Using Consensus Ecological Risk Assessment (CERA) to Evaluate Oil Spill Response Options

Do More Skimmers Equal Better Response?

Mearns, A.J., and Evans, M.B., Emergency Response Division, Office of Response and Restoration, National Oceanic and Atmospheric Administration, Seattle, WA

What is CERA?

- CERA workshop participants learn and practice assessing the relative benefits and impacts of alternative oil spill response actions.
- Participants include resource trustees and stakeholders from local, state, and federal agencies and from NGOs.

Why CERA needed?

- Arguments about response strategies are common during oil spill responses, slowing decision-making. Chemical dispersants are especially contentious. Windows of opportunity can close for some response options, including some changes in local spill response planning; equipment stockpiles are reviewed; revisions to dispersant preapproval agreements.
- Hazard is from brief oil concentrations that decline over time. Effects of such exposures to marine life aren’t well understood.
- Including all stakeholder groups has been challenging. NGOs have been least well represented.
- Consensus is not always achieved.

How CERA works

1. Workshop designers define a realistic oil spill scenario in the area of concern.
2. NOAA uses a computer model to predict the fate of the spilled oil and to forecast potential concentrations of dispersed oil in the water column if dispersants are/are not applied.
3. Working in small groups, participants score the risk to each resource at risk from each response option. To score risk, they estimate the percentage of the population that could be injured, and the expected recovery time. Groups record their justifications for each score. Source experts are available to each group.
4. When groups’ risk scores differ, participants compare rationales for risk scores and discuss whether consensus is in order. Groups may agree to differ.
5. Participants develop recommendations for the Regional Response Team and compile lessons learned.

Why group scores differ:

- “We thought the skimmers would rip up the sea grass beds…”
- “We need to know more about the recovery rate of coral exposed to dispersed oil …”
- “We thought the skimmers would rip up the sea grass beds…”

Issues

- Hazard is from brief oil concentrations that decline over time. Effects of such exposures to marine life aren’t well understood.
- Including all stakeholder groups has been challenging. NGOs have been least well represented.
- Consensus is not always achieved.

Next steps

- 1 - 2 workshops annually around U.S.
- Formal assessment project (“Do CERA workshops facilitate decision-making during spill response and planning?”), and peer review.

References


For more information