Coastal Response Research Center
at the University of New Hampshire

The Coastal Response Research Center (CRRC) is a partnership between the National Oceanic and Atmospheric Administration (NOAA) Office of Response and Restoration (ORR) and the University of New Hampshire (UNH). The goal of CRRC is to reduce the consequences of spills and other hazards that threaten coastal environments and communities and to serve as a hub for the local, national and international oil spill communities. Specifically, CRRC: (i) conducts and oversees basic and applied research on spill response and restoration; (ii) transforms research results into practice; (iii) conducts outreach and encourages strategic partnerships to improve preparedness and response; and (iv) educates the next generation of the oil spill community.

The Center funds research projects on the injury and recovery of natural resources, socioeconomic/human dimension issues, and transportation and weathering of released materials resulting from spills in coastal regions. CRRC is known globally as an independent, intermediary that brings all stakeholders to the table to develop and implement viable and trusted solutions to complex problems related to environmental disasters.

The CRRC led the collaborative effort among several UNH-NOAA centers and NOAA programs that developed a data platform capable of interfacing diverse spatial data sets and real-time data in a web-based format. The platform, the Environmental Response Management Application (ERMA®) is easy to operate and allows the user to “drill down” to reveal actual data (e.g., sensitive species and habitat), magnify segments of the geography, and monitor real-time conditions. ERMA demonstrates the capabilities of an integrated data management platform and is used extensively, including during the Deepwater Horizon spill in the Gulf of Mexico.

The CRRC has hosted numerous international spill-related workshops on a variety of topics including: dispersants, Arctic ERMA, modeling, human dimensions, submerged oil, and priority research and development needs. These workshops have convened a diverse group of experts from government, industry, NGOs, and academia as well as other stakeholders (e.g., indigenous peoples). Example topics for workshops include: The State-of-Science of Dispersants as Applied to the Arctic, Environmental Disaster Data Management, Oil Observing Tools, and All Hazards Exercise Planning.

The Center has funded research on many topics that have resulted in products such as: DTox, a Worldwide Quantitative Database of the Toxicity of Dispersants and Chemically Dispersed Oil; and Response Risk Communication Tools for Dispersants and Oil Spills. The Center also hosts working groups on dispersants, submerged oil and environmental disasters data management that bring together federal and state agencies, NGOs and the private sector to share information about on-going research efforts environmental response and restoration. For more information on the Center, upcoming workshops, Center-funded research, and student involvement visit our website at www.crrc.unh.edu.

Aerial application of dispersants to an oil slick. Photo courtesy of the
The Center for Spills in the Environment (CSE) is located at the University of New Hampshire (UNH). CSE is a parallel center to the NOAA-funded Coastal Response Research Center (CRRC), also located at UNH. CSE works with a variety of governmental agencies and the private sector. Similar to CRRC, CSE focuses on the education, research and outreach involved with all aspects of spills, with an overall objective of promoting effective protection, restoration and recovery of coastal areas. CSE is known as an independent, honest broker and for its experience in the areas of environmental and marine science and engineering as they relate to spills. CSE has conducted numerous workshops bringing together researchers, practitioners and NGOs of diverse backgrounds to address issues in spill response, restoration and recovery.

Representatives of CSE activities and projects:

♦ In October 2014, CSE hosted a forum which featured speakers who played key roles during the 1989 Exxon Valdez accident in Prince William Sound, Alaska and the Deepwater Horizon (DWH) spill in the Gulf of Mexico. The forum brought together prominent oil spill experts from government, academia and industry to address important questions related to these spills including: What have we learned from these two spills? How can they inform future spill response? What should we do differently to address the spills of the future? How should we apply what we have learned to oil exploration in frontier areas like the Arctic and ultra-deepwater and inland (e.g. railroad and pipeline) spills? In addition to discussion of potential spill scenarios four important panels were convened on the role of:
  - Science during Oil Spills;
  - Media during Oil Spills;
  - Social and Public Health during Oil Spills, and;
  - Policy and Politics during Oil Spills.

♦ Oil Sands Products (OSP) Forum (Seattle, WA). A panel of experts offered the latest information and details on OSP and its characteristics, transportation (via rail, pipeline, vessel), and fate, behavior, modeling any natural resources impacts when spilled. Case studies (Enbridge/Kalamazoo and Burnaby spills) were presented. A final report is available on the CSE website.

♦ Oil Dispersant Research Workshop (Baton Rouge, LA). This workshop offered a collaborative opportunity for researchers, funded GoMRI, NSF, federal & state agencies, industry and NGOs and practitioners to present their latest findings on dispersant-related issues. It laid the groundwork for determining areas where research has the potential to impact future dispersant use in spill response and promoted mechanisms for scientific exchange and collaboration.

♦ Dispersants, Submerged Oil and other Working Groups. The goal of these topical working groups are to facilitate discussion among members to identify research needs and keep abreast of new findings resulting on-going studies and to coordinate future efforts.

For more information on CSE activities, please see www.cse.unh.edu or contact Nancy E. Kinner, Ph.D., Director at nancy.kinner@unh.edu