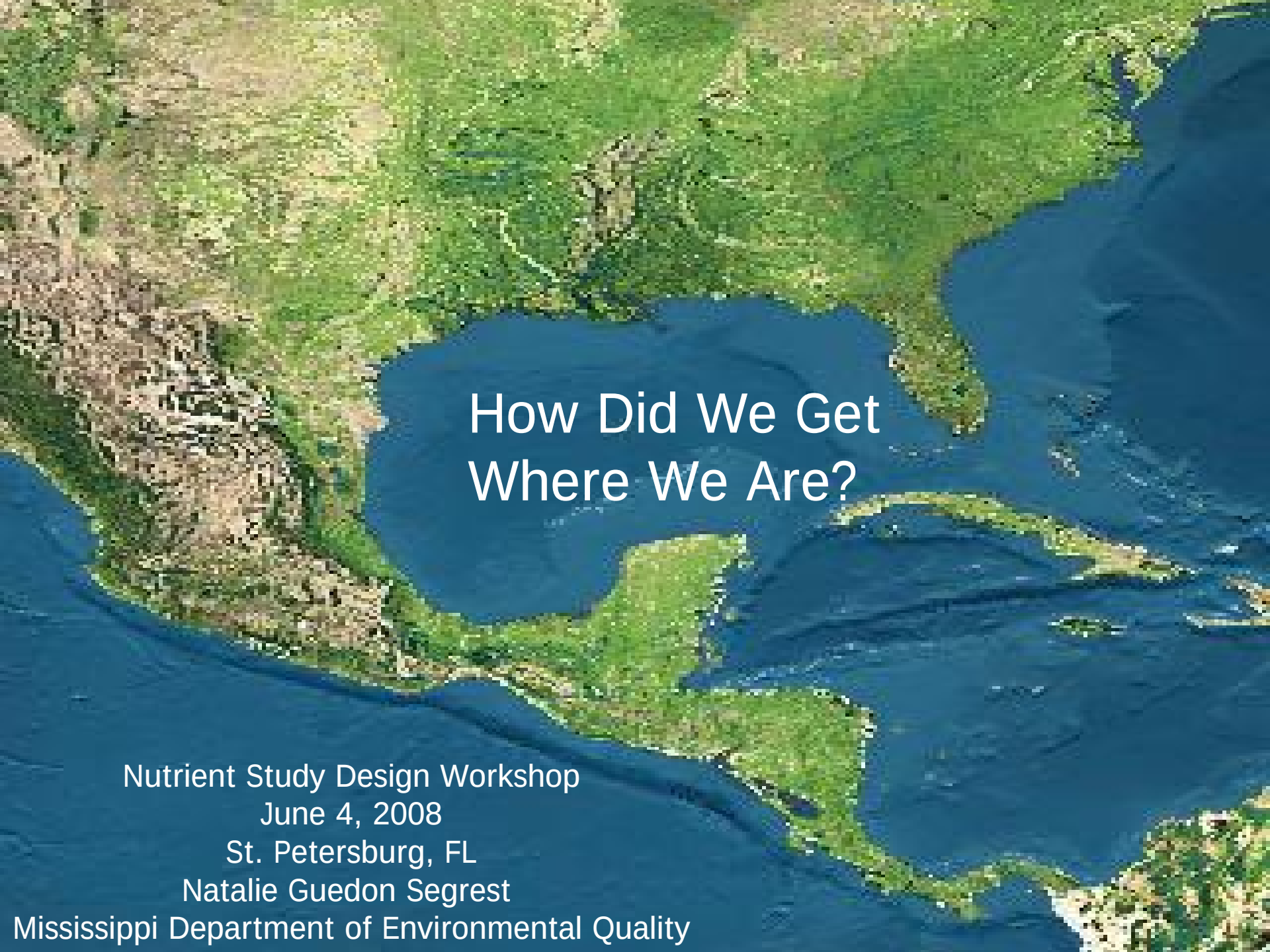


# How Did We Get Where We Are?

Nutrient Study Design Workshop
June 4, 2008
St. Petersburg, FL
Natalie Guedon Segrest
Mississippi Department of Environmental Quality

# Why are Nutrient Criteria Such a Big Deal?

- Jan 2001, EPA published Eco-regional Nutrient Targets
- Percentile approach used based on data from STORET
- Published targets surprised states (very protective)
- Numeric criteria for cause & response variables
  - TN and TP
  - Chl a and measure of clarity
- Grubbs memo: states to adopt numeric nutrient criteria by 2004 or develop a plan for adoption by 2002
- States opted for developing a plan

# Nutrient Criteria Development Plans

- EPA provided guidance for criteria development by water body type
  - Lakes/reservoirs
  - Rivers/streams
  - Estuaries/Coastal waters
- States mobilized and started collecting data
- Plans have 3 phases: data collection, data analysis and criteria development
- Plans must be “mutually agreed upon” by EPA

# GOMA Approach for Criteria Development

- Estuaries arguably most challenging water body type
- Estuaries are receiving water for upstream flow
- All 5 States share the Gulf of Mexico
- All 5 States are faced with numeric nutrient criteria development

# What is GOMA doing about it?

- Nutrient Priority Issue Team Goal
- Develop data and science that all states can use
- Move as a “united front”
- Develop sound science upon which to develop numeric criteria

# Nutrient Reduction Priority Issue Team

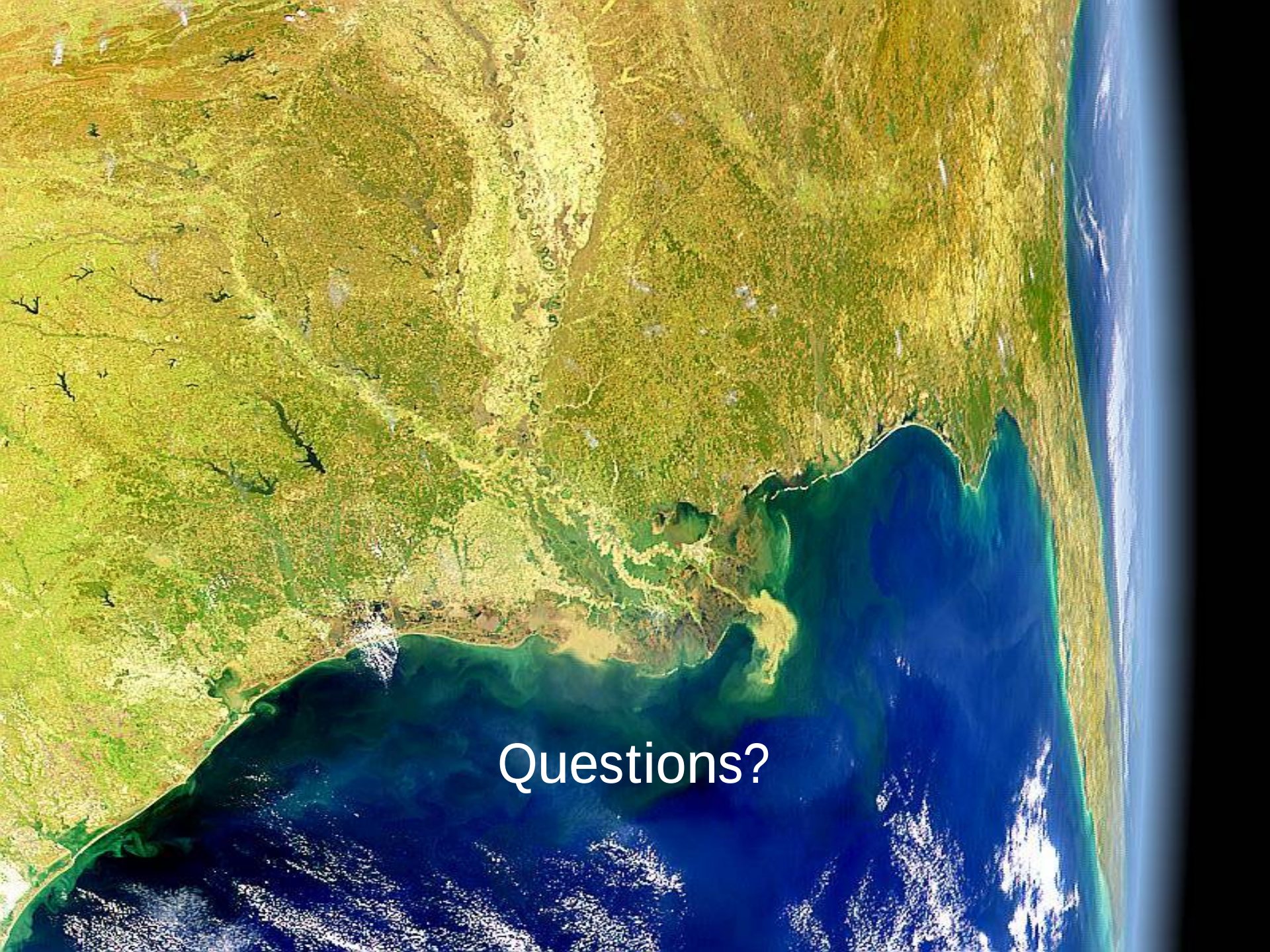
- Characterization of Nutrient Sources, Fate, and Transport across the Gulf Region
- Nutrient PIT action items N-1:A.4 and N-1:A.2
- Series of pilot projects under a common research framework
  - across varying water body systems and seasonal conditions
  - collect data and information regarding the sources, fate and transport of nutrients through the different systems
  - Information necessary for the development of appropriate nutrient criteria in the Gulf of Mexico

# 1st Design Workshop at Galveston

- Developed a workshop discussion paper for broad watershed approach
- Presentations from researchers:
  - Atmospheric deposition
  - Remote Sensing
  - Isotopic Tracking of Nutrient Sources
  - Models

# Results from Galveston

- Formation of workgroups to address different components of paper
  - Nutrient pathways
  - Biological endpoints
  - Water quality and hydrodynamic modeling
  - Physical/chemical monitoring
- Edited/updated paper with workgroups


Questions?