

CHARACTERIZING SOCIAL DISRUPTION FROM OIL SPILLS AND SPILL RESPONSE

Thomas Webler, Social and Environmental Research Inst.

Seth Tuler, Social and Environmental Research Inst.

Fabienne Lord-Fonseca, Social and Environmental Research Inst.

KEYWORDS: Oil spills, social impacts, economic impacts, human dimensions, spill response, social vulnerability.

Oil spill response planners never disregard the human dimensions of oil spills. In fact, the National Contingency Plan requires that items of economic and environmental importance that are threatened by a spill be covered in the plan. However, the strength of ecological concerns and the wealth of information on ecological sensitivity tend to be primary drivers in contingency planning. The socioeconomic lags behind the ecological in terms of readily available information and tools to assess sensitivity. Social endpoints that are acutely threatened *are* protected in an emergency response, but the systematic assessment of social and economic effects is not widely done in area-based contingency planning processes.

This project investigates what is involved in bringing a systematic assessment of socioeconomic vulnerability considerations into area-based oil spill contingency planning. Specifically the objectives are to: (1) identify the human dimensions of impacts of spills and spill responses; (2) evaluate the relationships between these effects and the planning and management actions; and (3) characterize the sufficiency of existing data and data-analysis tools to characterize and anticipate causal relationships.

This paper summarizes work done to date on the first and second objectives. Drawing on an extensive literature review of existing case reports and two detailed investigatory case studies of Buzzards Bay, Massachusetts and the Louisiana Gulf Coast area, we present a taxonomy of human dimensions impacts. This taxonomy moves beyond the typical classification of impacts that is customarily done in social impact assessment. Our goal is to propose a technique for organizing impacts associated with the social disruptive effects of spills in a manner that facilitates protective and mitigative actions. Toward this end we link these impacts with factors that shape the vulnerabilities of communities to the stresses associated with spills. We have revised and reformulated a conceptual framework for characterizing vulnerability and we report on the usefulness of this for interpreting how communities' exposures to oil spill hazards can lead to very different outcomes.

The overall objective of the project is to produce recommendations will promote oil spill contingency planning using a perspective that highlights the coupled human and natural systems.

Thomas Webler
Social and Environmental Research Institute

278 Main Street Suite 404
Greenfield MA 01370
twebler@seri-us.org
(413) 773-9955