

Advancing Ecological Modeling for Diversions and Hypoxia in the Northern Gulf of Mexico

**The 5th Annual NOAA/NGI Gulf Hypoxia
Research Coordination Workshop**

July 14-16, 2014

**Mississippi State University Science and
Technology Center
1021 Balch Blvd
Stennis Space Center, MS 39529**

Workshop Overview

Purpose

Advance **ecosystem modeling** in the northern Gulf to inform efforts to assess and predict the potential ecological and socioeconomic effects of diversions and hypoxia.

Goals

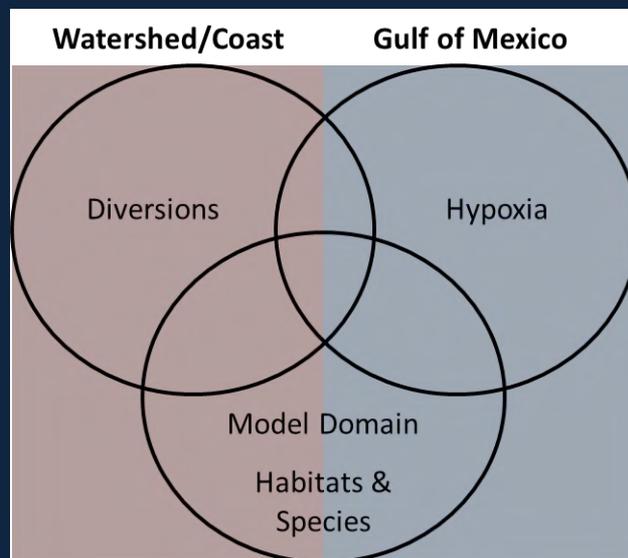
- Provide a forum for strengthening communication between modelers, stakeholders, and managers
- Refine and prioritize fisheries management and habitat conservation needs associated with the ecosystem effects of diversion and hypoxia
- Assess adaptive management needs for advancing ecosystem models

Focus is on models....

Why Diversions and Hypoxia?

Within the context of ecosystem modeling.....

- Overlap in effected species, functional groups, and habitats
- Often overlap in model domain
- Intersecting influences of key physical and biogeochemical drivers, including:
 - Salinity and locatin of freshwater discharge
 - Nutrients and other water quality
- Both issues are subject of significant management efforts



Expected Outputs

**Management
Needs**

(Breakout Session 1)



**Model
Matrix**

(Breakout Session 2)



***Ecosystem Modeling Adaptive
Management Framework***

(Breakout Session 3)

Workshop Support From

- NOAA
- EPA Gulf of Mexico Program
- Restore the Mississippi River Delta Coalition
- Northern Gulf Institute

Steering Committee

- Steve Ashby (NGI)
- David Kidwell (NOS)
- Marie Bundy (NOS)
- Lael Butler (EPA)
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