



# MARINE MAMMAL COMMISSION

12 August 2010

Ms. Susan A. Kennedy  
Deputy Director of Strategic Planning  
Office of Program Planning and Integration  
National Oceanic and Atmospheric Administration  
1315 East-West Highway, Room 15749  
Silver Spring, MD 20910

Dear Ms. Kennedy:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Oceanic and Atmospheric Administration's (NOAA) draft Next-Generation Strategic Plan (75 Fed. Reg. 37405). The Commission appreciates the opportunity to comment on the plan and offers the following recommendations and rationale.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that NOAA—

- revise its Next-Generation Strategic Plan by re-examining the concepts of adaptation and resilience, carefully evaluating our (human) ability to manage or control them, and revising the plan to give a more realistic appraisal of their roles in the conservation and sustainability of marine ecosystems, and
- finalize its Next-Generation Strategic Plan and then immediately initiate a companion strategy for identifying and securing the necessary resources, not simply to improve upon current scientific and management efforts, but to bring them to a level that instills full confidence that our marine ecosystems will indeed be conserved for future generations.

## RATIONALE

Clearly, NOAA must play a central role in addressing the many challenges to our marine ecosystems. The Next-Generation Strategic Plan conveys a sense of vision and commitment by NOAA's leadership that will be welcomed by all interested in the status and future of our marine ecosystems and, more broadly, the global oceans. The Commission finds the draft plan to be well-considered, ambitious, and optimistic. Among other things, it—

- addresses a broad range of environmental challenges;
- acknowledges that, in many respects, the challenges are the consequence of human activities;
- emphasizes that efforts to address the challenges must account for the close linkages among climate, marine and terrestrial environments and the social and economic well-being of human communities;
- emphasizes the need to expand from a species-by-species perspective to one that includes the ecosystems of which the various species are a part; and
- reflects or is consistent with the new national ocean policy.

That being said, the Commission believes the draft plan underestimates present and future challenges and, in doing so, may fail to convey to decision makers the time, resources (e.g., funding, infrastructure, people), and dedication that will be required to achieve the goals of this plan and the new national ocean policy. Following are two examples where the Commission considers the plan to be too optimistic and in need of reconsideration.

### **Ecosystem Adaptation and Resilience**

The plan clearly recognizes that human activities and their consequences are changing our marine and terrestrial environments at an alarming rate. Our influence on climate—initially unforeseen, then grossly underestimated, and now obviously severe—is one example of how our collective actions have profound implications for the entire biosphere. The United States has struggled with its response to climate change and has yet to take significant steps toward slowing this phenomenon or moderating its consequences. Rather, we are hedging our bets that ecosystems and species will adapt or can somehow be made more resilient. To the extent that humans and human communities are treated as part of the ecosystem, adaptation may be a feasible, albeit partial, strategy.

The non-human components of ecosystems, however, are limited in their abilities to adapt and, generally speaking, we are not capable of manipulating their resilience to the accelerating changes being wrought by human activities. Certainly, we can attempt to protect them from the adverse effects of our actions, but their resilience is largely a function of inherent properties. Wildlife scientists and managers have long recognized that we have relatively few tools for managing non-human species and so, for the most part, we attempt to manage the human activities that affect them. The Commission's concern with regard to the Next-Generation Strategic Plan is that it overstates the ability of scientists and managers to understand and influence the process of adaptation and the property of resilience in our marine ecosystems. Any strategy that relies on the adaptability of other species, and ecosystems generally, rather than protecting and, where necessary, restoring them, will itself function as a strong selective force, rendering those species that cannot adapt at sufficient pace either ecologically or biologically extinct. By overstating the ability of ecosystems and biological communities to adapt, the plan may give decision makers an unrealistic impression of NOAA's (or our collective) ability to conserve them. With this concern in mind, the Marine Mammal Commission recommends that NOAA revise its Next-Generation Strategic Plan by re-examining the concepts of adaptation and resilience, carefully evaluating our (human) ability to manage or control them, and revising the plan to give a more realistic appraisal of their roles in the conservation and sustainability of marine ecosystems.

### **Securing Resources and Anticipating Progress**

Despite the importance of NOAA's role in studying, managing, and conserving our atmosphere and marine environments, the agency does not now receive anywhere near the resources it needs to fulfill its many critical obligations. Using marine mammals as an example, NOAA lacks the funding, infrastructure, and personnel needed for even basic requirements such as stock assessments. As a result, NOAA lacks crucial baseline information in (1) the Gulf of Mexico,

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compromising assessment of oil spill effects on marine mammals, (2) the Arctic and subarctic, compromising assessment of climate change on marine mammals, and (3) the central and western Pacific, compromising assessment of fishery effects on Pacific cetaceans. The Next-Generation Strategic Plan recognizes these shortcomings in assessment but does not provide a realistic appraisal of what would be required to address them.

Even if funding were not an impediment, the lack of infrastructure and trained personnel would prevent the agency from meeting the objectives of this plan in five years. Insufficient ship and aircraft time means that management decisions often are based on data that are outdated, incomplete, or imprecise. Insufficient investment in ocean observation platforms and interagency ocean data assimilation strategies undermines scientific efforts to understand, track, and forecast changes in marine environments. With this Next-Generation Strategic Plan, NOAA should be seeking to ensure not only that management is based on the best available science, but that the available scientific information is adequate for its intended purpose. Unfortunately, the best available science often is not an adequate standard. See, for example, Taylor et al. (2007) wherein NOAA's own scientists document the inadequacy of marine mammal stock assessment efforts.

The Commission believes that, over past decades, NOAA's shortcomings have not been from a lack of vision or goals. Rather, the Commission believes those shortcomings stem from inadequate implementation that, in turn, stems at least in part from insufficient resources. The key question now facing NOAA and all of its supporters, including the Commission, is whether we collectively are prepared to make a compelling case that additional resources are vital. The Commission sees no alternative if NOAA is to make meaningful progress toward the goals set forth in the Next-Generation Strategic Plan. To that end, the Marine Mammal Commission recommends that NOAA finalize its Next-Generation Strategic Plan and then immediately initiate a companion strategy for identifying and securing the necessary resources, not simply to improve upon current scientific and management efforts, but to bring them to a level that instills full confidence that our marine ecosystems will indeed be conserved for future generations.

The Commission would be pleased to support and assist NOAA as it seeks to fulfill its many responsibilities, not only for marine mammals, but for our marine ecosystems generally. With that in mind, please do not hesitate to contact me if the Commission can be of assistance.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive, flowing style.

Timothy J. Ragen, Ph.D.  
Executive Director

#### Literature Cited

Taylor, B.L., M. Martinez, T. Gerrodette, J. Barlow, and Y.N. Hrovat. 2007. Lessons from monitoring trends in abundance of marine mammals. *Marine Mammal Science* 23(1):157-175.