***Introduction—***

Influence of TA as a predictor of shell growth mechanistically

Separate influence of osmotic stress under maintained salinity conditions

Why this matters? Estuarine influence by freshwater is dynamic

Rain events causing mass die offs

Oyster performance elevated in estuaries, however, at risk to climate change shifts in precip regimes, nutrient loading (hypox), disease, etc

Focus not only on shell growth and aesthetics, but also on gut tissue

Focus on juveniles, more sensitive than adults and may be a bottleneck to extreme freshwater conditions

Food availability not limiting\* may or may not occur simultaneously with changing seawater conditions

***Methods—***

Experimental overview:

Species: Natural History

Chemical manipulation of seawater

Organismal performance quantification:

Shell growth

Net growth

Incremental growth

Energetic allocation

Condition index

% Organic carbon in shells

***Results—***

Seawater conditions

***Discussion—***

aslgnsdf