

Research Review Response - Key NOAA Actions Planned

The Research Review final report contains numerous findings and recommendations grouped under eleven major headings. Each heading is listed below, along with a brief synopsis of the heading's main recommendation, and a description of the actions the National Oceanic and Atmospheric Administration (NOAA) plans to take in response to the key recommendations.

1. Research Plan and NOAA's Mission: NOAA should develop a 20-year Research Vision and a 5-year Research Plan

NOAA has developed a draft agency-wide Research Plan describing research goals, major projects, and capabilities required for the next five years. NOAA has also developed a draft 20-year Research Vision that will be needed to improve the understanding of ecosystems, climate, weather, commerce and transportation to meet NOAA's mission in the future. The Research Plan and Research Vision were made available for public review and comment on August 20, 2004. Comments will be incorporated, and a revised Vision and Plan will be published by December 2004. NOAA leadership will communicate the Vision and Plan to a broad range of stakeholders by March 2005. After communication with stakeholders and experience in implementation, updated versions of the Research Vision and Plan will be prepared in conjunction with NOAA's annual planning process.

2. Research Organization: NOAA should establish an Associate Administrator for Research and a Research Board

NOAA agrees with the finding in the Research Review final report that a strengthened, more integrated research management system is needed for NOAA. However, NOAA proposes an alternative approach for strengthening its research management structure by building on its ongoing efforts. To better coordinate its research enterprise, NOAA formed its Research Council in 2002, and charged the Council with ensuring NOAA services are based on sound science and its research programs are integrated, coordinated, and consistent with the NOAA mission and Strategic Plan. The Research Council has brought together senior scientists from each line office and representatives from other relevant parts of NOAA. To further strengthen NOAA's research enterprise, the NOAA Executive Council (NEC), NOAA's highest-level executive management body, will provide active oversight of NOAA's research. The Research Council will support the NEC, and the Administrator has assigned the Deputy Administrator to be the senior management official with the responsibility for overseeing the development of a cohesive, responsive research program for NOAA. The Deputy Administrator shall also adjudicate issues across NOAA's research program elements, and oversee the creation and implementation of policies and plans for transferring research to operations and information services.

3. Transitioning Research: NOAA should formalize the process to transition research to operations and information services

As the Research Review final report highlights, NOAA has successfully transferred research into operations and information services at many levels and through many channels. For example, NOAA researchers developed NEXRAD and AWIPS, the backbone of today's Weather Service. Results of NOAA's research not only benefit operational services, but also inform our management actions and support decisions by external parties. To ensure we recognize the breadth and uniqueness of these research activities, and to ensure the most effective processes, NOAA will develop a policy for transferring research to operations and information services. This policy will address the breadth of NOAA's research, assign management, programmatic, and fiscal responsibilities, and recognize the need to sustain both the "push and pull" articulated by the Research Review report. The policy will include migration of research to NOAA operations from other agencies. The policy will be developed by December 2004 under the direction of the NOAA Executive Council and the Deputy Administrator.

4. Research Location: Criteria should be developed to determine where research is located within NOAA. The criteria should be applied to existing and proposed research activities and, opportunities for potential migration should be identified. Further, NOAA should establish an External Task Team to evaluate and strengthen the structure and function of ecosystem research programs

NOAA's research activities are partly focused in the Office of Oceanic and Atmospheric Research (OAR), and partly spread throughout the other line offices. NOAA's Research Council will oversee development of criteria to determine the location of research in NOAA, under the direct supervision of the NEC. NOAA agrees a more detailed examination of the structure and function of ecosystem research would be beneficial, in particular because of the major research opportunities for NOAA to address combined ecosystems –physical systems analyses over the next decade and beyond. NOAA will develop terms of reference for an Ecosystem Task Team and will ask its Science Advisory Board (SAB) to identify external candidates for the team by December 2004. The Ecosystem Task Team will identify criteria to determine where ecosystem research should be located and make recommendations to properly align NOAA's ecosystems research program with these criteria. The Ecosystem Task Team's final report will be prepared in the fourth quarter of FY 2005. In parallel with this effort, NOAA's Research Council will develop criteria to determine the location of all other research in NOAA. The Research Council's criteria and the ecosystem task team report will be implemented in the following planning, programming, and budget cycle to ensure the proper placement of research in NOAA.

5. Extramural Research: NOAA should better articulate the importance of extramural research throughout the budget process; increase involvement of the extramural community in NOAA's research planning; and improve the administration of awards to the extramural community

NOAA recognizes the value of extramural research to the agency and endorses the Review Team findings. In FY 2003, NOAA provided \$153 million for external research and development. The Research Council will track funding for research as a whole, as well as the part committed to extramural research. NOAA will include information on the total research budget and an estimate of funds proposed for the extramural community in future budget requests to Congress. NOAA will seek a balanced research program taking full advantage of the extramural research capability in its planning and budgeting process.

NOAA will engage with the external research community to ensure they understand how and when they can provide input to NOAA's fiscal planning. Specifically, we will provide the extramural community a schedule for the upcoming planning cycle by February 2005. The role of extramural research will also be clarified in the revised versions of NOAA's 5-year Research Plan and the 20-year Research Vision. The extramural community was asked to comment on these documents in August 2004, and to be part of the process to revise them on an ongoing basis.

NOAA is working to improve its business practices in support of extramural research. Timely grants processing is a priority. NOAA has established performance milestones for each type of grant, and senior NOAA leadership reviews performance monthly. A full grant lifecycle automated system, "Grants Online," is being developed to streamline the process, reduce paperwork, and establish a grants database. NOAA projects an initial operational capability in November 2004 and will implement a final version in March 2005.

6. Cooperative Research: NOAA should standardize processes for Cooperative Institutes and other cooperative arrangements

NOAA has a variety of processes by which NOAA Cooperative Institutes and other research facility cooperative arrangements are established and maintained. Working under the immediate direction of the NEC, NOAA's Research Council will develop guidelines for awarding and operating Cooperative Institutes across NOAA, including provisions for periodic performance reviews and recompetition. A draft policy will be completed by December 2004, and will be published for public comment. The policy will be finalized by March 2005, and implementation will begin by reviewing existing agreements in light of the new policy and procedures. By September 2005, the Research Council will prepare a report to the SAB on its review of existing agreements and will make recommendations for change.

7. Reimbursable Research: NOAA should establish clear guidelines to ensure reimbursable work directly supports NOAA's mission

Several of NOAA's research labs are heavily dependent on reimbursable funding. Although reimbursable funds can provide NOAA additional resources to support its mission, they can also conflict with NOAA's mission priorities. NOAA's current policy on reimbursable work requires Assistant Administrators to ensure all reimbursable agreements support NOAA core missions

and requirements; produce a product, service or research results contributing to NOAA's mission; take into account private sector capabilities; leverage the capabilities of other agencies; represent the best use of NOAA office/laboratory personnel and facilities; and limit the use of full time equivalents for reimbursable agreements. By March 2005, the Research Council will have undertaken a rigorous assessment of the reimbursable work done by its research organizations and propose revisions to the current policy as needed. Actions to bring all parts of NOAA's research enterprise into compliance with the revised policy will begin immediately thereafter.

8. Research Organization within OAR: NOAA/OAR should strengthen management processes

The directors of the OAR laboratories have substantial independence in setting their research agendas. While there are some positive aspects of this independence, NOAA agrees OAR should strengthen its management processes to ensure all OAR laboratory activities are focused and integrated into NOAA's mission. NOAA further agrees there should be a single individual who would provide vision, integration, and ongoing oversight of OAR laboratories. NOAA is in the process of reviewing its headquarters functions in OAR to identify appropriate actions necessary to strengthen the leadership and oversight over research activities in laboratories and programs as well as the transition of research to operational products and information services.

9. Research Organization in Boulder: NOAA should consolidate the laboratories in Boulder, Colorado

The Boulder laboratories have significantly contributed to advancing NOAA's mission during the past 50 years. NOAA believes consolidation of the Boulder laboratories would lead to improved quality of research planning and execution, more efficient use of resources, and increased opportunities for multidisciplinary collaboration. A Boulder Planning and Transition Team is working to define a new consolidated structure for the 650 staff working in its Boulder laboratories. A proposed plan will be conveyed to NOAA management by December 15, 2004. A major status report will be presented to NOAA management by October 15, 2004 including the mission, name, activity foci, organization structure, main crosscutting activities, as well as rationale for these proposals. During October and November, comments from NOAA management will be incorporated into the proposal. Discussions will continue with OAR Boulder staff as well as key stakeholder groups, such as other NOAA organizations in Boulder, before the proposal is finalized. In addition to topics covered in the October 15 status report, the final plan will address plans for, and characteristics of, the permanent Director position; implications/approaches to significant reimbursable-support issues; and a list of further issues to resolve. Implementation of the consolidation plan will commence after appropriate Congressional notifications have been made.

10. Air Resources Laboratory: NOAA should conduct a core capability analysis of the Air Resources Laboratory

The Air Resources Laboratory (ARL) has made significant contributions to NOAA and other Federal agencies. However, ARL is very geographically dispersed and receives a significant portion of its funding from other agencies. NOAA will conduct a core capability analysis of ARL to ensure proper focus of ARL activity. The review will evaluate the research conducted to ensure it is within NOAA's mission and supports the NOAA 5-Year Research Plan. By November, a review team will be established and work will begin. A draft report will be completed and provided to the Research Council and the NEC for review by March 2005. NOAA will take appropriate action based on this analysis.

11. Continuing Oversight: NOAA should review progress in implementing the recommendations from the Research Review

To ensure NOAA responds conscientiously to the recommendations in this report, NOAA will ask its SAB to appoint an external team to review progress in implementing recommendations from the Research Review Team. The review will be done one year after the completion of the Research Review final report, in August 2005. The SAB conducted the research review, and we are confident they will provide effective oversight and advice.