

**National Oceanic and Atmospheric Administration
U.S. Department of Commerce
Summary Report on Scientific Integrity**

NOAA generates tremendous value for the Nation—and the world—by advancing our ability to understand and anticipate changes in the Earth’s environment, improving society’s ability to make scientifically informed decisions, and by conserving and managing ocean and coastal ecosystems and resources. NOAA’s world-class research and information services continuously advance our scientific understanding of a changing climate and its impacts. NOAA monitors and models the environment to forecast daily weather; warns us of hurricanes, tornados, and tsunamis; and supports private enterprise with the information necessary to sustain economic growth. NOAA is directly responsible for managing the Nation’s fisheries and for supporting the responsible management of coastal habitats and species. NOAA is a global leader in understanding the processes by which ecosystems provide services crucial for human survival on Earth, and in helping to educate businesses and Federal, State, and local decision makers about how the health of human society and the health of the environment are interconnected.

NOAA is an organization based upon science, scientific research, and providing and using scientific advice for decision-making. NOAA’s ability to achieve its strategic vision of “healthy ecosystems, communities, and economies that are resilient in the face of change” relies on transparency, traceability, and scientific integrity at all levels. In light of the Administration’s new policies on scientific integrity, NOAA is currently working to update its relevant policies through revising NOAA Administrative Order (NAO) 202-735D, addressing issues associated with scientific integrity more broadly, developing an associated procedural handbook for responding to allegations of misconduct, and creating an intranet “commons” site to help inform staff on scientific integrity issues in an easy-to-understand format. Relevant policies currently in effect are detailed below.

I. Foundations of Scientific Integrity in Government

NOAA recognizes the importance of scientific and technological information and science as methods for maintaining and enhancing our effectiveness and establishing credibility and value with the public, both nationally and internationally. NOAA has in place a high level body of senior managers, known as the NOAA Research Council, responsible for providing general corporate oversight and developing policy to ensure that NOAA’s research activities are of the highest scientific quality and relevant to our mission. Leadership of the Research Council is provided by NOAA’s Chief Scientist, or designee, allowing input and access to NOAA’s political leadership. The NOAA Research Council is specifically responsible for:

- Overseeing a continual process of independent peer evaluation to determine the quality and relevance of science and technology programs, products, services, and professional staff, and recommends where and how improvements should be made;
- Monitoring performance measures for research to advance science quality and safeguard scientific integrity;
- Ensuring NOAA's research investment follows best practices and is applied consistently across NOAA following Office of Management and Budget criteria;
- Establishing criteria and developing processes for peer reviews of all research and development programs; and

- Working with the NOAA Science Advisory Board to support science and research activities of NOAA.

More information is available at www.nrc.noaa.gov.

i. Data integrity and Accessibility

NOAA has a number of policies in place to ensure that its data is of the highest quality and as widely accessible as possible. Specifically:

- NOAA has implemented Information Quality Guidelines to ensure and maximize the quality, objectivity, utility, and integrity of the information NOAA produces and disseminates. These guidelines also establish an administrative mechanism that allows affected persons to seek and obtain correction of information that does not comply with NOAA or Office of Management and Budget guidelines. Details are available at: www.cio.noaa.gov/Policy_Programs/info_quality.html.
- NOAA recognizes that data access is a foundation of strong science. Consistent with this approach, NOAA has established a Data Management Policy, which provides that environmental data will be visible, accessible, and independently understandable to users, except where limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. More details are available at: www.corporateservices.noaa.gov/~ames/NAOs/Chap_212/naos_212_15.html.

ii. Scientific Misconduct and Conflict of Interest:

NOAA strongly believes that any instance of scientific misconduct is unacceptable and threatens public confidence in the integrity of its programs. Consequently NOAA has developed administrative processes that address allegations of scientific misconduct, for in-house researchers and for external NOAA-funded research. NOAA is currently revising this policy to expand the scope to address scientific integrity more broadly. Current NOAA Policy on Scientific Misconduct is available at:

http://www.corporateservices.noaa.gov/~ames/NAOs/Chap_202/naos202_735D.html.

Grantee organizations are also subject to the Department of Commerce Code of Conduct, as provided by Section J of the Financial Assistance Standard Terms and Conditions

(http://www.fpir.noaa.gov/Library/OMI/Grants/PresentPolicy/DOC_ST&C05.pdf) and the Department of Commerce Grants and Cooperative Agreements Chapter 16

(<http://oam.eas.commerce.gov/docs/Ch16%20Other.pdf>). NOAA Cooperative and Joint Institutes are

also subject to the rules and guidelines stated in the NOAA Cooperative Institute Handbook

(<http://www.nrc.noaa.gov/ci/policy/docs/handbook.pdf>).

To protect against conflicts of interest by individuals serving as peer reviewers of scientific information or scientific assessments, NOAA has implemented a detailed Conflict of Interest Policy, available at http://www.cio.noaa.gov/Policy_Programs/NOAA_PRB_COI_Policy_110606.html.

II. Public Communications

Department of Commerce Administrative Order (DAO) 219-1 provides the public communications policy for NOAA. Recognizing that robust discussion of science and an open dialog with the public is a foundational requirement of scientific integrity, NOAA has developed implementing guidance to DAO 219-1 to help ensure that agency research results are widely shared. NOAA's implementing guidance is available at <http://www.noaa.gov/mediaguidance.htm>.

III. Use of Federal Advisory Committees

NOAA has seven Federal advisory committees chartered under the Federal Advisory Committee Act, four of which provide scientific advice:

- The NOAA **Science Advisory Board (SAB)** advises the Under Secretary of Commerce for Oceans and Atmosphere on long- and short-range strategies for research, education and the application of science to resource management and environmental assessment and prediction. Composed of eminent scientists, engineers, resource managers and educators, the diverse membership of the SAB assures expertise reflecting the full breadth of NOAA's responsibilities, as well as the ethnic and gender diversity of the United States. Nominations for members are solicited from the public via notices in the *Federal Register*, as well as through other outreach processes. Member biographies, committee products and other information are available at: <http://www.sab.noaa.gov/Board/board.html>.
- In October 2003, Secretary of Commerce Don Evans established the **Hydrographic Services Review Panel (HSRP)**. The HSRP is composed of a diverse field of experts in hydrographic surveying, vessel pilotage, port administration, tides and currents, coastal zone management, geodesy, recreational boating, marine transportation, and academia. Advice from this panel assists NOAA in its efforts to improve the nation's marine transportation system, as well as its support of commerce with world-class products and services that will help ensure safe, efficient, and environmentally sound marine transportation. Membership nominations are solicited from the public via *Federal Register* notice, as well as through other outreach processes. Member biographies and other information are available at: <http://www.nauticalcharts.noaa.gov/ocs/hsrp/hsrp.htm>.
- The **Marine Protected Areas Federal Advisory Committee (MPA FAC)** provides expert advice and recommendations to the Secretaries of Commerce and the Interior on implementation of aspects of Section 4 of Executive Order 13158. The MPA FAC is composed of 30 individuals, appointed by the Secretary of Commerce, with diverse backgrounds and experience, who represent a broad range of parties interested in the use of MPAs as a management tool, including scientists, academics, commercial fishermen, anglers, divers, state and tribal resource managers, the energy and tourism industries, and environmentalists. In addition, nine federal agencies are represented as non-voting ex-officio members of the committee. Membership nominations are solicited from the public via Federal Register notice, as well as through other outreach processes. Member biographies and other information are available at <http://www.mpa.gov/fac>.

- **The National Climate Assessment Development and Advisory Committee (NCADAC)** is NOAA's newest FAC. The committee will produce an assessment that integrates and interprets the previous findings of the US Global Change Research Program and analyzes the effects of current and projected climate change upon a range of sectors including agriculture, energy, water resources, human health, and transportation, and will focus on regional and national level impacts. Committee members include academic scientists, the private sector, local and state government, and representatives from the non-profit sector, all selected in accordance with the Federal Advisory Committee Act and a request for nominations from the public. More information is available at:
<http://globalchange.gov/what-we-do/assessment/proposedfacmembers>.

NOAA FAC members are selected through clear, open, standardized processes, in accordance with applicable Federal law and Department of Commerce guidance. FAC members have established records of distinguished services in their professions, with diverse backgrounds, reflecting the wide diversity of stakeholder groups relevant to each FAC and the NOAA mission in general. In the ongoing process to update its scientific integrity policies, NOAA is developing policies that ensure that the Administration's new policies relative to the use of FACs are fully addressed.

IV. Professional Development of Government Scientists and Engineers

The foundation of NOAA's long-standing record of scientific, technical, and organizational excellence is its people. NOAA supports the professional development of its scientists and engineers through a number of policies. Key among these, NOAA actively encourages the publication of research findings in peer-reviewed, professional, or scholarly journals. This policy is considered so fundamental to NOAA's mission that publication in scientific journals is considered in laboratory reviews and yearly performance evaluations for some of its scientists, particularly those in more senior level positions. In addition to encouraging publication, NOAA actively supports the presentation of research findings at professional meetings by its scientists and engineers. Reinforcing our commitment to the professional development of NOAA's scientists and engineers, NOAA actively supports the appointment of its scientists and engineers to the editorial boards of professional or scholarly journals. To this end, a number of NOAA employees currently serve on a wide variety of editorial boards. Moreover, NOAA, consistent with Department of Commerce policy, allows its scientists and engineers to receive honors and awards for their research, perhaps most notably illustrated by the 2007 Nobel Peace Prize awarded to the Intergovernmental Panel on Climate Change, with contributions from more than 120 NOAA scientists. Further, NOAA actively supports its employee's participation in professional or scholarly societies, committees, and task forces.

NOAA is currently implementing more specific policies relating to professional development in its revisions to NAO 202-735D, and its associated handbook. As part of this process, NOAA is actively working with the Department of Commerce to find ways, consistent with applicable laws and NOAA's mission, to remove barriers for its scientists and engineers to serve as officers or on governing boards of non-governmental non-profit organizations.