

## Local Level Stakeholder Coordination and Communications to Support Oil Spill Preparedness and Response

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Effective response to oil spills can be challenging, especially when multiple levels of government are involved. When an oil spill threatens the coast, local officials and communities are concerned about response strategies and potential impacts, which could affect their area. Local government authorities are responsible for addressing concerns of elected officials and other stakeholders at the community level. In the US and UK, a National Response System (NRS) provides oil spill coordination at the national level down to state level. The NRS can be strengthened by improving the capacity to effectively engage at the local level during preparedness. New opportunities to coordinate could improve response management going forward, by leveraging the relationships developed in emergency preparedness among local government, elected officials, and communities. Relationships and dialogue established during preparedness also support crisis communications with the public at large during response through traditional media, the Internet and social media.

Stakeholder engagement is process which can benefit the response organization and those affected by pollution incidents and other emergencies, e.g., storms. Stakeholder engagement and risk communication methodologies are ways to help cultivate realistic expectations and develop consensus about response options, before, during, and after an incident. Coordination and collaboration between the Incident Management Team (IMT) and affected communities can lead to shared objectives and improved information exchange. This is accomplished through traditional media and direct engagement to address emerging risk perceptions, questions, and concerns, especially about issues that spark social conflict, such as dispersant use in the US. Dialogue is necessary to learn about stakeholder and community risk perceptions associated with an incident, to assess the situation in relation to those perceptions, and then develop appropriate responses to their questions, concerns and perceptions.

This paper explores ways to enhance existing NRS processes to improve interactions and communications at the local level during preparedness, and the response and post response phases of an oil spill.

**INTRODUCTION:**

A successful oil spill response today must safely stop the release, recover as much spilled oil possible, manage public expectations, and satisfy leaders in affected communities. The US NRS is an established framework that supports the incident management team's (IMT) focus on

the ‘nuts and bolts’ of the operational requirements for the spill response. The NRS has the capacity to engage with local stakeholders during preparedness through the area planning process. However, as currently practiced, engagement occurs among spill responders at the state level rather than with local leaders or communities; it is an acknowledged gap in the US (Allen, 2010). What remains unclear are ways to satisfy local concerns, using existing processes, and enable the entities in the NRS to carry out a response which will be viewed as successful by affected communities. In this paper, the authors apply a globally relevant engagement standard to oil spill preparedness and response.

**Stakeholder engagement** is a coordination process used by an organization to involve relevant stakeholders for a clear purpose to achieve accepted outcomes. **Stakeholders** are defined as those groups that have a stake/interest/right in an issue or activity, e.g., an oil spill, including those that can be affected either negatively or positively, directly or indirectly, by decisions made about the issue or activity. Oil spill stakeholders are composed of broad groups, some because of decision making and assigned responsibility during response; others have a

**Table 1. Typical Stakeholders for Oil Spill Response.**

<p><b>Formal Authorities</b></p> <ul style="list-style-type: none"> <li>• Unified Command* (Federal On-scene Coordinator, e.g., USCG, USEPA; State On-scene Coordinator(s); Responsible Party/“the spiller”); Affected Local Community; Affected Tribal Nation)</li> <li>• Regional Response Teams (15 Federal agencies and appropriate state and tribal representatives for each state in a Federal region) <ul style="list-style-type: none"> <li>○ For oil spills, State Environmental Coordinators</li> <li>○ For hazmat spills and disasters, State Emergency Managers</li> </ul> </li> <li>• Resource Trustees* (federal, state and tribal), e.g., NOAA, US DOI</li> </ul>	<p><b>Knowledge Sources, Influencers &amp; Opinion Leaders</b></p> <ul style="list-style-type: none"> <li>• Trusted sources of information, e.g., Scientific/Academic Community, Professional Associations, e.g., Association of Public Health Officials, American Medical Association</li> <li>• Elected and Appointed Officials, and their constituents at the local, regional and national levels</li> <li>• Local Emergency Managers</li> <li>• Environmental Groups/NGOs, e.g., National Wildlife Federation (NWF)</li> </ul>
<p><b>Citizens at Large</b></p> <ul style="list-style-type: none"> <li>• Public (local, state, national, international)</li> </ul>	<p><b>Affected Stakeholders, e.g.,</b></p> <ul style="list-style-type: none"> <li>• Marine Resource Users and Industries, e.g., fishing/ seafood, tourism, industrial water users</li> <li>• Affected Community, including property owners in the vicinity of the spill and renewable resource communities, e.g., subsistence and other communities dependent upon renewable resources</li> </ul>
<p><b>Other Spill Stakeholders</b></p> <ul style="list-style-type: none"> <li>• Spill Managers, Operations Specialists and Practitioners</li> <li>• Oil, Gas, Marine Industry</li> </ul>	

stake in the outcomes of those decisions and the consequences of the spill as shown in **Table 1**.

**Engagement** is a form of two-way communications which adds value to preparedness and response because it enables participants to explore issues of concern from their respective perspectives and reach a shared understanding about response objectives and options. When used for collaborative problem solving, engagement can encourage cooperation and support for jointly developed solutions.

Engagement also provides opportunities for preparedness and response organizations to learn about the risk perceptions, questions, concerns, and mental models of stakeholders including communities. Engagement can help build constructive relationships and dialogue about oil spills and response options, such as dispersants (Walker et al, 2013). A **mental model** is an individual's understanding of how something works in the real world. Findings from local stakeholder oil spill workshops in Virginia and Washington state (Walker, 2012; Walker and Bostrom, 2014) show that some local stakeholder mental models omit key elements and may focus unduly on elements that contribute relatively little potential risk.

This paper suggests that the federal government official responsible for oil spills, the Federal On-Scene Coordinator (FOSC), possesses sufficient discretionary authority to lead and expand community engagement with communities in their areas of responsibility (AOR). By expanding current planning, FOSCs and their staff can:

- Help leaders and their communities develop realistic expectations about a response before, during, and after a spill.
- Engage relevant stakeholders to achieve accepted outcomes, e.g., understand and support the full range of response options and clean up strategies in the Area and Regional Contingency Plans; identify socio-economic resources at risk from an oil spill; learn about and plan to mitigate the potential for psychosocial impacts (the interrelationship of social context and psychological health and well-being) and explore appropriate opportunities for volunteers in oil spills.
- Share information and implementing risk communication strategies to address risk perceptions of individuals, community members, and stakeholders that may be affected by an incident or the response efforts. The Centers for Disease Control and Prevention (CDC) is a federal agency with extensive experience in risk communication during emergencies: “good communication to the public is a necessity, not a requirement” and the public needs “information from its leaders and leaders *need support and cooperation from the public.*” (Reynolds et al., 2004).

## **METHODS:**

This paper draws on the recently published guide, *Community Engagement Guidance for Oil and HNS Incidents* that was developed by the authors (Walker et al., 2013) for a European audience. The authors' development of this guide was based upon literature reviews, including:

- Pertinent international, national, and local regulations and standards which govern oil and Hazard and Noxious Substance (HNS) spill preparedness and response in the Atlantic Region of Europe;
- Spill case studies from Europe, the US, and Asia for lessons learned relevant to community engagement topics;
- Good practice guides available from emergency managers and responders, authored by government, industry, and NGOs; and
- Social science research studies which provide rationale for community engagement and insight about how to engage effectively.

The guide was further informed by a survey of more than 40 experienced international responders to obtain their recommendations about engagement communications topics. Finally, the guide adapted an international Stakeholders Engagement Standard (UNEP, 2005) to oil spill preparedness and response. **Figure 1** illustrates the stages of the engagement standard.



**Figure 1. Overview of Effective Stakeholder Engagement Framework**

## DISCUSSION:

Before any spill, Vessel, Facility, or Area Contingency Plans examine spill scenarios, response objectives, and response options. During a spill, the incident command system (ICS) “Planning P” cycle focuses on operational objectives and the management of task-directed resources to implement situation-appropriate response options. During preparedness and

response, competing priorities often pre-empt community and stakeholder engagement at the local level, which can build trust and are critical to success. Effective engagement must occur pre-spill to develop the working relationships and agreements necessary for realizing its value during response.

The Stakeholder Engagement Standard recommends some framing concepts which Area Committees could incorporate to expand engagement with local stakeholders. These include establishing boundaries for information disclosure, and defining the purpose and scope of these additional Area Committee activities. The boundaries of disclosure should specify what information will be shared with its stakeholders and what information stakeholders may or may not share outside the engagement process. Potential boundary options might be:

- Full disclosure including attribution of who said what;
- Full disclosure without attribution of who said what;
- Limited disclosure agreed by participants; and
- Limited disclosure controlled by the owners of engagement.

This aspect of the engagement process needs to be thoughtfully considered in relation to the issue of transparency. Openness and transparency can strengthen people's trust in government and encourages involvement in the process. Understanding about a spill situation evolves as more information and data is gathered. Sensemaking, the process by which people give meaning to experience, is a common activity in organizations (Weick, 1995). During an oil spill, responders continuously evaluate the situation to understand what is going on; the public also engages in sensemaking through social media posting. The boundaries for information disclosure during response are best sorted out, agreed, and documented in contingency plans in advance.

**Table 2** displays some key tasks for advancing community engagement as part of the area planning process, which helps strengthen a successful spill response going forward.

<b>Table 2. How to Build a Community Engagement Framework.</b>	
<b>Tasks</b>	<b>Processes</b>
<b>Frame Community Engagement</b>	Develop a framework for community engagement that is based on cooperation, support, trust, confidence, and realistic expectations
<b>Characterize Successful Stakeholder Engagement</b>	Community trusts, has confidence, expectations are realistic, community leadership and stakeholders are engaged, communications are timely, and reliable information meets their needs.
<b>Learn about Local</b>	Engagement provides the Area Committee during

<b>Stakeholders and Issues</b>	preparedness and the IMT during response opportunities to learn about community and stakeholder needs and expectations.
<b>Manage Risk Perceptions</b>	The communication capacity has been developed to reduce the “gap” between community fears / expectations and what is realistic / possible.
<b>Practice Risk Communication</b>	Engagement with the community and stakeholders based on skilled communication processes, and trust.
<b>Facilitate Community Resilience</b>	Sustained ability of a community to use available resources to respond to, withstand, and recover from adverse situations, like oil spills and natural disasters.

### Frame Community Engagement

For community engagement to be useful and add value, the involved parties need to agree to cooperate and support joint objectives, and the methodology to achieve those objectives. Successful engagement means the response improves as a result of stakeholder participation and that stakeholders have confidence in the NRS. An expanded process will need to be supported and staffed, resources identified, and relationships cultivated before a spill crisis, when people have time to think about perspectives and requirements beyond what is familiar. **Stakeholder mapping** is a specific step in engagement and should involve local emergency management officials who can advise about those who may be interested in oil spills and have resources to contribute. As part of stakeholder mapping, specific attention should be given to anticipating oil spill issues of concern at the local level, and identifying those people and organizations that are trusted and considered credible sources of information. These individuals can become key resource partners and are referred to as “trusted individuals.” Examples of trusted individuals are local academia, physicians, community health workers, NGO representatives, and faith-based organizations.

The US Presidential Policy Directive 8 for National Preparedness (PPD-8, 2011) clearly acknowledges that individual and community preparedness is fundamental to successful response and recovery. Engagement as suggested in this paper is consistent with PDD-8 and supports closer alignment between the NRS and the National Response Framework (NRF). PDD-8 states that the national preparedness goal shall be informed by the risk of specific threats and vulnerabilities—taking into account regional variations—and include concrete, measurable, and prioritized objectives to mitigate that risk. To that end, PDD-8 also reinforces the need to align and integrate the responsibilities of local emergency management with spill response organizations. By expanding the network of those involved in Area Contingency Planning to include all those who could be impacted by an oil spill at the local level, we enable the whole community to contribute to and benefit from national preparedness by collaborative sharing of knowledge and skills.

### Characterize Successful Stakeholder Engagement

What does successful community engagement look like? The authors suggest that

indicators of successful engagement are: 1) the community trusts and has confidence in local authorities and the response organization; 2) community and stakeholder expectations about spill response are realistic and achievable; and 3) community leadership and stakeholders are engaged, communicate and exchange timely and reliable information to meet their needs and the needs of the response organization (**Table 3**).

<b>Table 3. Indicators of successful community engagement (Walker et al, 2013)</b>	
<b>Success Indicator</b>	<b>Implementation Strategies</b>
<p>The community trusts and has confidence in the response organization.</p> <p><b>When to act:</b> Pre-spill planning, then update and refine during response</p>	<ul style="list-style-type: none"> <li>• Leverage existing relationships.</li> <li>• Identify spill stakeholders in the community and define the nature and level of their concerns.</li> <li>• Make a commitment to community engagement for specific, mutually-agreed purposes related to spills.</li> <li>• Together, develop an engagement plan for spill preparedness and response.</li> </ul>
<p>Community and stakeholder expectations about spill response are realistic and achievable.</p> <p><b>When to act:</b> Pre-spill planning, then update, implement, and refine during response</p>	<ul style="list-style-type: none"> <li>• Prepare methods and tools that will help the community understand realistic options available to manage and mitigate the consequences of spills.</li> <li>• Apply risk communication principles to convey limitations and opportunities of available response technologies.</li> <li>• Involve technical representatives with relevant expertise from the local level in preparedness and response decisions.</li> </ul>
<p>Community leadership and stakeholders are engaged, communicate and exchange timely and reliable information that meets the needs of their constituency and the response, which will promote realistic and credible response decision making, facilitate appropriate compensation for damages, and promote recovery.</p> <p><b>When to act:</b> Before, during, and after response</p>	<ul style="list-style-type: none"> <li>• Develop staff skills in the use of strategies, methods, and tools that the Community Liaison Officer and trusted individuals can use to engage the community and meet community needs.</li> <li>• Apply skills during pre-spill planning, training, exercises, and response.</li> <li>• Develop a pre-spill general plan for community engagement activities during response lead by Liaison Officer(s), as a foundation to promote community resilience and recovery.</li> </ul>

### **Learn about Local Stakeholders and Issues**

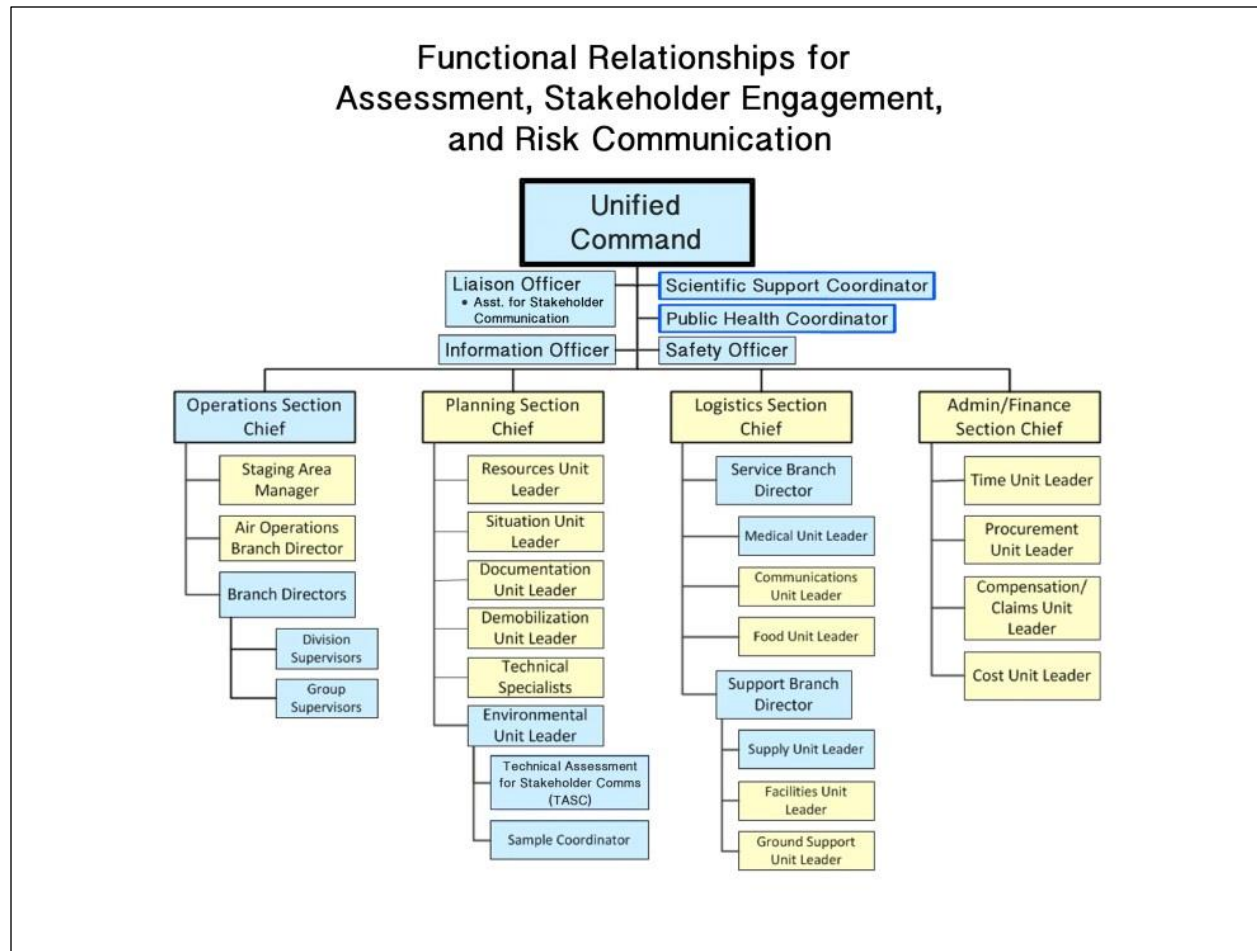
The best time to learn about, and address, oil spill questions, concerns and perceptions of local stakeholders is during preparedness. Even when this is accomplished, incident-specific

concerns will likely arise during a spill and need to be addressed at that time, preferably in a proactive manner. Recent updates to the U.S. Coast Guard Incident Management Handbook (IMH) (USCG, 2013) show additional responsibilities which can be assigned specifically to work with local stakeholders. One of the revised functions of the Liaison Officer is to develop a stakeholder coordination plan.

When needed, an FOSC can appoint an Assistant Liaison Officer (ALOF) to manage local or community stakeholders. The ALOF would then become the response organization's point of contact for affected communities and stakeholders. Multiple ALOFs may need to report to the Liaison Officer when warranted by the geographic scope or volume of stakeholders. The M/V *Rena* oil spill in New Zealand in 2011 implemented an extensive and effective stakeholder engagement program to share information and work with community volunteers.

ALOFs who serve as community liaisons should have pre-incident training and practice coordinating and communicating internally with relevant parts of the response organization, (Scientific Support Coordinators, Environmental Unit, Operations, Safety, and Media and Public Affairs Team) and externally with community representatives, other local stakeholders and their trusted sources of information. Figure 2 is an example of the internal coordination with technical specialists within the response organization, e.g., Scientific Support Coordinators, Environmental Unit, or Operations Section, as highlighted in **Figure 2**, may be necessary to address local stakeholder, questions, concerns and risks about incident-specific conditions.





**Figure 2. Overview of the Internal Communication Necessary within the Response Organization**

### Manage Risk Perceptions

Information to address public perceptions, concerns, and questions about oil spills can be developed in advance for identified topics and those topics which are unfamiliar to non-responders such as the advantages and limitations of the various response options. Suitable fact sheets and information have been prepared in the past and updated since the Deepwater Horizon oil spill by NOAA Emergency Response Division, Regional Response Teams, the American Petroleum Institute (API), and International Tanker Owners Pollution Fund (ITOPF), the Centre of Documentation, Research, and Experimentation on Accidental Water Pollution (CEDRE) and IPIECA, to name a few.

Perceptions, trust and credibility are closely interconnected. The response organization may need to engage with and share information with previously identified trusted individuals in the community, and even invite them to share information with a larger group through their own

networks. These trusted individuals can be valuable partners in addressing perceptions about the spill; establishing respectful working relationships with these individuals should occur during preparedness with agreements reached about activation, potential scope of work, and funding during response. Incident-specific conditions often cause new questions and concerns to emerge.

The response organization has the most current and accurate information about the situation: what is being done to mitigate the situation; potential risks; pollutant behavior; and extent of contamination. In order to be effective in stakeholder engagement, this content and information needs to be shared quickly and regularly through trusted individuals, who maintain established relationships at the local level, to address the affected community's perceptions and concerns real-time.

### **Practice Risk Communication**

Communications shortfalls and areas of improvement identified following the Deepwater Horizon oil spill largely focus on the traditional areas of crisis communications: public affairs and communications technology; and also note the impact of political influence on external communications (National Commission, 2011; USCG, 2011). The role of risk communication and engagement is absent in these recommendations. However, the need for “whole of government” approach for messaging is noted (USCG, 2011), with a recommended solution being through improvements in public affairs and crisis communications. **Risk communication** is interactive exchange of information about risk, which simply, is a threat of loss, real or perceived, of that which is valued.

Risk communication includes actions, words, and other interactions that incorporate and respect the perceptions of the recipients, intended to help people make more informed decisions about threats to their health and safety (Ropeik, 2008). It involves learning about and developing communications to address risk perceptions and consists of an interactive form of external communication with stakeholders and the affected. The use of risk communication methodologies can strengthen communications by listening and responding to affected community perceptions, and especially when trusted and credible relationships have been established.

Traditional mass media solutions should always be implemented since the information reaches the greatest numbers of people, but it needs to be supplemented by engagement at the local level. In the vicinity of the spill, people may have additional questions or question the truth of media messages sent out by those responsible for managing the incident. Former US House of Representative Speaker Tip O'Neill learned from his father that “*All politics is local*” (O'Neill, 1987) which underscores the importance of local stakeholders; their dissatisfaction can undermine progress and the political process at higher levels.

As currently implemented, messaging and outreach is a one-way communication process—the response organization's public affairs, public relations, or crisis communications specialists push out talking points and press releases to traditional media and elected officials. However, this approach has limitations. Relying predominantly on one-way messages for external communications prevents affected stakeholders and community members from engaging

in dialogue around their risk perceptions, questions and concerns. Messages may be succinct and clear but lack the detail that the stakeholders or affected community members need to form their judgments about the risks associated with the incident. Risk perceptions can be identified and addressed directly through engagement activities carried out by the ALOF by indirectly monitoring and posting to social media. Research shows that members of the public can understand technical issues needed to make a well-informed judgment about risks, when appropriate information is developed and shared (Walker, 2014).

The key to risk communication success for traditional media is anticipation, preparation, and practice. Many questions can be anticipated and answers crafted and tested in advance; this practice is recommended. Through engagement, the response organization has the means to listen and learn about local level perceptions and concerns and then provide information to address those questions, concerns and perceptions. Risk communication principles can be applied during preparedness and response. Effective risk communication provides timely, accurate, clear, objective, consistent and complete risk information. The primary objectives of effective risk communication (Covello, 2003) include:

- Building, strengthening, or repairing trust;
- Educating and informing about the risks in the emergency;
- Building consensus or encouraging dialogue about appropriate actions for the incident;
- Raising community awareness of plans for responding to the emergency;
- Disseminating educational information on actions to be taken before, during and after the emergency; and
- Encouraging the affected community to take appropriate actions during and after the emergency.

### **Facilitate Community Resilience**

Engagement is a way to build capacity for resilience in communities, especially following disasters and oil spills that impact renewable resource communities, e.g., dependent upon fishing, and tourism. **Resilience** refers to the ability to withstand and adapt to changing conditions; it can speed recovery from disruption due to emergencies that are beyond citizen control and managed by external entities, e.g., the Federal government and Responsible Parties. Resilience happens when communities unite in order to help themselves cope by drawing on their local capabilities and knowledge to help others and mitigate the situation. Community resilience occurs when individuals are able to harness resources and expertise after an emergency in ways that complement and reinforce the response. The US has learned this lesson in the last decade after significant hurricane events. Such experience demonstrated that those affected want to and can help one another—and communities are teaching others. The progress after 2012 Hurricane Sandy to come together, recover more quickly when they to help themselves, and rebuild is a good example of community resilience. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121-5207) provides for community resilience; it was designed to allow decision making and resource management to take place at the local level. Another the US example of community resilience is the FEMA Community Emergency Response Team (CERT) program which educates people about disaster preparedness for hazards

that may impact their local area, trains them in basic disaster response skills, and activates CERTs when needed. CERT members have assisted others in their neighborhood or workplace following an event when professional responders are not immediately available to help; the CERT actions promote resilience.

The NRS is a top-down management organization and promotes neither local level coordination nor community resilience as currently practiced. Implementing broader engagement at the local level in the area planning process, and during response, adapts the existing framework to promote resilience and speed recovery from significant oil spills.

## **CONCLUSIONS:**

A response to an oil spill emergency requires the FOSC to successfully manage more than just stopping the release and cleaning up the spill. The capacities of the IMT to engage with affected communities and stakeholders before and during an oil spill to also meet their needs, is another measure of a successful response.

International engagement standards, handbooks, and manuals can guide entities involved in oil spill preparedness and response to learn, adapt, and manage the process better by planning for community and stakeholder engagement. Progressive international response organizations are increasingly aware of the interconnections between environment, social, and economic issues and that they cannot act alone to find solutions.

Fundamental to this notion, leaders in incident response should recognize that to be effective, engaging communities and stakeholders must be elevated from a reactive risk-management effort during the response to a proactive and engrained element of their strategic planning. This includes demonstrating a commitment to develop an active stakeholder engagement process in their strategic planning by building on collaboration with their communities.

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