Summary

NOAA's Office of Oceanic and Atmospheric Research BOSTON ROUNDTABLE

On Wednesday, September 20, 2006, Dr. Richard W. Spinrad, Assistant Administrator for Oceanic and Atmospheric Research (OAR), hosted an OAR Constituent Roundtable, "NOAA Research: Improving Predictions from Minutes to Millennia" at the headquarters of the American Meteorological Society (AMS) in Boston, MA. Twelve constituents, representing academia, federal and state government, and private industry joined Dr. Spinrad. Following is a summary of the major points discussed at the roundtable.

Opening Remarks

In his opening remarks, Dr. Spinrad welcomed the group and underscored the important role NOAA Research plays in NOAA achieving its <u>mission and goals</u>. He stressed three messages – OAR supports preeminent research at all levels of the organization; OAR research provides value to society; and OAR operates in a culture of transparency, reaching out to constituents for input on research priorities and planning.

Before turning the floor over to the constituents, Dr. Spinrad discussed the issues that keep him up at night including the FY 2007 budget and the likelihood of a continuing resolution, the ability to attract and sustain a preeminent scientific workforce, NOAA's ability to support high-risk/high-payoff transformational research; scientific openness; and strengthening the public-private partnership.

Constituent Observations

Participants addressed how OAR can best serve the needs of the Nation, with attention to the issues facing the Boston area. Five common themes evolved identified, including (1) mission growth; (2) partnerships; (3) transitioning research to operations; (4) education; and (5) infrastructure.

Mission Growth

Participants agreed the unique diversity of NOAA's mission positions the agency to address emerging environmental challenges. Participants identified opportunities for research to provide new and improved products and services to meet society's changing needs including ecological forecasts, public health, drought forecasts, harmful algal bloom forecasts, energy siting and demand forecasts, information on episodic and persistent coastal hazards, invasive species, and forecasts of the impacts of climate change. Participants also praised NOAA for its renewed focus on socioeconomic research to better articulate the value of NOAA products and services.

Participants focused on domestic partnerships and encouraged NOAA to continue to its key role in the international scientific community.

Dr. Spinrad noted the participants touched on a critical issue for NOAA – mission growth – and the most interesting developments will be made where NOAA's four mission goals intersect and overlap. He further noted that this is an area where the research community can help facilitate more "one-NOAA" thinking. Dr. Spinrad also agreed with the participants' assessment of the importance of international coordination, noting that while NOAA is a domestic agency, environmental forecasting is a cross-border issue.

Partnerships

Participants noted the need for strengthened partnership relationships to ensure that NOAA's preeminence in research is reflected throughout the U.S. research community. Partnerships with and among the private sector, academia, state governments, and other federal agencies were discussed.

Participants stressed the importance of partnerships during tight budget times. In particular they focused on leveraging state government and NOAA resources for the benefit of both. They also suggested strengthened partnerships between NOAA, NASA, and NSF to ensure support for both basic and applied research, and to streamline mechanisms for transferring funds between agencies. Participants also requested a mechanism for communicating with other federal agencies to better understand the questions the community is asking.

Dr. Spinrad recognized the participants' calls for stronger partnerships and noted that the culture of transparency OAR is fostering will help improve communication and the development of shared priorities.

Transitioning Research to Operations

Participants called for increased partnering in field research and an improved process for transitioning private sector and academic research to government operations. In particular, they identified the need for a mechanism to test private/academic research developments operationally.

In addition, the participants identified a need to strengthen the link between research observations and operational observations, to determine how best to transition research platforms to operations.

Education

Several participants identified two broad areas for improving education – the media and students. They underscored the importance of an educated public for informed decision and policy making. They indicated that while NOAA has operational responsibilities, NOAA scientists must also be storytellers. NOAA must go beyond operational forecasts to tell the story of how our atmospheres and oceans behave and what that means for society.

On behalf of the broadcast community, participants requested more timely access to climate data and precipitation totals as well as information on important national issues, i.e., tornado or wildfire outbreaks. In addition, they requested NOAA reach out to the broadcast community by offering workshops and fellowships. Other suggestions for NOAA included offering a 'weather event of the day' on the NOAA website; providing complete packages of information, including video footage to reporters; and encouraging initiatives to expand the role of the broadcast meteorologists to station scientists.

Participants noted that NOAA and other science agencies face several challenges for the development of the future workforce. They expressed concern that not many students are studying oceanography and recognized the need to develop a robust, flexible workforce capable of working across different disciplines.

Dr. Spinrad noted that OAR does not have a mandate for education except as provided through the Sea Grant Program and program-specific mandates such as Ocean Exploration. He expressed a commitment to utilizing programs like Sea Grant to educate the public and policy makers.

Infrastructure

Participants noted that ocean science is becoming more infrastructure based and that government and non-government organizations need to work together, rather than building in parallel if we are to avoid mortgaging the system. They identified the need for a coordinated national commitment to integrated ecosystems management including the integration of new and existing sensors and cross-agency coordination.

Participants suggested potential economies of scale might exist that would warrant federal government provision of infrastructure.

Dr. Spinrad noted he is encouraged by NOAA's renewed focus on facilities, specifically the recent identification in the budget of facilities requirements which he believes will help prevent a draw on research and program funds. However, it is important to note that NOAA's facilities maintenance requirements are approximately \$100 million per year.

Dr. Spinrad further encouraged participants to discuss infrastructure in terms of the value it adds. For example, he noted NOAA's array of remote sensing and in situ observations providing near or real-time information has value for Water Resource Authorities, local harbors and others.

Partnerships between NOAA and state agencies were identified as another means of leveraging resources. In addition, participants stressed forecasts for coastal/marine resources provide critical information for addressing issues of coastal management, off-shore development, project siting and navigating conflicting interests for coastal and ocean resources.