U.S. Coral Reef Task Force Meetings Seventeenth Meeting Washington D.C. February 28 - March 2, 2007

Key Note Address Deputy Secretary Lynn Scarlett, The Department of the Interior

Good afternoon! On behalf of Secretary Kempthorne, I am delighted to welcome you. As we gather here, Secretary Kempthorne is traversing half the globe with the First Lady. What is his destination? He is on his way to Midway Atoll, our National Wildlife Refuge amid the newly designated Northwest Hawaiian Islands Marine National Monument—now named the Papahanaumokuakea Marine National Monument.

Many of us know the monument by its statistics. The monument extends across 140,000 square miles of ocean expanse and atolls. It provides nesting terrain for the world's largest breeding population of Laysan Albatross, with nearly a half million nesting pairs carpeting the atoll. Black-footed Albatross, 13 other resident seabird populations, and, undersea, magnificent coral reefs all bring this island and marine ecosystem alive.

But these statistics simply cannot capture the wonders of this ecosystem. Last week, I sat with the First Lady at a slide show presented by Susan Middleton, photographer for the book "Archipelago." We watched photographic rainbows of turquoise, fuschia, crimson, and gold. We saw sea critters of unimaginably intricate shapes etched with wonderfully intricate designs and patterns. And we saw coral—an artist's palette of colors and medley of shapes and sizes.

As we contemplate coral reefs, we all readily appreciate their beauty. Yet coral reefs are significant even beyond their exotic and aesthetic intrigue. Coral reefs matter—for the rich ecosystems they offer. They matter, too, for the economic benefits they confer to human settlements. Coral reefs comprise just two-tenths percent of the world's ocean. Yet they nurture one-third of all marine fish species.

They are living systems of the world's tropical marine diversity. In southeastern Florida alone, their recreational benefits are tallied at over \$4 billion. In the Caribbean, the economic value of coral reef tourism is nearly \$9 billion. Along coastlines, they protect shorelines from erosion and wave damage.

Coral reefs matter—and they are in trouble.

Coral disease and bleaching, extraction, damage from vessel groundings, the effects of land runoff and pollution all combine to touch these dynamic, fragile, and unique ecosystems. The Interior Department's responsibilities stretch beyond land to embrace some of these wonders of nature.

We manage some 3.7 million acres of coral reef ecosystems. With NOAA and the State of Hawaii, we manage the Northwest Hawaiian Islands Marine National Monument—and some 89 million acres of coral reefs. We help build the foundations of scientific knowledge about coral reefs—at the Virgin Islands National Park and Buck Island National Monument—or through fishery surveys at the S. Florida national parks and Dry Tortugas.

We study the adaptations of coral reefs to climate change; or the effects of African and Asian dust to explore relationships between pathogens in dust and degradation of coral reef ecosystems.

Overall, Interior's annual appropriated budget is just under \$11 billion. Of that, some \$900 million is associated with oceans and coasts.

Like our land-based ecosystems, coral reefs are complex. They are dynamic. They interconnect with the ebbs and flows of the human and natural worlds around them.

As you gather today—and at subsequent meetings of the Coral Reef Task Force—you will refine science agendas. You will share information. You will set conservation priorities.

Amid these conversations, we face a larger set of questions about how best to structure human action so that we may set goals, invest resources, coordinate activities, and—govern. There is a temptation—faced with a "problem"—to think its solution demands a new agency, or a single, unifying program, or a single "person in charge" to plan its resolution.

The US Coral Reef Task Force adopted a different approach in its "Puerto Rico Resolution". Through that resolution, we have a series of 3-year Local Action Strategies generated by each of the 7-member US States, Territories, and commonwealths. The Action Strategies offer the virtues of nimbleness and adaptation to local priorities and circumstances combined with the benefits of coordination through shared priorities and collaboration.

The Action Strategies share common themes and tools. All emphasize "results"—through performance indicators and monitoring. We cannot chart a course, unless we know where we are trying to go. The Action Strategies set those goals. Performance indicators provide that roadmap.

The action plans offer focus for near-term actions. Yet our coral reefs face overarching challenges that extend beyond particular locations and reach into the future. De-calcification, possibly associated with increased carbon dioxide; coral bleaching; pathogens carried in dust; marine debris; unsustainable fishing practices—these challenges transcend the reach of individual jurisdictions. They transcend, even, the oceans and extend to practices on land.

Let me mention two governance challenges, in particular.

First, some of the problems we face reflect the outcomes of what Garret Hardin called the "tragedy of the commons". These problems illustrate the outcomes of accessing common pool resources in which all have a motivation to consume the resource—and no one has an internalized motivation to conserve.

We have strived—here and around the globe—to set catch limits on fish or regulate equipment or limit the size of boats or shrink the fishing season. Yet success eludes us—unintended consequences emerge as catch limits result in introduction of larger boats; or season limits result in a crowded surge of activity.

A second challenge results from our focus on problems site by site, or fish by fish. Nature itself knows no boundaries. As author and scholar Barry Commoner noted, all things are interconnected.

In the context of these two challenges, as we "search for solutions", perhaps we might broaden our horizons and extend our portfolio of options. Let me mention two sets of options that we might more seriously consider. I offer these—not to articulate an Administration policy—but as food for thought as we deliberate management of coral reefs and, more broadly, marine and coastal resources.

First are those that apply "rights" and "ownership" concepts to ocean resources. Some coral reefs in the South Pacific have experienced destructive fishing practices in the past. For example, author Michael De Alessi recounts the use of dynamite or, even, cyanide

Yet biologist Robert Johannes has found examples of "village ownership" or "village management" of coral reefs—in which community management extends from beach to reef's edge and coral reef protections are robust. These ownership clusters include secure tenure—and, with that tenure, corresponding reef and fisheries protections. Some of these communities have "fish wardens" to oversee reefs.

Are there lessons to be learned from these traditional community ownership models?

Perhaps many gathered think of economic policy models as the adoption of costbenefit analysis. Yet, at its foundations, economics is about institutional arrangements and how they affect incentives and align responsibilities.

Experiments in individual tradable fishing quotas in New Zealand or similar concepts now used for some species in Alaska draw from an understanding of "the tragedy of the commons". They project institutional models to better align resource access with long-term incentives for self-propelled conservation. These models are, often, controversial. Yet they merit a more dispassionate evaluation. They help us apply lessons from the institutional underpinnings of markets to conservation.

But let me turn to a second set of options—also institutional in focus. If Nature knows no boundaries, finding ways to achieve more integrated decision making becomes imperative. Yet an institutional challenge is how to preserve the virtues of decentralized nimbleness and location-specific relevance, while enhancing—at the same time—coordination and integration of decisions.

As communities seek to combine these two virtues in new institutional arrangements, we are seeing the emergence of what some refer to as "shared governance".

Consider the Northwestern Straits Marine Conservation Initiative. The Initiative encompasses a rich and productive marine area stretching from the Strait of Juan de Fuca and northern Puget Sound to the Canadian border. The initiative encompasses 7 counties and numerous communities and tribes. Participants created a Commission that sets performance goals—for marine restoration, scientific research, removal of derelict and abandoned equipment, and other endeavors. The Commission sets goals—then identifies actions in pursuit of those goals and monitors results. The initiative is a model of shared governance, co-management, and cooperative conservation in which the whole is greater than the sum of its parts.

Also in the American West, we see a similar model in the Pacific Coast Joint Venture. The Joint Venture includes public and private partners who coordinate and cooperate to identify, protect, restore and enhance critical near-shore, intertidal and estuarine habitats in coastal British Columbia, Washington, Oregon, and northern California.

Many efforts are underway to coordinate conservation—on land and at sea. These efforts vary in form but all address 5 issues:

- o How ought we to better define access rights to marine resources?
- o How might we involve user groups in decision making?
- o How ought we to determine which groups are represented?
- o How should we delineate the scope and scale of management efforts?
- o How can we coordinate management across jurisdictional boundaries?

I extend this brief overview not as a set of prescriptions for policy but as institutional models for contemplation. In Africa, for example, there exists an International Center for Living Aquatic Resources Management. In Asia, there is an Institute for Fisheries Management and Coastal Community Development. These institutions embarked on co-management projects—projects in which local communities that use marine resources partner with public agencies, universities and conservation organizations to manage and conserve marine resources—with a community-centered focus. These models often combine economic, environmental, and social goals. Cognizant of Hardin's "tragedy of the commons", they often better delineate rights and responsibilities.

Might these institutions serve as a fulcrum for addressing broader, interconnected issues such as "dust"? If so, how?

I offer these observations because a glimpse at many coral reef challenges—marine debris, unsustainable fishing, sediment loadings from land runoff—suggest that they result from the highly dispersed actions of many, not the focused actions of a few. The nature of these challenges suggest that institutional engagements that draw folks in locally and directly engage them in problem solving will likely outperform agency commands from—say—Washington.

I am deliberately provocative today because the extent of challenges demands that we extend our imagination to different models. I know you have other ideas before you—for example, a concept on carbon sequestration.

Interior is already partnering on carbon sequestration—through our Fish and Wildlife Service, we have worked with private partners to plant some 80,000 acres of trees for carbon sequestration and other conservation benefits. We are working in partnership with electric utilities—especially in the southeast.

Yet as you discuss carbon sequestration, I want to underscore that not just any carbon sequestration program will do. A focus simply on metrics that calculate the rate of sequestration and reward high rates of sequestration could drive poor decision making—the planting of fast-growing species like melaleuca, for example.

As we contemplate these concepts, we need to situate them within a broader conservation and land management context. We need to consider biodiversity and enhanced conservation values—not merely sequestration.

This discussion highlights a common feature of the world around us—that of complexity. Those gathered share a commitment to maintaining thriving communities. Those gathered also share a commitment to conservation.

It is fitting, therefore, to come full circle back to my starting point today and remind us of the exquisite undersea world of coral reefs. I remember the first time I ever snorkeled. Above water, I saw only the dark gloss of the ocean surface. When I ducked my mask beneath the surface, I saw a world I can only describe as magical. I saw the tentacles of sea anemone gracefully waving in waters. I saw gem-colored fish in abundance. I saw corals intricately etched and delicately shaped.

This marine world is at once beautiful—and functional. We need to better understand these undersea ecosystems and tend them well. Thank you for your commitment.