Getting Our Act Together: How the Scientific Community Can Come Together to Support the Gulf of Mexico

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Deepwater Horizon Oil Spill Impacts

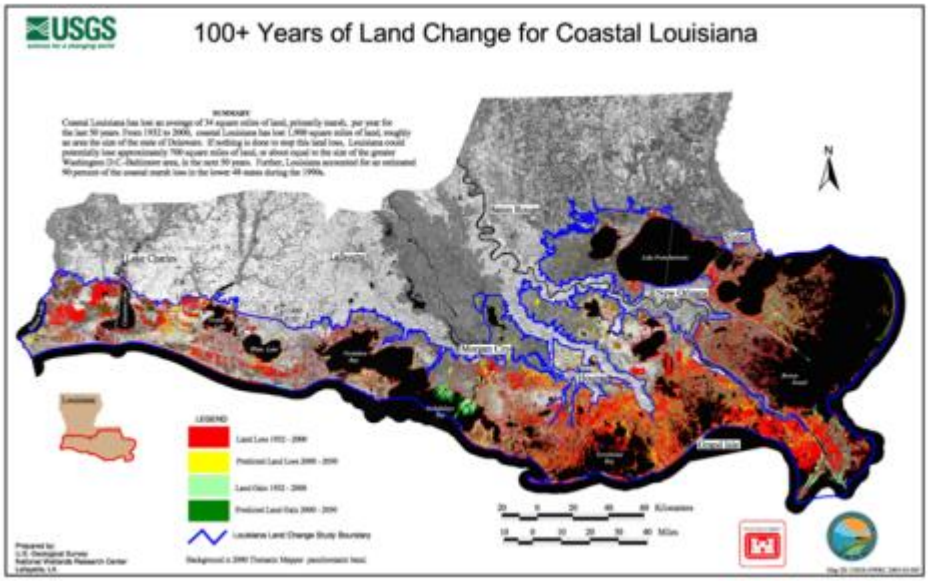
- Total oil released: Apr. 22 – July 15 (when flow suspended): 4.9 million barrels, +/- 10% (FRTG)
- Over 1.8 M gallons of dispersant
- Over 80,000 square miles of Gulf closed to fishing

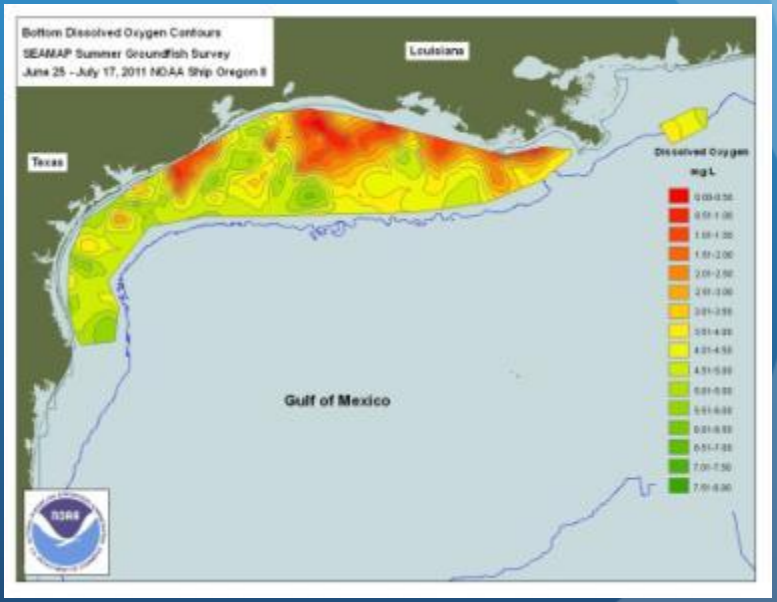
A catastrophic and debilitating event for the Gulf of Mexico but also the most recent in a series of significant acute and chronic stressors for the region

Chronic Stressors for the Gulf of Mexico

- Sediment input (or lack thereof)
- Land/habitat loss
- Sea level rise/climate change
- Coastal storms

Photos: USGS





- Freshwater input (or lack thereof)
- Nutrient input and water quality

Gulf of Mexico science

- Classic boundaries between disciplines are no longer distinct (bio-geo-socio-physico-chemistry)
- Entraining the “human” element is not optional (socio-economics, ecosystem services, human health/environment)
- Adaptability and flexibility are requirements, not luxuries (climate change, extreme events-natural and anthropogenic)

The challenges that face the Gulf and the science required to understand and address them are too vast for any one individual, institution, agency, or entity to handle alone

They can only be addressed by *partnership*, *collaboration*, and *integration*

Capitalizing on what works and expanding beyond

☑ ***Moving past agency boundaries***

- Example: Landscape Conservation Cooperatives (USFWS)-Climate Science Centers (USGS)-Ocean and Coastal Resource Management (NOAA)-Regional Climate Services Partnership (NOAA)

☑ ***Pursue areas of intersection and complementarity***

☑ ***Expanding our ties across institutions***

- Example: Gulf of Mexico University Research Collaborative

- Examples: Sea Grant, National Estuary Programs, National Estuarine Research Reserves

☑ ***Continue to support efforts to reach beyond institutional and geographic boundaries***

Capitalizing on what works and expanding beyond

☑ ***Leveraging existing and new assets***

- Example: NOAA-Shell MOU

☑ ***Promote and expand these and other capabilities, particularly as industry continues to move into the deeper Gulf***

☑ ***Providing broad forums for Gulf Science***

- Example: Gulf Research Initiative (GRI)

GULF OF MEXICO RESEARCH INITIATIVE

- Example: Subcommittee on Ocean Science and Technology (SOST) PI Workshops

☑ ***Integrating these efforts will help to maximize opportunities to learn and leverage***

Capitalizing on what works and expanding beyond

☑ ***More fully integrating science and management in Gulf-wide efforts***

- Example: Gulf of Mexico Fisheries Management Council
- Example: Gulf of Mexico Alliance
- Example: Gulf Coast Ecosystem Restoration

☑ ***Expand and enhance the integration of science and management/restoration efforts in both day-to-day, focused efforts as well as broader, Gulf-wide activities***

"Coming together is a beginning, staying together is progress, and working together is success." - Henry Ford

"What we need to do is learn to work in the system, by which I mean that everybody, every team, every platform, every division, every component is there not for individual competitive profit or recognition, but for contribution to the system as a whole on a win-win basis." - W. Edwards Deming

"People have been known to achieve more as a result of working with others than against them." - Dr. Allan Fromme

The Far Side, Gary Larson

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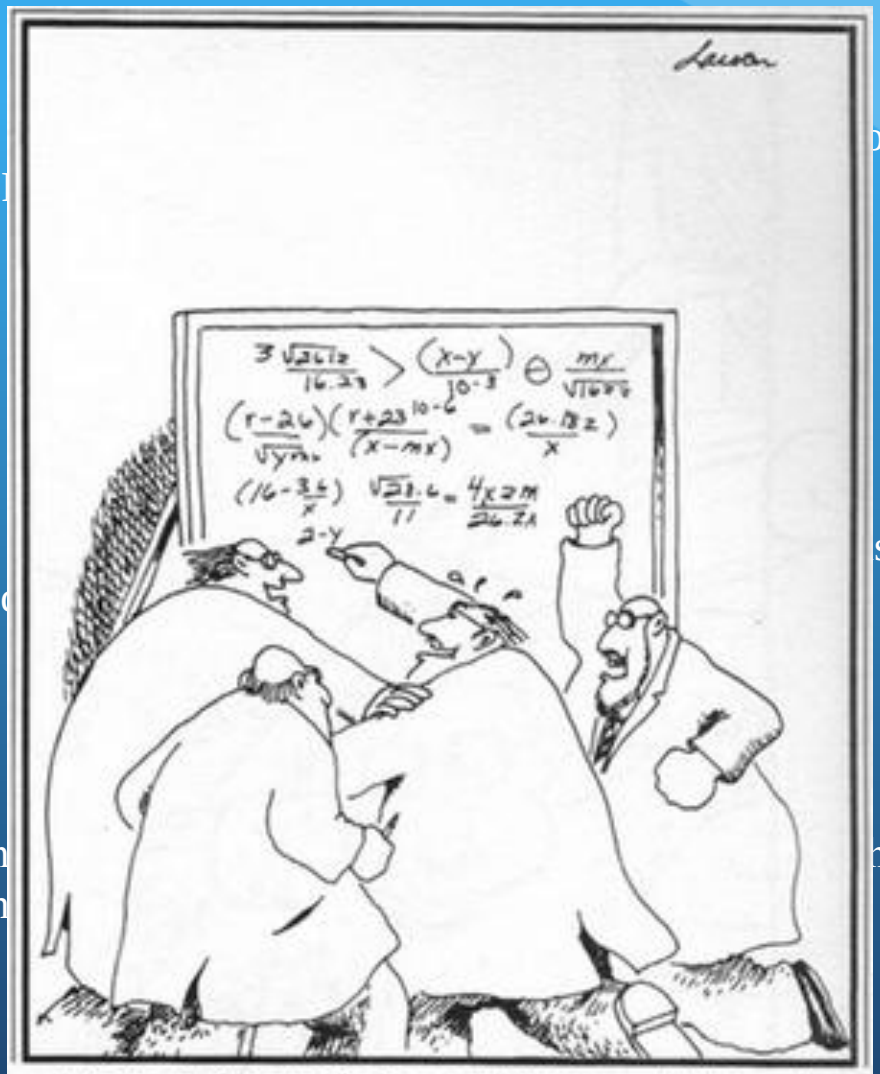

"Go for it, Sidney! You've got it! You've got it! Good hands! Don't choke!"

The Far Side, Gary Larson