SCIENCE PARTNERSHIPS ENABLING RAPID RESPONSE (SPERR)

Scientific collaboration to respond rapidly and effectively to marine oil spills

WHO WE ARE

A collaboration between the Center for Ocean Solutions and ChangeLabs at Stanford University, the project team brings innovative design strategies and deep expertise in ocean science and governance to the table.

PROJECT ADVISORS

The project is guided by an advisory group and implementation group comprised of leaders who have unique and valuable perspectives on the scientific collaboration challenges presented by large oil spills, and who can implement potential project solutions. and collaboration with scientists across multiple disciplines in government, academia and industry. Although this spurred rapid advancement of valuable new scientific knowledge and tools, it also exposed weaknesses in the system of information dissemination and exchange among the scientists from those three sectors. The Deepwater Horizon tragedy illustrates just how important it will be to prepare for future spills by developing more effective networks that allow rapid sharing of scientific information and ideas.

The Deepwater Horizon disaster was the largest marine oil spill in U.S. history. The spill required unprecedented engagement

Our team is tackling the complex, interdisciplinary challenge of scientific collaboration during large oil spills by generating innovative solutions that go beyond traditional problem-solving strategies.

The SPERR team's goals are to:

- Characterize and understand the obstacles to effective scientific collaboration during environmental crises such as large oil spills, as well as highlight successful instances of collaboration.
- Design new tools, protocols, and practices and amplify existing successful ones that enable scientific exchange between government agency responders and non-governmental scientists from multiple relevant disciplines before and during crises.

CENTER FOR

• Craft solutions that are applicable in other complex disaster response contexts beyond marine oil spills, including earthquakes, tsunamis, and public heath crises.

ChangeLabs. A A A SOLUTIONS

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This one-year project (July 2014- 2015) comprises three phases:

Phase I: Key stakeholder Interviews

Our team conducted over 100 interviews with academics, agency scientists, decisionmakers, and journalists to understand key barriers and identify opportunities.

Phase 2: Concept Generation & Refinement

We proposed a wide array of ideas to overcome barriers to collaboration, and potential strategies to enable the development of effective scientific networks in times of environmental crisis.

Phase 3: Prototyping

We prototyped a range of possible solution strategies among decisionmakers and academic stakeholders. Ultimately, one solution was chosen to implement because it uniquely and powerfully addresses the challenge of scientific collaboration during crisis—the Scientific Action Network (SAN).



(Above) The SPERR Project Team and Core Advisors. Back Row: Lindley Mease (Stanford), Theo Gibbs (Stanford), Scott Lundgren (USCG), Gary Machlis (Clemson), Bob Haddad (NOAA), Debbie Payton (NOAA) Front Row: Nancy Kinner (UNH), Chris Reddy (WHOI), Dana Tulis (EPA), Tara Adiseshan (Stanford), Jane Lubchenco (Oregon State), Kris Ludwig (USGS) Not pictured: Marcia McNutt (Science), David Kennedy (NOAA), Thad Allen (former USCG), LaDon Swann (SeaGrant), Steve Murawski (USF), David Westerholm (NOAA).

SPERR PROJECT TEAM:

LINDLEY MEASE Center for Ocean Solutions

THEO GIBBS-PLESSL ChangeLabs

If you are working on similar projects to increase collaboration during disaster response, we want to know!

EMAIL US AT: sperrproject@stanford.edu

VISIT OUR WEBSITE: www.sperr.us

FOLLOW US ON TWITTER: @SPERR_