



Mitigating Disaster Impacts on Academic Institutions in the Gulf of Mexico Region

Ocean Springs, Mississippi
May 6, 2019

How Academia Is Now Integrated with Disaster Response?

Charlie Henry, Director
Disaster Response Center
Mobile, AL



How Academia Is Now Integrated with Disaster Response?

“While some things have improved since the Deepwater Horizon Oil Spill, we are not where most of us believe that we should be.”



A bit of history...

Origins of the NOAA “HAZMAT” Program...

1970 NOAA Created

1976 *Argo Merchant* oil spill,
Nantucket, MA

1977 – Special Force in the NCP

Scientific Support to FOSC

Scientific Support Coordinators

Scientific Support Teams



NOAA’s Office of Response and Restoration (OR&R)

“We have been part of the science of oil and chemical spills for a very long time.”

Oil Spills



8/2/2004







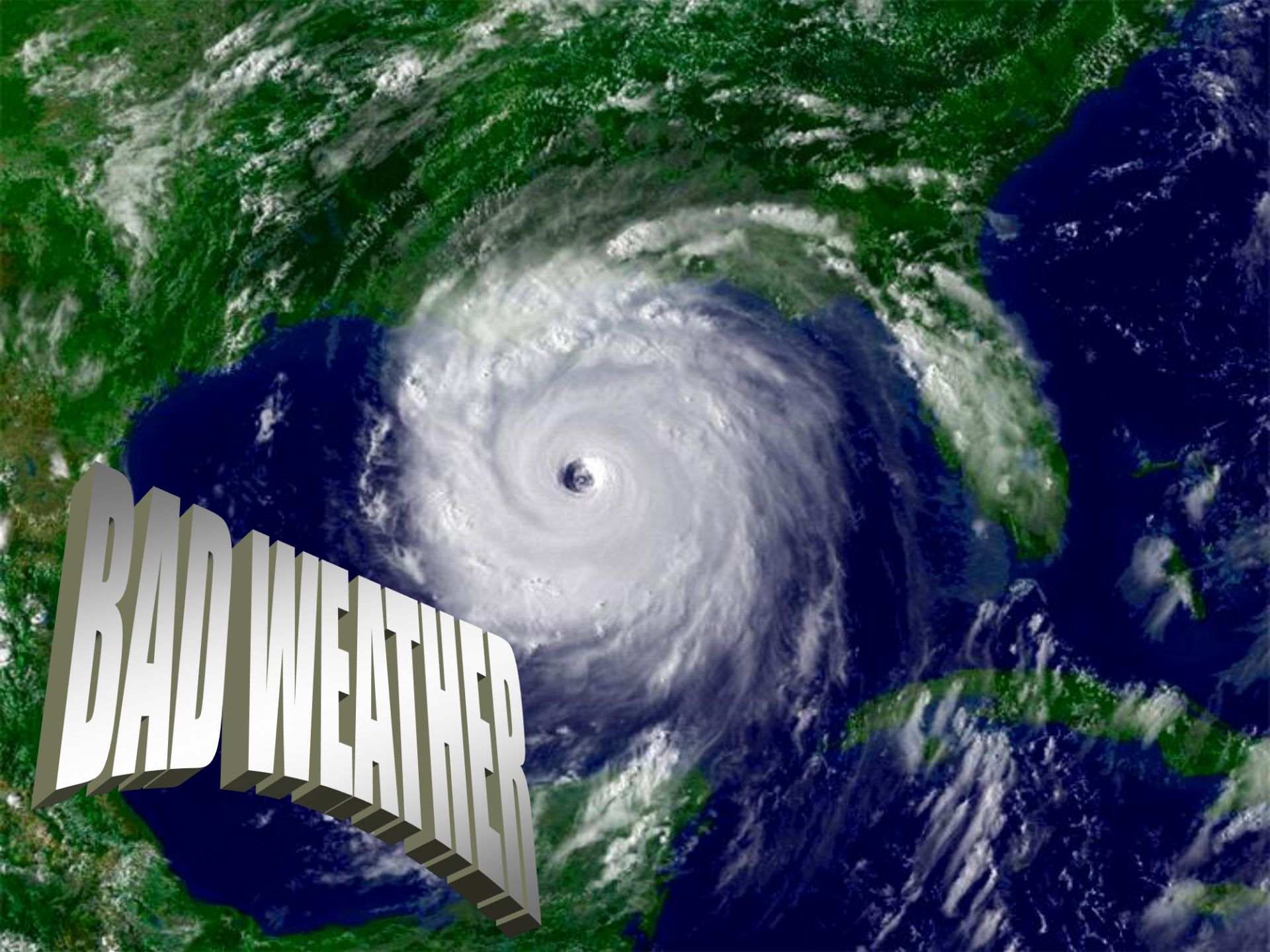
Chemical Spills



Damage Assessment and Restoration

Marine Debris





BAD WEATHER



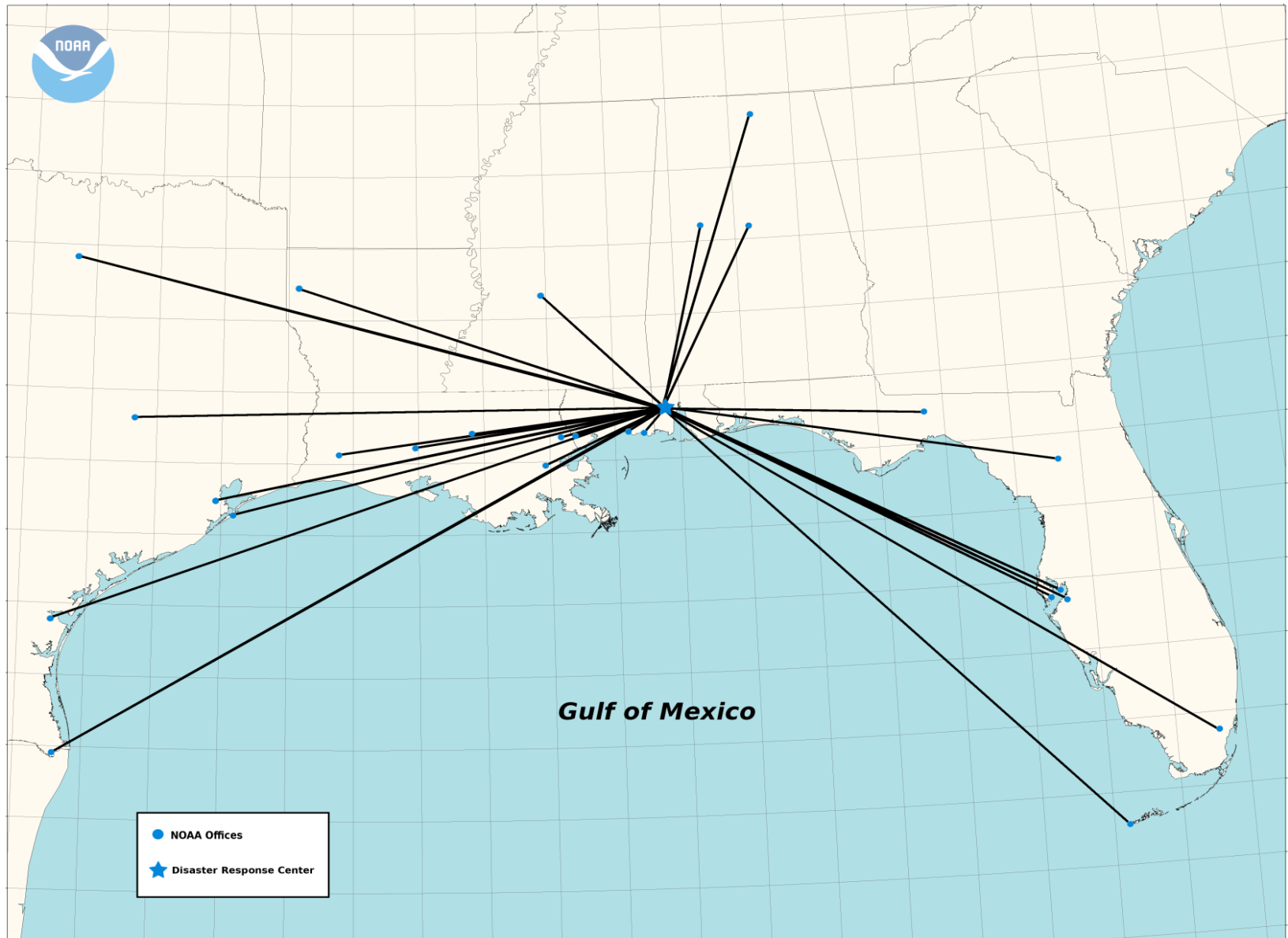
Annually, OR&R...

- provides 24/7 support for emergency response support.
- responds to 120-170 oil & chemical spills.
- trains more than 2000 emergency responders and planners.
- supports over 40 spill drills with the U.S. Coast Guard and other agencies.
- settles 4-7 natural resource damage assessment cases & works on over 200 additional cases.
- supports removal of hundreds of tons of marine debris.
- develops new tools & conducts research to address hazards on the water and prevent marine debris.
- ...and respond to disasters.

(small program office, pretty big job)

Disaster Response Program

DRC – A Hub for Gulf of Mexico Coordination



Leveraging Science to Solve Problems

Applied Science for Science Based Decision Making

“Isn’t it pretty to think so.”

**“Actual oil spills are often the only true
laboratory for study...**

**oil spills can be viewed as
uncontrolled scientific experiments.”**

“get smarter later”

Science in Support of the Deepwater Horizon Response

Jane Lubchencoa, et al (2012)

Where Is the Oil? Where Will It Go? Where Did It Go?

What Remains of DWH Oil in the Environment?

Should Oil Be Dispersed Chemically [at the Point Source]?

Is Seafood Contaminated with Oil and Dispersants?



Jane Lubchencoa, et al (2012)

Conclusions included these statements:

...new mechanisms are needed to resolve the tensions around the appropriate time to share preliminary findings.

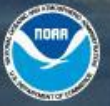
...a parallel problem concerns intellectual property.

...during a crisis, scientists must respect that the priority needs of the response must come before acquisition of new knowledge when the two are in direct conflict – in parallel, responders must support gathering new data, unless those activities interfere with the response.



Workshop Goals:

- Develop best practices for advancing interaction with the academic community during response, enabled by relationships built during the preparedness phase.
- Build relationships and foster understanding of the roles and responsibilities of the oil spill response/assessment scientific community and the academic community, including an understanding of each other's strengths and limitations.
- Develop mechanisms that facilitate access for academic research during oil spills.
- Develop implementation recommendations and metrics for evaluating success.



Sorry – Wrong Workshop – My Bad ☹️

***Leveraging Science and Academic Engagement
During Incidents***

June 25-26, 2019

**Sponsored by NOAA's Officer of Response and
Restoration in partnership with the University of New
Hampshire**



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NO, I'M NOT PROMOTING

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Funding\$

GOMRI – Gulf of Mexico Oil Spill and Ecosystem Science Conference

Science Action Network

Enabling scientific collaboration for disaster planning and response.

2019 RRT 6 CONTINGENCY PLAN - SCIENCE AND TECHNOLOGY ADVISOR(S) GUIDANCE DOCUMENT

The aim of this document is to provide an adaptable, scalable means to access and organize Science and Technical advisors, primarily academia, which will help assure that complex response decisions are informed by the best available science and information.

“If you don’t know each other before a disaster,
a disaster is not a good time to get to know
each other.”

Conferences
Area Planning Meetings
Regional Response Team Meetings
Drills and Exercises