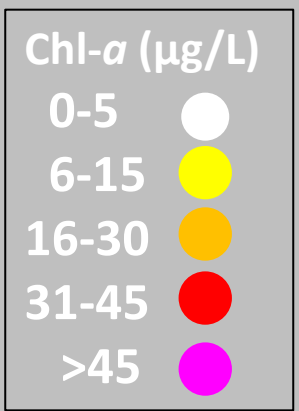
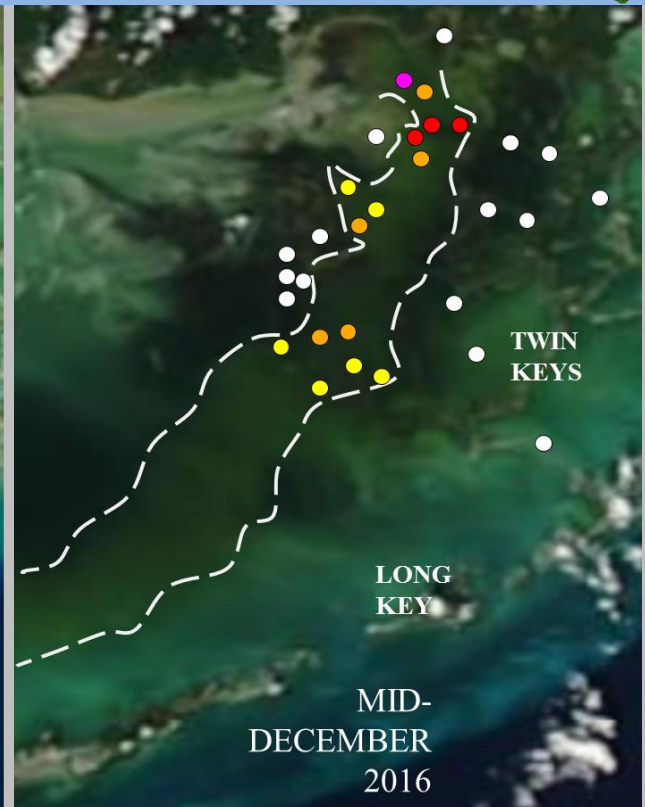
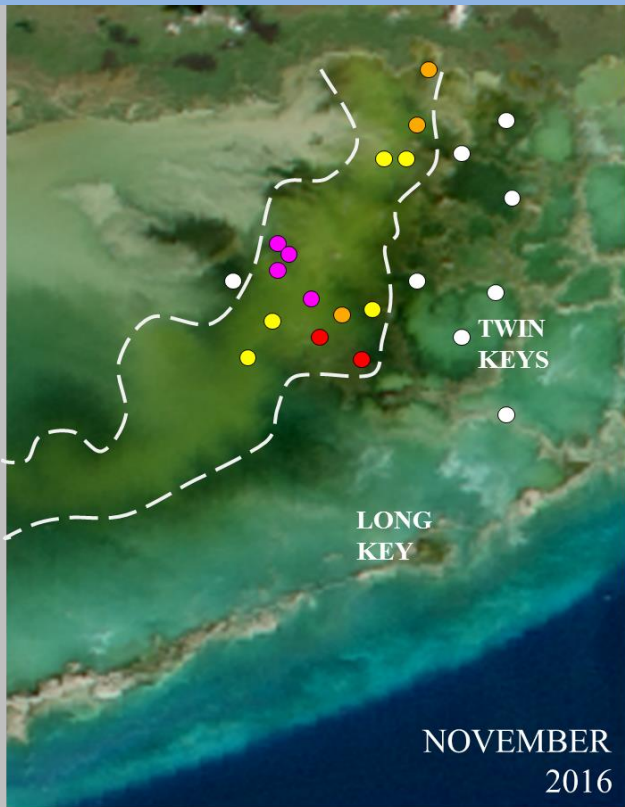
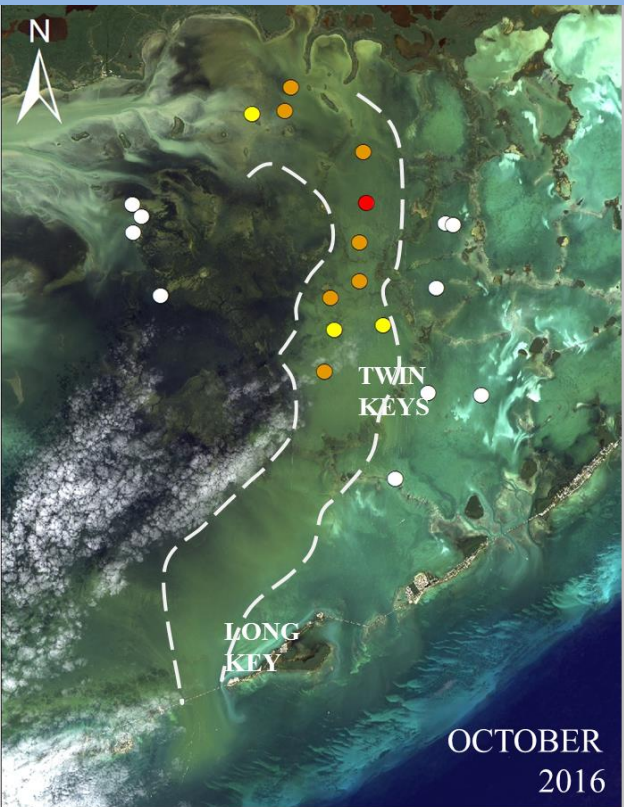
# GEER 2017: Florida Bay Seagrass Die-off Session



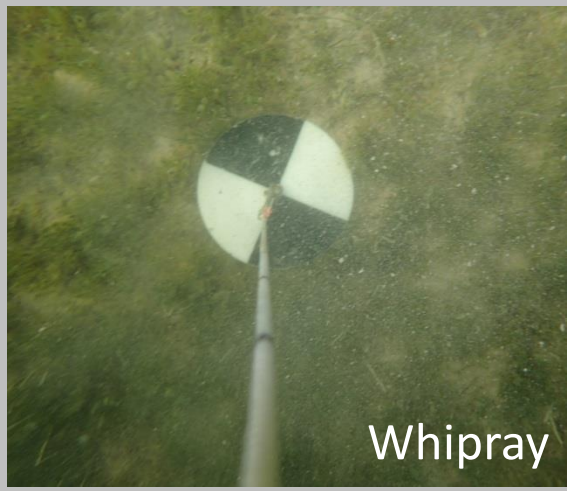
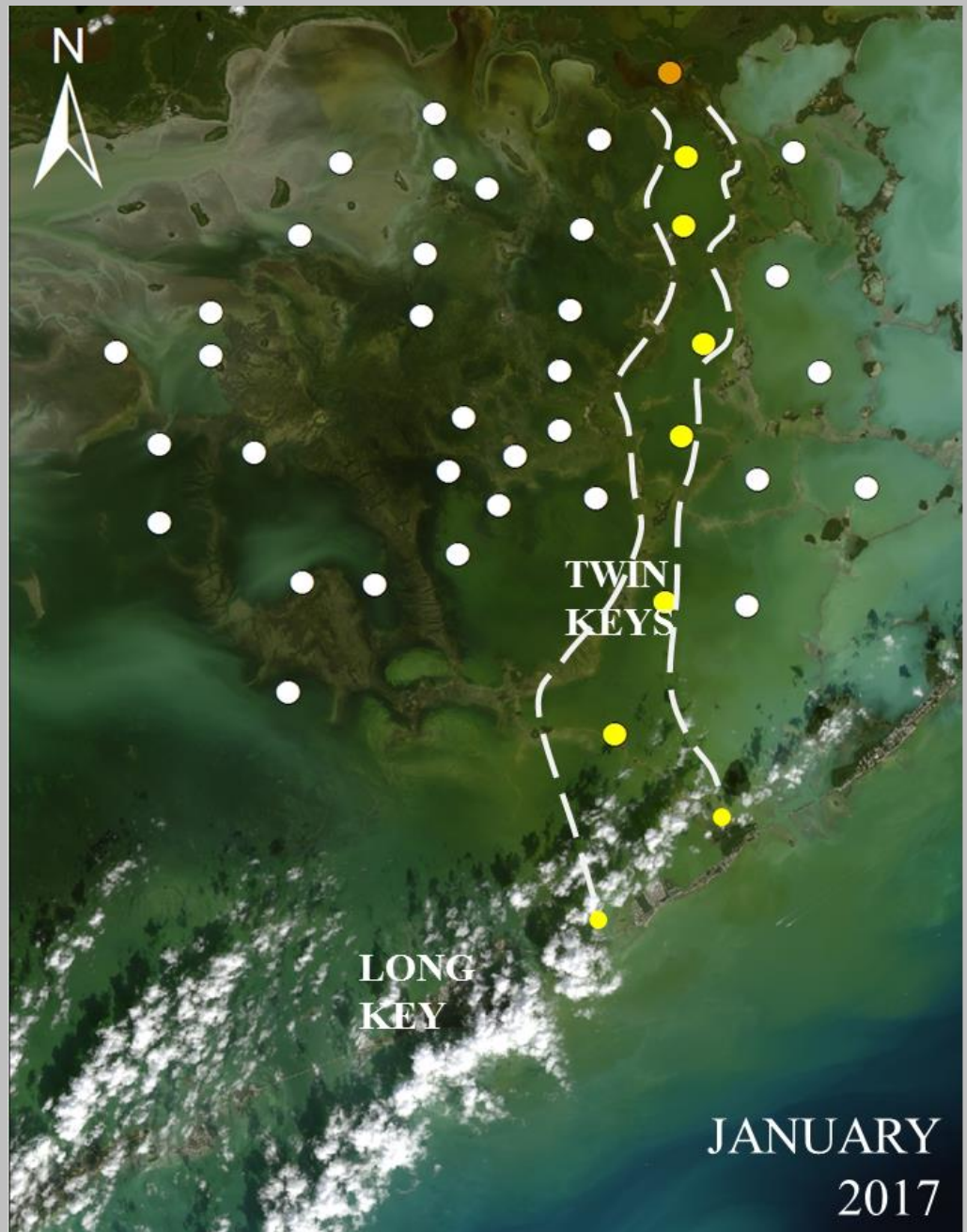
# GEER 2017: Florida Bay Seagrass Die-off Session



# GEER 2017: Florida Bay Seagrass Die-off Session



# GEER 2017: Florida Bay Seagrass Die-off Session



Chl- <i>a</i> ( $\mu\text{g/L}$ )	
0-5	●
6-15	●
16-30	●
31-45	●
>45	●

JANUARY  
2017