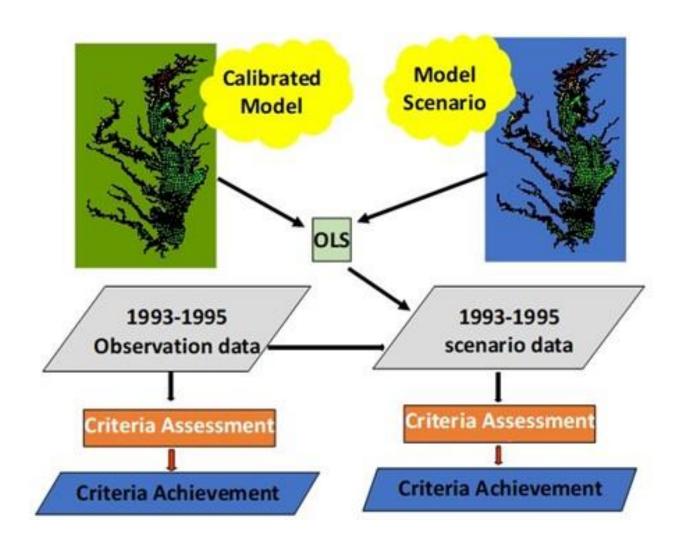
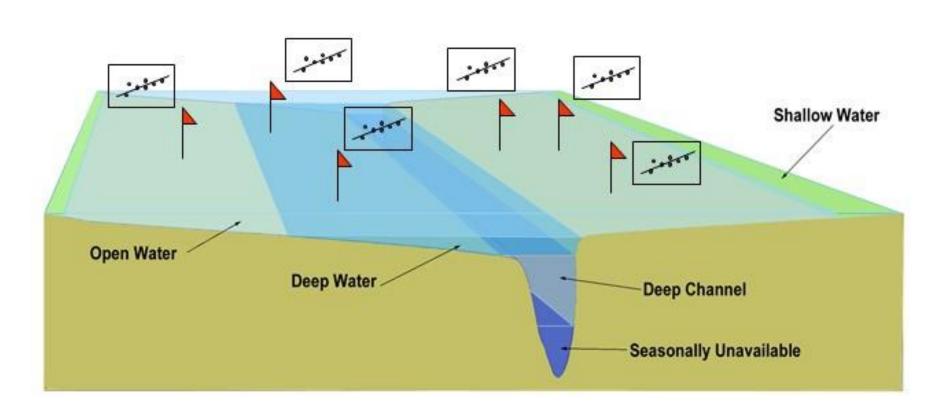
# Climate Change Scenario Assessment in the WQSTM

Gary Shenk and Richard Tian – CBPO Modeling Workgroup 12/5/2019

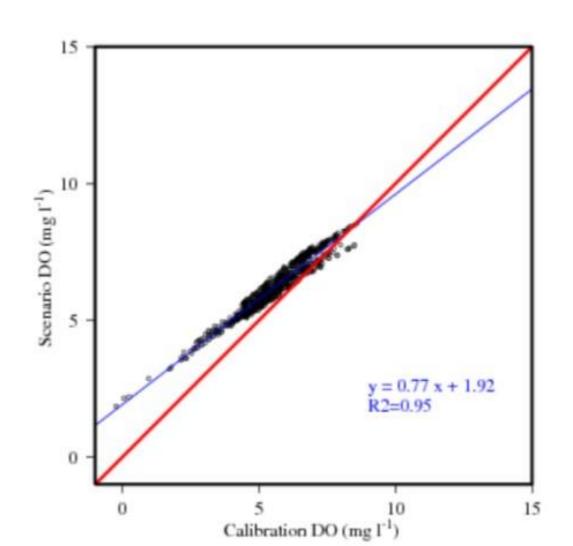
### Modeling relative change



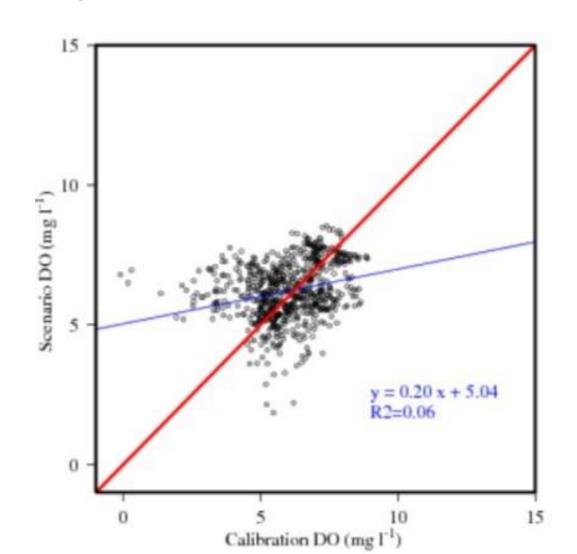
### One regression at each location, depth, and month



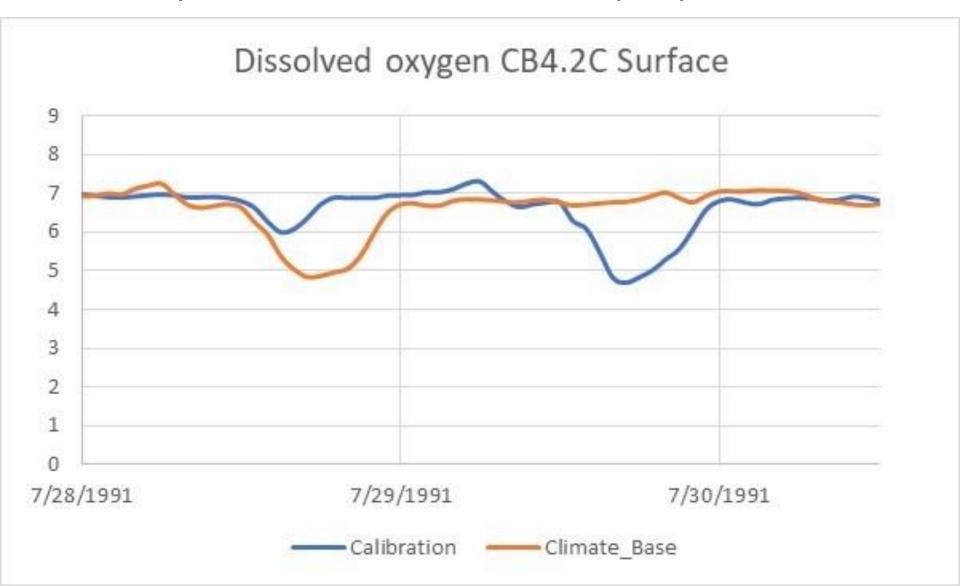
### Results are normally robust



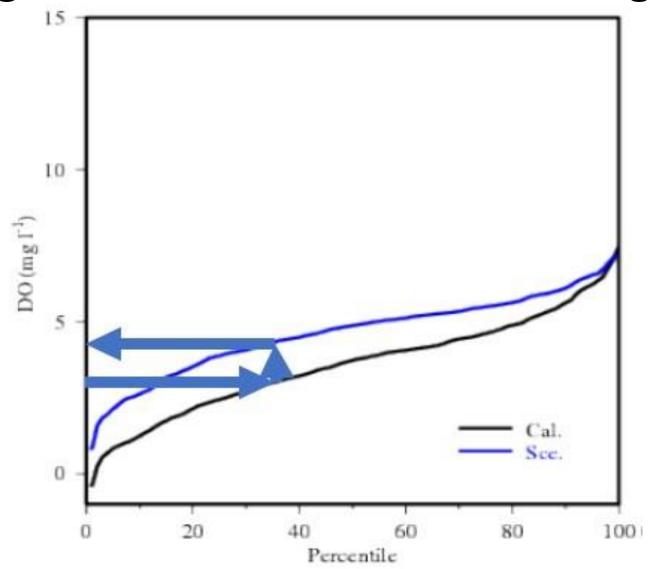
## Climate change results are normally not robust



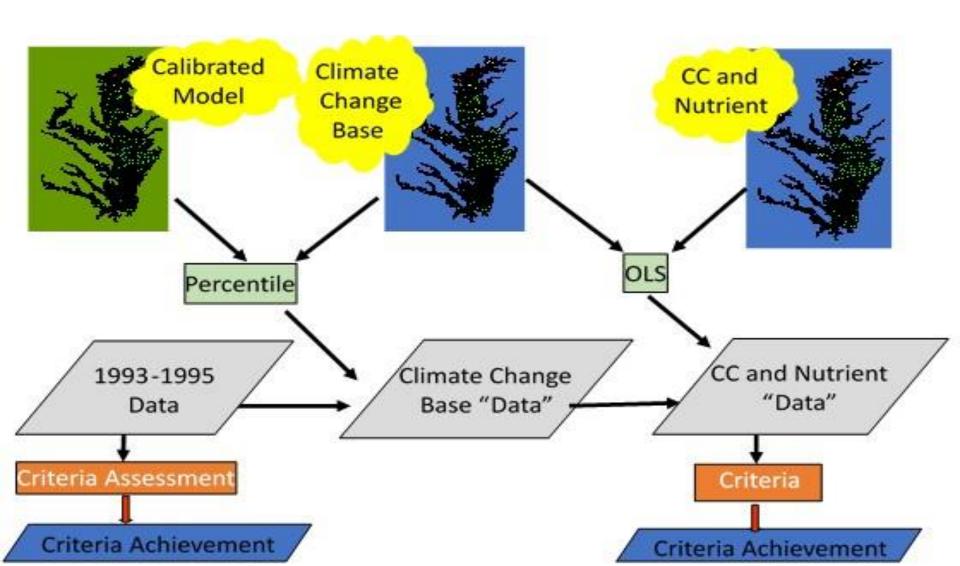
### Temporal offset – new physics



### Adjustments to observations for climate change based on distribution change



#### Modified climate assessment



#### Summary

- Still modifying and analyzing the observed data set to what we would have observed under climate and nutrient scenarios
- Nutrient reduction scenarios are precisely the same method that has been used since the early 2000s
- There is a first step that accounts for changes in flows and temperature associated with climate change
- Previously approved by the MWG