

A Scientist's Call For an All-Out Scientific Response
We Need a Science War-room and a Science Counsel
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When our nation is under threat, it convenes a centralized war-room filled with the smartest, most seasoned experts to analyze the problems, evaluate uncertainties and risks and advise decision makers who take action.

The Gulf Coast region of the U.S., home to 61 million people with a population larger than many sovereign nations, is in ecological crisis and under grave economic and social threat from the Deepwater Horizon oil spill. The problem demands a large and coordinated scientific response. Simply stated: it needs a science war-room.

Over 18 million gallons of oil have gushed into the ocean, oozing toward the shoreline and into the Loop Current. Several scientists argue that the figure is much higher. The spill threatens precious natural resources that underpin an historic culture and economy. The National Oceanic and Atmospheric Administration (NOAA) has already closed off over 20 percent – or 46,000 square miles – of federal Gulf waters to fishing, up from an initial 7 percent closure. The federal government has declared a state of emergency. Louisiana has shut-down over one-third of its oyster beds, in a state where harvesting contributes around \$40 million annually to the economy, and in a region that supplies 59 percent of the nation's oysters. Oil laps at the Breton Wildlife Refuge, a haven for birds and wildlife created by President Roosevelt in 1904. Everyone agrees that there is worse to come and that we face an unprecedented ecological disaster.

We must have a visible and coordinated scientific response that matches the scale and scope of the catastrophe. We need a science war-room populated with the best minds and expertise including ecologists, wildlife biologists, oceanographers, fisheries scientists, toxicologists and ecological economists. In a crisis of this magnitude we should have a full team working together and around the clock, briefing decision-makers on the situation and likely scenarios, responding quickly to changing conditions and new information and advising on options and actions. As with any disaster, we will face unpopular and hard decisions. Like a "Sophie's choice" we may have to choose which species and resources we are most likely to save and sustain, and which ones we cannot help. Let's make those choices openly, thoughtfully and to our greatest ability, based on the best science available in order to minimize damage to our communities.

Since this tragedy began, I read new oil spill-related quotes from one or two scientists who raise valid ecological concerns on a daily basis. As a scientist and citizen, I worry about the impacts, as I should. But scientific quotes, no matter how accurate and ongoing, won't solve the problem. As a nation we've invested millions of dollars in science and nurtured scientists whose work is renowned and valued worldwide. Where is the process to reap the benefit in our time of crisis? What prevents us from collectively harnessing the nation's scientific horsepower to find effective solutions before it's too late? As scientists we can spend the next twenty years wading in oil-soaked marshlands in order to fill peer-reviewed journals with our findings from this disaster. Instead, let's fill those pages with how we used our science to make a difference and how we can do so again in the future. This is a call to action to all the parties: from BP to the Government. There cannot be an industry science and a Government science. Please collectively mobilize the

scientific community effectively. We are needed and we are ready to help. Do so immediately so we won't have to write another post-mortem on the terrible damages done to people from the loss of ecosystems and their services. The Gulf Coast deserves a scientific war-room now and a war counsel that is on par with the engineering and technological fervor that is being directed to stopping the leak.

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