Overall CRRC Mission

- Develop new approaches to spill response and restoration through research/synthesis of information
- Serve as a resource for ORR and NOAA
- Serve as a hub for spill research, development, and technical transfer
 - Oil spill community (e.g., Regional Response Teams, National and International R&D efforts, multi-organizational partnerships)







CRRC's Strategic Plan

- 3-5 year horizon starting in 2007
- Three topics of CRRC focus
 - Dispersant use
 - Submerged oil
 - Oil-in-lce

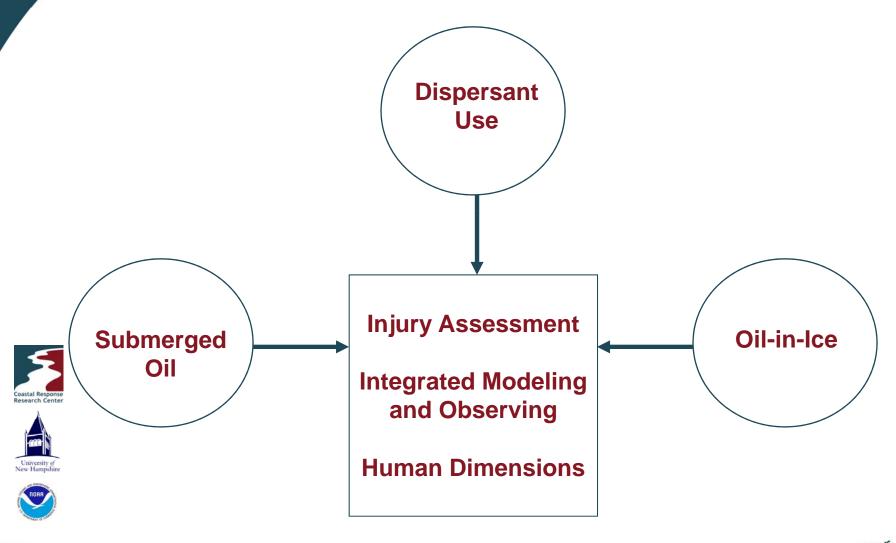






- Within each topic, three areas of emphasis
 - Injury Assessment
 - Integrated Modeling and Ocean Observing
 - Human Dimensions

Focus Topics



Efficacy/Effects of Dispersant Use

- Dispersant-related issues CRRC focus since inception
 - NRC Report 2005
 - Annual RFP topic
 - Sept 2005 Workshop
 - CRRC leads Dispersants Working Group (DWG)
- Dispersants emphasis continues because of:
 - Continued DWG efforts pending US Coast Guard (USCG) near-shore dispersant requirements in Spring 2007
 - Questions remain







Dispersants Initiative

- NRC report on dispersants efficacy and effects recommended:
 - Integration of research plans
 - Need for <u>peer-reviewed</u> information and <u>environmentally-meaningful</u> studies
 - CRRC's mission to address national issues related to spills
 - Act as a hub for oil spill research
 - Foster collaboration







Coordinated Dispersants Initiative

- July 2005: CRRC and NOAA convened meeting of U.S. <u>funding</u> entities: USEPA, MMS, USCG, TXGLO, OSRI, LA OSRADP, CAOSPR, API and other Industry reps
- Unanimous agreement to participate in integrated research plan







- Formed Dispersants Working Group (DWG) in Fall 2005, with expanded membership
- Expanded in 2006 to include international funding entities

Dispersants Workshops

- CRRC Workshop on Sept 20-21,2005
 - Outcome of workshop = report of research needs, RFP topics and brief descriptions
 - DWG members use these as basis for their RFPs
- February 1-2, 2007: Dispersants Research
 Forum in New Jersey, USA
 - DWG PIs presenting current research
 - Including international participation
 - DWG will meet to determine which research needs have been addressed and what remains to be answered







Matrix of Current Dispersed Oil Research

- Organized by topic areas identified in CRRC workshop report: "R&D Needs for Making Decisions Regarding Dispersing Oil."
- Funding entities provided data for the matrix
- Includes project title/Pls, coverage of research topic, completion date, funding, and manuscripts/contact information
- Demonstrates impressive, collaborative effort in filling research gaps







Major Topic Areas

- 1) Efficacy 1: Chemical parameters
- 2) Efficacy 2: Operational & hydrodynamic parameters
- 3) Efficacy 3: Modeling integration of chemical, operational & hydrodynamic parameters
- 4) Effects 1: Fate of oil and dispersed oil in the water column & other habitats



5) Effects 2: Realistic Exposure Regimes/Toxicity Testing



6) Effects 3: Integration to improve short & long-term predictions of effects



Forum Agenda

- Thursday:
 - Effects of dispersing oil
 - Fate of dispersing oil
- Friday:
 - Efficacy of dispersing oil
 - Cold-water dispersant use
 - Panel Discussion of ongoing and future dispersant research







Panel Discussion

- 1) Efficacy 1: Chemical parameters (Daling SINTEF)
- 2) Efficacy 2: Operational & hydrodynamic parameters (Hansen USCG)
- 3) Efficacy 3: Modeling integration of chemical, operational & hydrodynamic parameters (Venosa EPA)
- 4) Effects 1: Fate of oil and dispersed oil in the water column & other habitats (Clark API/ExxonMobil)
- 5) Effects 2: Realistic Exposure Regimes/Toxicity Testing (Sowby CA OSPR)
- 6) Effects 3: Integration to improve short & long-term predictions of effects (Scholz NOAA)
- 7) Overview/Summary (Saupe CI RCAC/OSRI and Hollebone - EC)







Next Steps

- Dispersant Working Group meets after Forum
- Determine which research needs have been addressed and what remains to be answered
- Discussions on strategies for future collaborations/research
- All presentations and summary of DWG meeting will be posted at:
 - www.crrc.unh.edu/dwg







Coastal Response Research Center

www.crrc.unh.edu





