

**Written testimony of Dennis Takahashi-Kelso, PhD
United States House of Representatives
Committee on Natural Resources
Subcommittee on Insular Affairs, Oceans and Wildlife**

June 24, 2010

Good morning, and thank you for the invitation to participate in this hearing. My name is Dennis Takahashi-Kelso, and I am the Executive Vice President of Ocean Conservancy. My career includes diverse roles in natural resources management and environmental protection over several decades, much of it in Alaska. As Alaska Commissioner of Environmental Conservation when the tanker *Exxon Valdez* ran aground, I was the governor's cabinet officer responsible for enforcing the state's oil spill clean-up standards. For two years, I worked on the spill and its aftermath, including policy reform, in both the Alaska Legislature and in Congress.

What we are currently witnessing in the Gulf is a human and environmental tragedy. I would like to thank your subcommittee, Chairwoman Bordallo, for the important work you are undertaking in response to the BP *Deepwater Horizon* disaster. The hearings you are convening, and the legislative responses you are considering, are a vital part of ensuring that a disaster of this magnitude is never repeated.

This subcommittee has requested testimony on coastal state planning for offshore energy development and whether current planning efforts are adequate to ensure an effective, coordinated spill response. In particular, you requested consideration of whether planning efforts are adequate for large, complex spills, such as the BP *Deepwater Horizon* disaster; whether these planning efforts are sufficiently well-coordinated among governmental agencies and levels; and what resources might improve oil spill planning, logistics, response, and recovery.

In addressing those questions, I will first discuss my own experience in Alaska during and after the *Exxon Valdez* spill and review some of the lessons learned from that disaster. The *Exxon Valdez* spill underscored that it is essential for states to ensure adequate planning for spill response, and I will discuss ways in which this planning and response process can be improved. Finally, the BP *Deepwater Horizon* disaster has made it even clearer that prevention is absolutely critical. I will explain how the current ground rules governing oil and gas development need comprehensive reassessment and revision, within a context of improved ocean governance, and how those changes would improve the ability of states to reduce the risks of major oil spills and ensure better response preparedness.

Lessons learned from *Exxon Valdez*

When the *Exxon Valdez* grounded and ripped open in Alaska's Prince William Sound, it spilled 11 million gallons of crude oil, about 20 percent of the tanker's cargo. As a precondition of shipping oil from the Valdez Marine Terminal, state law required a site-specific oil spill "contingency plan," and Exxon's approved plan addressed a hypothetical event that turned out to be of the same order of magnitude as the actual spill. The plan laid out the response capacity

required of the shipper along with detailed maps, as well as other specific information drawn from fishermen and other local experts. When the spill occurred, however, Exxon's designated spill response agent, Alyeska Pipeline Service Company, did not carry out the actions described in the response plan. After about 24 hours, Exxon mobilized its own spill response, but without many of the site-specific features and other requirements of the state-approved plan. Under the applicable law—prior to passage by Congress of the Oil Pollution Act of 1990—the spiller had the right to maintain control over the spill response and the US Coast Guard had only limited authority to displace the company's control. Because the spill was in waters subject to federal jurisdiction, the state was not in a position to direct Exxon to implement the requirements of the approved plan. When Exxon had difficulty carrying out an effective response during the first several days of the spill, state agency staff, fishermen, and other local volunteers, mobilized our own spill response that targeted high priority areas identified by the approved oil spill contingency plan.

Ultimately, the spill oiled at least parts of more than 1200 miles of shoreline—roughly equivalent to the distance from Massachusetts to North Carolina—and resulted in closures of salmon and herring fisheries, as well as economic losses to the tourism industry and other severe community impacts. Although most intensive during the first summer after the accident, the spill response extended over three years; and the damage assessment and restoration efforts continued for several more years. Now, 21 years later, recovery is well underway but not yet complete.

Lessons learned from *Exxon Valdez* include:

- **Prevention must be paramount.** Once a large amount of oil is in the water, damage is inevitable and removal of the spilled oil is difficult. Consequently, prevention must be our top priority. To achieve prevention, statutory and regulatory standards must be high, application and enforcement of those standards by government agencies must be diligent, and incentives must be aligned with prevention. In the case of oil transport, states have some, but limited, authority; the primary responsibility lies with the US Coast Guard. The Oil Pollution Act of 1990 made substantial improvements in some prevention measures, such as requirements for double-hulled tankers. While tankers still pose a sizable threat, we need to ensure oil spill response plans and states can both address current threats and adapt as new technologies and techniques pose different challenges and risks.
- **In a major spill, the spiller should not be in control of the response.** At the time of the *Exxon Valdez* spill, the spiller had the legal right to direct and maintain control of the spill response. As a result, Exxon could simply substitute its judgment for that of government officials who had first-hand knowledge of local conditions; there was no effective recourse under the law as it then existed. The federal Oil Pollution Act of 1990 improved the situation by enabling the government to federalize spill response efforts, direct the responsible party's spill response efforts, or merely monitor the responsible party's spill response efforts.
- **The Natural Resource Damage Assessment and Restoration phases are crucial.** The assessment of natural resources damage and associated injuries as articulated by the Oil Pollution Act of 1990 is not only a key element in establishing the spiller's liability, but

also in laying ground for long-term restoration. In the *Exxon Valdez* spill, little baseline information existed on which to assess damages. Even in the Gulf of Mexico, the baseline is limited. It is essential that studies begin immediately, even as the emergency response is proceeding, in order to provide that key foundation for a full assessment of injuries. The spiller should pay all costs of the Natural Resource Damage Assessment, including the costs of gathering and synthesizing baseline data; and it should not fall upon the government agencies to “front” those costs from their budgets, even if the expenditures are later reimbursed. Restoration efforts will necessarily take years, and monitoring should be ongoing for decades.

Policy changes following the *Exxon Valdez* spill

The *Exxon Valdez* spill spurred changes in both state and federal legislation governing oil spill prevention, preparedness, and response as they began to address some of the lessons learned from the spill. During the year following the *Exxon Valdez* spill, the Alaska Legislature began to strengthen the requirements for oil spill contingency planning. In many ways, the new legislation was a model of how a state can protect its citizens through better spill response preparedness. These changes substantially increased minimum response capacity, required equipment to be available on-site or in nearby equipment depots, called for training of local response teams, increased the size of the oil and hazardous substance response fund, and made other significant improvements. The situation in Alaska illustrates how important it is to have a stable triangle of protection: state response and preparedness standards; federal regulation of activities beyond state jurisdiction, for prevention and response; and strong watchdog functions carried out by residents who know the area and are exposed to the risks. In this way, the affected public and the ocean ecosystems on which communities depend are more likely to be protected than if they rely solely on state or federal authorities.

The most important federal legislative change was passage of the Oil Pollution Act of 1990 (OPA 90), which introduced several critical reforms, including technical standards, improved response planning, funding for research and development, and liability and compensation requirements. Under OPA 90’s amendments to the Clean Water Act, the federal government may respond to a spill event by “federalizing” the spill and engaging directly in the cleanup, monitoring the responsible party’s cleanup efforts, or directing the responsible party in implementation of the response. 33 U.S.C. §1321(c)(1)(B). These changes have made it more likely that the relevant contingency plans would be properly carried out during a major spill. The state’s role is limited, however, because the federal government retains authority to decide when cleanup is complete.

OPA 90 also expanded the role and breadth of the National Contingency Plan (NCP) and linked the NCP to area and regional plans—a multi-layered planning and response system intended to improve spill preparedness and response effectiveness by combining the site-specificity of plans formulated by Area Committees and states with the consistency of the NCP and regional plans. OPA 90 also includes a requirement for establishing procedures and standards for responding to worst case oil spill scenarios. 33 U.S.C. § 1321(d)(2)(J).

While OPA 90 made several significant improvements and addressed critical gaps in spill response plans, it did not resolve all the issues related to exploration and development of oil and gas resources, nor to planning for, response to, and remediation of spills. Three problems undercut the effectiveness of this approach. First, the adequacy of planning efforts and other legal requirements depends substantially on the ability to mobilize and sustain an emergency response. That is, the nested plans in the NCP array, no matter how thoughtfully conceived, can be effective only if equipment and personnel are deployed immediately in response. The actual location of these resources, not the contractual arrangements to get them, is crucial and may be a weak link. Second, a “worst case” is often difficult to pursue when the key government agency—Minerals Management Service, in the case of offshore drilling—insists that the risk is “insignificant.” In another example, Exxon resisted Alaska’s efforts to require contingency plan scenarios for spills in excess of 100,000 barrels; the company said that such a scenario was unnecessary because its modeling indicated that a spill of that magnitude would happen only once in 241 years. The *Exxon Valdez* spill exceeded 250,000 barrels. Achieving a meaningful “worst case” spill planning scenario will always be difficult, and planning only for less severe spills will leave residual risk that is not addressed. Third, for a state to be effective, it needs to have the capacity to enforce its plan and participate simultaneously in the Natural Resources Damage Assessment, which must start almost as soon as the emergency response begins. This level of engagement, immediate and long-term, is both expensive and technically demanding. Few states have the staffing and technical support to sustain it without external funding and other resources.

In the intervening decades, as both the complacency of the public and the political influence of the oil and gas industry have grown, these standards have been repealed or severely weakened. There are a number of areas in which OPA 90 can and should be improved in order to help coastal states address potential impacts of oil spills on their shores.

Oil spill response plans must address spill events of very large size, must be site-specific, and must be tailored to local conditions. The federal government should provide both funding and logistical assistance to states to ensure their plans include improved baseline data to better understand potential impacts, a clearer role for public review and better standards to ensure response plans can be fully executed in the event of a spill.

Improved baseline data

Increased funding for science and response efforts is needed for states to fully understand the potential impacts on the local ecosystem from a large-scale spill and how best to respond to a spill given these ecological conditions. Baseline scientific data are critical to ensure that the response and clean up are appropriate, and are also an important foundation for a Natural Resource Damage Assessment. This information can and should guide the type of response efforts the states should require in clean up plans. Annual funding is needed to support a comprehensive program of research, monitoring, and documentation of local and traditional knowledge. That work would assess and monitor populations of principal species in the ecosystem and the biological and physical factors that affect their abundance and distribution; construct and maintain an updated quantitative food web model; identify sensitive species and

important ecological areas; and enhance understanding of temporal and spatial variability within ecosystems.

It may be possible to provide funding to fill these needs with minor changes to OPA 90, 33 U.S.C. §2701, *et seq.* OPA 90 authorizes certain uses of the Oil Spill Liability Trust Fund, which holds revenue from a per-barrel tax on oil production. 33 U.S.C. § 2712. With minor changes, OPA 90 could provide funds to the National Oceanic and Atmospheric Administration (NOAA) and U.S. Fish and Wildlife Service or other agencies to conduct the necessary science and to the US Coast Guard to identify and implement the necessary precautions. It is important to provide the public with access to data and other information. Congress should guarantee public access to information gathered after a spill and as part of the research and planning process.

Strong Standards for Response

In the case of the *Exxon Valdez* spill, unlike the BP *Deepwater Horizon* disaster, the size of the maximum possible spill was clear: it could not exceed the total cargo carried by the vessel. As a result, planning for a “worst case” spill was more straightforward. Although a site-specific plan—as required by state law—was pre-approved and in place, the failure to carry out the plan resulted in the loss of valuable time and a less effective response. In order to be deployed quickly, equipment and personnel must be either pre-positioned near potential spill sites or quickly mobilized from nearby locations that actually have those resources on site. Spill response plans, of which Exxon’s plan is an example, rely upon contracts with spill response companies or regional consortia. Delays in mobilization of an effective spill response may result from the lack of actual capacity in the area of the spill. To be effective in an emergency, response capability must be mobilized immediately, and if the response plan calls for contractors to provide the equipment and workers for the response, actual capacity needs to be demonstrated ahead of time. Equipment must be based in the near vicinity of potential accidents, and trained teams of responders must be available in-region to operate the equipment in accordance with the pre-approved plan.

We need to ensure that companies have considered the worst case scenario and have the resources and infrastructure to fully execute their response plans. The plans may be very good, but they are blueprints for response, not actual spill response capacity. Plans must link with other providers of response equipment and personnel. The amount of equipment and its location is crucial to whether the plans can actually make a difference if a spill actually occurs.

Public Review and Participation

In addition, spill response plans, as part of exploration or development plans, are intended to be available for public review—a key way in which affected communities can participate in the decisions about risks that affect them. States should develop a specific process to ensure the public has access and input to the plan. Exploration and development plans are generally approved “conditionally,” pending development of a spill response plan subsequent to the approval. There is no specific public review process for the plan. Consideration should be given to developing such a process, or, more broadly, to avoiding conditional approvals. Any public process around spill response plans should also require that MMS respond to public comments,

questions, and input specifically, rather than simply issuing an approval with standard, vague language stating that the agency concluded the plan met statutory and regulatory requirements.

Lastly, the federal government should establish Regional Citizens' Advisory Councils (RCAC) for regions that could be impacted by oil spills. One area of OPA 90 that has proven to be particularly useful is the establishment of RCACs specifically for terminal and tanker oversight and monitoring in Alaska. Essentially, RCACs offer the opportunity for local residents to perform a watchdog, research, and monitoring function. Duties of the RCACs include providing advice and recommendations on policies, permits, and regulations; monitoring environmental impacts and operations and maintenance of facilities; and reviewing adequacy of spill prevention and contingency plans. The RCACs are also allowed to review scientific research and to conduct their own studies. According to Boston College Law Professor Zygmunt Plater, an expert in oil and gas regulatory policy, the original OPA 90 language proposed RCACs for areas of oil and gas development outside of Alaska, but this language was removed from the bill due to political pressure from the oil and gas industry (National Public Radio interview, June 17, 2010). Establishing one or more RCACs in the Gulf of Mexico could help Gulf states and local communities maintain ongoing oversight of oil and gas operations in the Gulf. It would be important to ensure that the membership of RCAC included persons who in a position to play a watchdog role.

Policy Reforms to Focus on Prevention and Minimization of Risk

As we saw with the *Exxon Valdez*, where no more than 10 percent of the spilled oil was actually cleaned up—and as we are now seeing with the tragedy in the Gulf—prevention is far more effective than is response. The BP *Deepwater Horizon* disaster demonstrates vividly that our nation's approach to oil and gas activities on the Outer Continental Shelf (OCS) is fundamentally flawed. In the case of oil and gas drilling, the primary government authority lies with the Minerals Management Service (MMS); and substantial changes to federal laws are needed to establish new standards for its decisions. The standards and procedures applicable to these government agencies must define effective roles for the states to play in preventing spills. Beyond changes to OPA 90, other regulatory reforms are needed to prevent or address disasters like the BP *Deepwater Horizon* blowout. The federal agency responsible for oil and gas activities on the OCS, the Department of the Interior's MMS, has proved incapable of effective planning, regulation, and oversight. Federal statutes governing oil and gas activities on the OCS do too little to ensure that coastal and ocean ecosystems—including living coastal and marine resources and habitats—receive adequate protection. As Congress acts to develop a legislative response to the events of this disaster, we urge you to act on the following five priorities to reform OCS legislation.

- **Reform the Outer Continental Shelf Lands Act (OCSLA) by adding substantive standards to adequately protect ocean health and coastal economies.** In planning and administering OCS oil and gas activities, existing law requires MMS to balance oil and gas development with protection of human, marine, and coastal environments. In practice, however, MMS prioritizes resource extraction, often at the expense of these

other concerns, as demonstrated by the current spill. Congress should change the statute's mission to place a greater emphasis on protecting ocean health. OCSLA should allow oil and gas activities only when it is proven such activities pose minimal environmental risk. In addition, Congress should add substantive standards to OCSLA to ensure protection. For example, before an area is opened to oil and gas leasing, there must be a threshold level of baseline science to inform decision-making. Similarly, OCS planning efforts must identify and protect important ecological areas to minimize the potential for environmental harm. Congress should prohibit the sale of oil and gas leases in an area unless and until operators have demonstrated their ability to respond effectively to an oil spill in real-world conditions in that area. Congress should also impose more rigorous standards to ensure that OCS facilities are equipped with the best available technology and safety equipment.

- **Fix the planning and leasing process to ensure robust environmental review, enhance transparency, and allow for community input.** MMS must no longer be allowed to use the segmented nature of the OCSLA process to avoid rigorous analysis under the National Environmental Policy Act (NEPA) and other laws. OCSLA should be amended to impose specific requirements for environmental analysis at each stage in the process and require full, site-specific analyses of exploration and production as early as possible. Planning and leasing activities for oil and gas development need to proceed at scales that allow for meaningful environmental review with ample opportunity for community input and inclusion of local and traditional knowledge. Congress should require five-year leasing programs to be more precise in identifying the portions of planning areas that will be open to oil and gas leasing by, for example, placing an upper limit on the percentage of a planning area that may be included in any one five-year leasing program. Alternatively, Congress could require MMS to focus individual lease sales on specific lease tracts, rather than offering enormous portions of planning areas. In order to facilitate more rigorous NEPA analysis, Congress should also eliminate the 30-day deadline under which MMS must approve a “submitted” exploration plan. Furthermore, natural resource and environmental agencies should have a greater role in providing baseline science and influencing decision-making about oil and gas activities off our coasts. In particular, NOAA and Interior agencies, such as the US Fish and Wildlife Service, should play key roles in deciding which areas will be available for leasing, and in preparing environmental analyses in support of oil and gas leasing decisions.
- **Restructure the agency responsibilities for oil and gas planning, leasing, and oversight.** MMS lacks the expertise and institutional interest in broad ocean issues and has proven to be unable to assess objectively and accurately the potential risks of OCS drilling. Restructuring MMS should fully address conflicts between the revenue generating, planning, and environmental and safety enforcement responsibilities of the agency. In addition, expert agencies beyond MMS, such as NOAA and the US Fish and Wildlife Service, should have a much greater role in decisions about OCS oil and gas activities and preparation of environmental analyses surrounding them.
- **Hold oil companies and other responsible parties accountable for paying for clean up and damages associated with oil spills.** The current \$75 million cap on liability

should be removed in order to hold companies like BP responsible for their actions and ensure that oil companies, not taxpayers, are forced to clean up after their mistakes.

- **Direct funding from oil and gas activities to protect and restore ocean and coastal resources, increase our ocean knowledge, and develop our capacity to respond to and recover from oil spills.** Oil companies make billions of dollars while putting our ocean ecosystems and coastal economies at risk. A portion of the revenue from these activities should be permanently available to protect, restore, and maintain our ocean and coastal resources and be provided in such a way that it does not incentivize new drilling activity. In addition, as efforts over the last two months have demonstrated, our ability to respond to oil spills and reduce environmental harm is limited by the state of our ocean and coastal science and technology. Additional resources should be provided to better understand our coastal and marine environment and improve our ability to safely and sustainably operate there. Last year this committee held hearings on H.R. 3534 the Consolidated Land, Energy, and Aquatic Resources Act of 2009, which would establish an Ocean Resources Conservation and Assistance Fund. We strongly support the establishment of this type of permanent funding for ocean conservation, science, and planning.

The Bigger Picture: Healthy Oceans Matter

More broadly, this disaster is only the most dramatic example of the threats facing our ocean. Habitat destruction, ocean acidification, marine debris and coastal runoff are among the many threats to the health of ocean ecosystems. The tragedy in the Gulf of Mexico highlights poignantly why healthy oceans matter – not only for fish and marine wildlife, but for coastal economies that rely on healthy fisheries and clean beaches. In addition to enacting specific reforms to the statutes that govern oil and gas development, we must reform our overall approach to managing our oceans.

In part, the threatened state of our ocean is due to the sector-by-sector management of diverse uses. Sector-by-sector management has led to serious conflicts among users. In the case of the *Deepwater Horizon* disaster, a single-minded focus on natural resource extraction with only cursory consideration of potential impacts to ecosystem health or other ocean uses created conditions in which safety, environmental reviews, preparation, safeguards, monitoring and oversight, and response capabilities were all inadequate.

We rely on our ocean and coasts to provide much more than just oil and gas. Decision-making based on a detailed review of only one sector, or only one use, is insufficient. As we increasingly look to our oceans to provide food, energy, transportation, and recreation, we need better coordination and a more complete approach to planning and risk management. We also need to prioritize ecosystem health, because we cannot afford to lose the critical ecosystem services that only healthy ecosystems provide. Many of these recommendations are incorporated in the presidentially established Interagency Ocean Policy Task Force's (IOPTF) draft recommendations on National Ocean Policy (NOP) and coastal and marine spatial planning (CMSP).

A strong NOP that implements ecosystem-based management and establishes protection, maintenance, and restoration of ocean and coastal ecosystems as the foundation for federal management—if mandatory and properly implemented—would protect ocean wildlife and habitat from harmful development, reduce impacts on sensitive and special areas, and help to build ecosystem resilience. It would also help balance resource extraction and ecosystem protection, ensuring careful consideration of the potential impacts of oil and gas activities on the marine and coastal environment, other ocean uses, and ecosystem health and resilience. Protecting important ecological areas and limiting hazardous activities would safeguard wildlife populations, promote healthier estuaries and watersheds, and reduce the likelihood and cumulative impacts of catastrophes like the disaster in the Gulf of Mexico.

Coastal and marine spatial planning, used to implement a strong NOP, could provide several key benefits that could prevent the conditions that led to the BP *Deepwater Horizon* disaster. CMSP would facilitate interagency coordination and decision-making and would allow other expert agencies to have increased input on, or authority over, decisions about oil and gas activities. This process would result in a foundation of baseline scientific data that facilitates science-based management, help identify future use or management problems, and promote smarter, more sustainable uses. Implementation of the IOPTF recommendations would also provide for increased public input into decision-making, including from local communities, other ocean users, and non-governmental organizations.

Additionally, having in place a multi-objective plan and an established agreement on management goals can help when emergencies such as oil disasters or hurricanes occur. Preparing for and working to prevent impacts from extreme weather events, commercial use and development, or industrial disasters is an integral part of CMSP. Better oversight and enforcement can help prevent disasters; better planning, preparation, and coordination can help minimize the impacts of those that do occur. While a national ocean policy using CMSP has not yet been finalized, Congress can craft new legislation or amend existing statutes in ways that would both set the stage for and align with CMSP processes.

While none of these changes could guarantee that we will never have another oil spill disaster, taken together they could ensure that we will not have one of this magnitude and complexity before we have fully understood and accounted for the risks involved.