

# Sampling Approach

**Gulf of Mexico Alliance  
Nutrient Sources, Fate, & Transport  
Study Design Workshop  
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# Sampling Approach

- Initial Considerations
  - What type of site selection criteria will be used?
    - probabilistic sampling?
    - targeted sampling?
    - combination of above?
  - What is the spatial resolution required?
  - What temporal resolution is required?
    - Annual, seasonal, monthly, daily

# Sampling Approach

- What resource compartments are important?
  - Estuaries
  - Near Shore
  - Recreational beaches(?)
- What fluxes are important?
  - Riverine load
  - Atmospheric deposition
  - Groundwater
  - Direct point source discharges to estuaries/coastal ocean

# Sampling Approach

- Additional Considerations
  - How do we leverage existing data sets/monitoring programs at both the state and national level?
  - How will laboratory type assays (e.g. primary productivity, algal bioassays) fit into the more traditional monitoring scheme?
  - How long of a time series is required to have statistical confidence in the answers to our questions?