The Science Action Network enables cross-sector disaster preparedness and response through novel academic-agency partnerships and resource sharing.

The Deepwater Horizon disaster of 2010 was the largest marine oil spill in U.S. history. Three years later, Superstorm Sandy swept the North East, leveling buildings and destroying critical infrastructure in New York City. Both disasters highlighted a shared weakness in the system of emergency response: the inability to rapidly integrate science and scientific expertise into critical local, regional, and national response decision-making.

As environmental disasters become increasingly frequent and more severe due to climate change and extractive resource use, a more efficient system of coordination between science and decision-making in preparation and response to these disasters is imperative.

The Science Action Network is a solution uniquely powerful in addressing these scientific collaboration challenges by creating a network of academic and professional scientists that are linked to regional government planning and response bodies to coordinate and streamline scientific input for decision-making.
The Science Action Network is designed as a network of 10 Regional Academic Hubs, each associated with a federal emergency response region. Through the Hubs, non-governmental scientists from academic institutions, professional societies, and scientific NGOs can develop and fund disaster-relevant collaborative research initiatives. During a disaster response effort, government agencies can access Hub members’ scientific expertise in a rapid, streamlined manner. A light-touch leadership council composed of representatives from federal response agencies, relevant industry and NGO stakeholders, and academic institutions guides the Network. The power of the Network, however, lies in its regionally-based, decentralized structure, which enables dynamic action.

THREE GOALS OF THE SCIENTIFIC ACTION NETWORK:

1. Bridge cultural gaps between response agencies and academic scientists and create new norms for scientific collaboration
2. Drive socially relevant and interdisciplinary scientific research through novel academic-agency partnerships and funding opportunities
3. Catalyze cross-disaster and cross-institutional scientific exchange

Science Partnerships Enabling Rapid Response (SPERR) was initiated by Jane Lubchenco (Under Secretary of Commerce for oceans and atmosphere and NOAA Administrator) and two Stanford University Institutes, the Center for Ocean Solutions and ChangeLabs, in late 2013. Together, with a team of high-level advisors from academic institutions and federal response agencies, they conducted over 100 in-depth interviews with key stakeholders in academia, government, and industry to understand the obstacles to and enablers of effective scientific collaboration across the crisis planning and response system. Conceptual development of the Science Action Network is the final phase of this one-year project. The project team is open to input on long-term prospects for the Science Action Network.