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NOAA Science Advisory Board

**Advisory Options for
Improving Communications among NOAA's Partners**

**A Final Report to
the National Oceanic and Atmospheric Administration**

September 2008

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I. EXECUTIVE SUMMARY

As a result of discussions between the National Weather Service and external partners in the weather enterprise, the NOAA Science Advisory Board (SAB) was asked to consider the options available for NOAA to solicit advice from the external community for its entire environmental enterprise. For this purpose the SAB chartered a Working Group to Examine Advisory Options for Improving Communications among NOAA's Partners (the Partnerships Working Group or PWG). With input from the appropriate offices in NOAA and the Department of Commerce, the PWG members debated the various options available, ranging from *ad hoc* meetings at various venues on an irregular basis to establishment of a formal federal advisory committee to NOAA. The group considered the strengths and weaknesses of all these options but agreed that NOAA should create a formal and clear mechanism to ensure that a wide variety of external stakeholders can provide advice and receive feedback from the agency. The PWG recommended that NOAA use a combination of approaches, starting with establishment of a working group under the Science Advisory Board to immediately address concerns from the external weather community, assess the success of this approach after 1-2 years, and consider at that time whether to establish a separate federal advisory committee with a mandate for the broader environmental services enterprise.

II. INTRODUCTION AND BACKGROUND

In 2003 the National Research Council (NRC) conducted a study of the interaction of the various sectors of the weather and climate enterprise on behalf of the National Oceanic and Atmospheric Administration (NOAA). This study was entitled Fair Weather: Effective Partnerships in Weather and Climate Services (National Research Council, 2003, referred to as the Fair Weather Report). It examined the roles and provided recommendations regarding the partnerships among three sectors, public, private, and academic. The NRC specifically recommended: "*The NWS [National Weather Service] should establish an independent advisory committee to provide ongoing advice to it on weather and climate matters. The committee should be composed of users of weather and climate data and representatives of the public, private, and academic sectors, and it should consider issues relevant to each sector as well as to the set of players as a group, such as (but not limited to):*

- *improving communication among the sectors,*
- *creating or discontinuing products,*
- *enhancing scientific and technical capabilities that support the NWS mission,*
- *improving data quality and timeliness, and*
- *disseminating data and information."*

The National Weather Service (NWS) and NOAA over the years have recognized the need to consider interactions with all sectors of the community including the growing private sector of weather product and service providers. The 1991 NWS Partnership

Policy stated: “*The NWS will not compete with the private sector when a service is currently provided or can be provided by commercial enterprises, unless otherwise directed by applicable law.*” After publication of the Fair Weather Report, a broad NOAA Policy on Partnerships in the Provision of Environmental Information (2004) was issued to establish a NOAA framework for interaction with the weather and climate enterprise. This NOAA Partnership Policy replaced the 1991 policy applicable only to the NWS, and it contained the following elements:

- Responds to Fair Weather Report
- Applies to provision of all NOAA environmental information services
- Improves the effectiveness of the “environmental information enterprise” composed of partnerships among public, private, and academic sectors
- Defines the NOAA responsibility to foster growth of the environmental information enterprise
- Describes *ad hoc* use of existing Federal Advisory Committee Act (FACA) committees and NOAA commitment to other, i.e. non-FACA, advisory mechanisms

This Policy underwent a critical public review and was ultimately revised in January 2006 to clarify NOAA recognition of the private sector. As part of this clarification, a small change in the wording of the policy itself was adopted, which NOAA’s accompanying discussion of the clarified policy language described as indicating: “*NOAA’s willingness to consider creating a standing advisory body to support the NOAA partnership policy.*”

Given this stated policy, NOAA initiated its consideration of an advisory body by seeking the advice of an existing federal advisory body to review and consider the options and make a recommendation to the agency on how to proceed. NOAA decided to present the issue to the NOAA Science Advisory Board (SAB) as the one Federal Advisory Committee to NOAA that considers questions relevant to the entire agency. The SAB, at its July 2006 meeting, reviewed the advisory mechanisms NOAA currently uses in support of the NOAA Partnership Policy and concluded that a significant group of participants in the nation’s environmental information enterprise view NOAA’s use of these mechanisms as insufficient to effectively garner external advice. The SAB recommended NOAA establish an *ad hoc*, limited duration working group to examine and recommend advisory options for improving communications among the various public, private, and academic entities engaged in environmental information matters. In August of 2007, the SAB established the Working Group to Examine Advisory Options for Improving Communications among NOAA’s Partners (referred to as the Partnerships Working Group or PWG) for this purpose (Appendix I). The members of the Partnerships Working Group were selected to represent various sectors and areas of expertise (Appendix II) but the group was kept very small in order to ensure the process would remain streamlined.

On 16 October 2007, the PWG met with representatives from the Department of Commerce (DoC) Office of the General Counsel, the DoC Committee Management Office, the NOAA NWS, and the NOAA SAB Office to gather background information

on the issue of providing advice to the NWS and NOAA regarding weather and other environmental information (Appendix III). The findings and recommendations of this group are reported below.

III. FINDINGS AND ALTERNATIVES

Primary Finding

As a result of discussions with the representatives from the DoC and NOAA, the PWG agreed that *the status quo (continued ad hoc use of existing advisory mechanisms) is inadequate because NOAA's practice is occasional, ad hoc use motivated by only NOAA concerns and NOAA's comfort with the existing advisory mechanisms.*

Key Elements for Alternatives

The PWG agreed that a formal arrangement for provision of advice is important. The current *ad hoc* approach does not provide a process which supports a regular, timely, understood forum for advice. The current situation also does not provide a formal process by which NOAA responds to that advice. Accordingly, the group agreed on the following key elements for any mechanism implemented.

- Timely notification of, and insight to, NOAA's plans for creation or discontinuance of NOAA products and an opportunity to discuss potential partner impacts.
- Clear expectations about what advice will be sought and how it will be used.
- Creation of a sense of community and support that can benefit both NOAA and the partners.
- Inclusion of academia, industry and NGO representatives due to different perspectives and interests.
- Permanence (as much as possible).
- Timely feedback to the partners from NOAA.
- Start with one area where the most interaction with NOAA and the partners occurs, the NWS. As NOAA evolves as an enterprise and experience is gained with the approach, it can be expanded as desired.

Alternatives

Given the charge to the PWG to “not rule out any approach” between NOAA and other public, private, and academic entities engaged in the Nation's environmental enterprise, the PWG considered the following alternatives to replace the current NOAA practice.

1. Form a new federal advisory committee.
2. Change the structure of and/or re-charter an existing NOAA federal advisory committee.
3. Expand the use of an existing NOAA federal advisory committee, and/or the National Research Council.
4. Use an existing external group (non-governmental organization – NGO) not managed by the government.
5. Use a contract to an industry partner.
6. Conduct *ad hoc* meetings with the public.

7. Combine several approaches.

Discussion of Alternatives

1. Form a new federal advisory committee

Although a new FACA committee initially looked like the cleanest approach with no modifications required to current committees, the PWG agreed that this alternative would be the most difficult and lengthy to implement.

This is the most formal option, requiring potential members to be vetted by the White House and receive security clearances as well as a variety of other measures to ensure approval. All meetings must be open to the public (unless there is a strong justification to close the meetings) and formally documented, introducing administrative costs and delays to the advisory process. DoC defines the number of federal advisory committees allowed within the agencies of the Department; currently, it has only one unallocated FACA slot available, hence this would have to be deemed the highest priority across the department. It could take a year or more for approval and notification to set up the committee. It would require a “Federal Official” to manage (this need not necessarily be a unique new position but could be shared duties with another FACA officer). Likewise, a new FACA committee would require support staff and incur expenses for administration as well as for meetings and other activities of the group. Therefore a designated and stable budget would be required to ensure proper functioning of the committee.

On the one hand, the existence of an official advisory committee allows for a full and transparent process for generating and providing advice to NOAA and allows for the agency to provide a formal response with full accountability. On the other hand, the formality can also be cumbersome and limit the speed at which issues are addressed. The level of effort and cost required to support a functioning federal advisory committee is not negligible.

2. Change the structure of and/or re-charter an existing NOAA federal advisory committee

Although rechartering an existing advisory committee reduces the time requirement to establish a new federal advisory committee and avoids the DoC limitation on the number of committees allowed, this approach will still incur the same expenses and procedural delays as a new committee.

3. Expand the use of an existing NOAA federal advisory committee, and/or the National Research Council

The PWG considered all of the federal advisory committees that exist in NOAA as well as the relevant Boards of the NRC. The PWG decided that use of a NRC Board would not be the best mechanism since each of these covers very broad topics that must consider multiple federal agencies and activities and not just NOAA; and continuing to commission specific studies carried out under the aegis of NRC amounts to continuing the “ad hoc use of existing advisory mechanisms” PWG was asked to improve upon. The

PWG then discussed the various federal advisory committees that exist in NOAA. In its presentation to the SAB in July 2006, NOAA NWS noted that its Marine Fisheries Advisory Council (MAFAC), Marine Protected Areas Federal Advisory Committee (MPAFAC), Sea Grant Review Panel (SGRP) and Advisory Committee on Commercial Remote Sensing (ACCRES) do not have a “partnership” mandate in their charters. The Hydrographic Services Review Panel is too specific and in any case is legislatively mandated so its charter would be difficult to change. The four Climate Change Science Program committees are focused on very specific products and are only temporary. Therefore, the NWS settled on the SAB as the only existing FACA committee in NOAA with the ability to address this issue. The PWG concurred with this conclusion.

The PWG decided the best option under this alternative would be a standing working group of the NOAA SAB that includes at least one member of the SAB with the remaining constituents from academia and a variety of other sectors. This option can be implemented quickly and would report to the SAB on a recurring basis. There is precedent in that three SAB standing working groups are currently active – Climate, Data Archive and Access Requirements, and Ocean Exploration Advisory. The disadvantages to this approach are that the working group would not report directly to NOAA but would only provide information and recommendations to the SAB. The SAB would consider what the working group advises but would not be obligated to pass any of it on to NOAA as official external advice. In addition, the processes required under this structure can be cumbersome and time-consuming.

4. Use an existing external group (non-governmental organization – NGO) not managed by the government

This approach would provide a forum for partners to provide advice, but the advice would be given to an external non-governmental organization, such as the American Meteorological Society (AMS), American Geophysical Union (AGU) or another professional society. On the one hand, the approach would ensure participation by the community encompassed by the NGO and would clearly be the product of an external body. On the other hand, this structure would not guarantee that the desired key elements are covered, nor would it necessarily provide the desired interaction with NOAA representatives.

5. Use a contract to an industry partner

This option has the same strengths and limitations as Alternative 4.

6. Conduct *ad hoc* meetings with the public

This alternative would include the use of “town hall” gatherings at such venues as the annual meetings of professional societies (AMS, AGU) to present information and receive feedback from external partners. Although such venues provide access to a very large number of members of the community, they do not allow for more deliberate debate of issues, development of consensus advice from the community, or a clear process for response from NOAA. This alternative is essentially the current mechanism that NOAA already uses and that has raised partners’ concerns.

7. Combine several approaches

This final alternative recognizes that there are strengths and limitations to all of the available mechanisms and the best option for both NOAA and external partners might be a combination or phased implementation of more than one of these.

IV. RECOMMENDATIONS

The PWG debated all of the options listed and carefully considered the strengths and weaknesses of each. While Alternative 3, *Expand the use of an existing NOAA federal advisory committee, and/or the NRC*, represents the best near-term solution, the PWG was uncertain if it is the best long-term solution. Therefore, the PWG recommends that NOAA immediately create a standing PWG of the NOAA SAB. This should be rolled out as follows:

- The NOAA SAB should actively encourage a broad representation in the working group membership to include a diversity of perspectives and skill sets. This should be undergone by soliciting nominations from, among others, the pertinent commissions, associations, and professional and academic societies (e.g., Commercial Weather Services Association, National Council of Industrial Meteorologists, American Meteorological Society, et al).
- Initial work should address interactions with and advice to the NWS and subsequently address broader environmental information services across NOAA.
- Evaluate after 1-2 years whether to:
 - Continue with an ongoing focus on NWS;
 - Continue and expand to the broader environmental information enterprise; or
 - Work with DoC to establish a separate NOAA Partnerships federal advisory committee with a focus on either the NWS or the broader enterprise.

If NOAA accepts the recommendation, the agency must establish clear expectations about what advice will be sought, how it will be considered, and how feedback will be provided.

A draft Terms of Reference for the proposed standing working group articulates the charge, suggested member skill sets, and other organizational elements (Appendix IV). The constituency of the working group should include both value-added and end-user industries that rely on weather products, other federal, state, and regional government agencies, NGO's and academia. To form this diverse and balanced membership, nominations will be solicited through a widely distributed Federal Register Notice (FRN). The SAB will review the list of nominees received and select those best suited to carry out the charge of the working group.

Members should rotate every three years (staggered) to address inclusiveness. After at least one year of the working group being in full operation, NOAA should task the SAB to evaluate if it is effectively and efficiently serving the purpose of garnering external advice.

V. CONCLUDING THOUGHTS

The NOAA Science Advisory Board, in accordance with its Working Group to Examine Advisory Options for Improving Communications among NOAA's Partners, believes that an open, regular, and on-going dialogue will create a true partnership between NOAA and its interested stakeholders. This will enable NOAA to consider a broad set of diverse, educated inputs in its planning and decision processes, and will foster an advocacy group to promote shared objectives.

Appendix I. Terms of Reference – Ad Hoc Working Group

NOAA Science Advisory Board

Working Group to Examine Advisory Options for Improving Communications among NOAA’s Partners

Terms of Reference

Background

The Science Advisory Board (SAB) at their July 2006 meeting reviewed the advisory mechanisms NOAA uses in support of the NOAA Policy on Partnership in the Provision of Environmental Information¹ and concluded a significant group of participants in the nation’s environmental information enterprise do not view NOAA’s “ad hoc” use of these advisory mechanisms as the preferred method of garnering external advise. The SAB recommended NOAA establish an *ad hoc*, limited duration, working group to examine and recommend advisory options for improving communications among the various public, private, and academic entities engaged in environmental information matters.

Charge to the Working Group

The Working Group will examine advisory options for improving the dialogue between NOAA and other public, private, and academic entities engaged in the Nation’s environmental enterprise.

The group should not rule out any approach, including, for example:

- Expanded use of existing NOAA Federal Advisory Committee Act (FACA) committees and/or the National Research Council (NRC),
- Changing the structure and/or re-chartering existing NOAA FACA committee(s), including the SAB,
- A new FACA committee
- Some combination of approaches, e.g. a phased implementation of several recommended changes.

The Working Group should consider the effects of recommendations on existing NOAA advisory committees, so as to avoid disruptions to the effectiveness of these other advisory committees. The results to include recommendations as well as any public comments should be conveyed to the SAB in a written report at a regularly scheduled SAB meeting within 6-8 months after establishment of the working group. A draft of the report should be available for a public comment period of not less than 30 days. The working group will consider public comments and incorporate them, as appropriate, into

¹ The NOAA Policy on Partnerships in the Provision of Environmental Information (“Partnership Policy”) complete text and history available on <http://www.nws.noaa.gov/partnershippolicy/>.

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the final report delivered to the SAB. The report recommendations should be specific and capable of implementation within six months of the report's release.

Term and Composition

The Working Group will consist of between three and eight members selected from a pool of candidates generated by both the SAB and NOAA. The group will be disestablished following the transmittal of the final report by the SAB to the Under Secretary.

Support

NOAA will cover travel expenses of the work group and provide appropriate staff support as needed.

Working Group Members

The Working Group will consist of senior and highly respected members with a balance among weather, climate, and ocean communities.

Appendix II. Working Group Membership

NOAA Science Advisory Board
Working Group to Examine Advisory Options for
Improving Communications among NOAA's Partners
(Partnerships WG, PWG)

MEMBERSHIP

Chair

Mr. Michael Keebaugh – Vice President, Raytheon Company, and Member of the SAB

Members

Dr. Mary Altalo – Executive Director, Ocean.US

Dr. Otis Brown – Dean, Rosenstiel School of Marine and Atmospheric Sciences,
University of Miami

Mr. George Frederick – President, Falcon Consultants, LLC

Mr. Joel Widder – Government Relations Consultant, University Corporation for
Atmospheric Research

Dr. John Toohey-Morales – President, Climadata Corp. and Chief Meteorologist, NBC
Telemundo

Appendix III. PWG Meeting Agenda

Meeting of the NOAA Working Group to Examine Advisory Options for Improving Communications among NOAA's Partners (PWG)

16 October 2007

Location: SSMC2, Room 18122
1325 East West Highway
Silver Spring, MD 20910

8:00 Coffee and Bagels

8:15 AM NOAA and NWS Welcome to the PWG
Jack Hayes, Assistant Administrator, National Weather Service

8:30 AM PWG Introductions, Discussion of Charge, and Desired Outcomes
Mr. Mike Keebaugh, Chair; Dr. Cynthia Decker, Executive Director, NOAA Science Advisory Board

Session 1: Setting the Stage:

9:00 AM An Overview of NOAA's Policy on Partnership in the Provision of Environmental Information
Dr. Edward Johnson, Director, NOAA/NWS Strategic Planning and Policy Office

10:00 AM Break

Session 2: Overview of Options

10:15 AM Federal Advisory Committee Act Overview and Review of NOAA's Current Committees under the Federal Advisory Committee Act
Ms. Alice McKenna, Senior Counsel, DOC Office of General Counsel
Ms. Linda Anadale, Committee Management Officer, DOC Office of Management and Organization

11:30 AM Lunch (On your own)

Session 3: Considering the Options (WG members and NOAA Steering Group members only)

12:30 PM Impressions of Highest Priority Needs for NOAA and Formulation of Work Plan
Open Discussion – Mr. Keebaugh leads

2:30 PM Break

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- 2:45 PM** **Continued Discussion**
Open Discussion – Mr. Keebaugh leads
- 3:45 PM** **Action item review and next steps**
Mr. Keebaugh, SAB Office
- 4:15 PM** **Wrap Up and Adjourn**

Appendix IV. Draft Terms of Reference – Standing Working Group

NOAA Science Advisory Board

Environmental Information Services Working Group (EISWG)

TERMS OF REFERENCE

Background

- In 2003 the National Research Council (NRC) conducted a study of the interaction of the various sectors of the weather and climate enterprise on behalf of the National Oceanic and Atmospheric Administration (NOAA). This study was entitled “Fair Weather: Effective Partnerships in Weather and Climate Services” (Fair Weather Report) and it examined the roles and provided recommendations regarding the partnerships among three sectors, public, private, and academic. The NRC specifically recommended: “*The NWS [National Weather Service] should establish an independent advisory committee to provide ongoing advice to it on weather and climate matters...*”
- In 2004, NOAA issued its “Policy on Partnerships in the Provision of Environmental Information,” which applied to provision of all NOAA environmental information services, with the intent to improve the effectiveness of the “environmental information enterprise” composed of partnerships among public, private, and academic sectors, and defined NOAA’s responsibility to foster growth of the environmental information enterprise. After undergoing critical review, the Policy was ultimately revised in January 2006 to clarify NOAA’s recognition of the private sector; this clarification also highlighted “*NOAA’s willingness to consider creating a standing advisory body to support the NOAA partnership policy.*”
- Given this stated policy, NOAA initiated its consideration of an advisory body by seeking the advice of NOAA’s Science Advisory Board (SAB), the one Federal Advisory Committee to NOAA that considers questions relevant to the entire agency. The SAB, at its July 2006 meeting, reviewed the advisory mechanisms NOAA currently uses in support of NOAA’s Policy on Partnerships and concluded that a significant group of participants in the nation’s environmental information enterprise view NOAA’s use of these mechanisms as insufficient to effectively garner external advice. The SAB recommended NOAA establish an *ad hoc*, limited duration working group to examine and recommend advisory options for improving communications among the various public, private, and academic entities engaged in environmental information matters. In August of 2007, the SAB established the Working Group to Examine Advisory Options for Improving Communications among NOAA’s Partners (referred to as the Partnerships Working Group or PWG).
- In March 2008, the PWG recommended the SAB 1) establish a standing working group of the SAB to address environmental information services across NOAA

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with a focus on interactions with the NWS, and 2) evaluate after 1-2 years whether to a) continue with an ongoing focus on NWS; b) broaden the focus to encompass all of NOAA and the broader environmental information enterprise; or c) work with DOC to establish a separate NOAA Partnerships federal advisory committee with a focus on either the NWS or the broader enterprise. The SAB accepted the PWG's recommendation(s) in its entirety.

The EISWG will work closely with all five NOAA Line Offices (National Marine Fisheries Service – NMFS, National Ocean Service – NOS, Oceanic and Atmospheric Research – OAR, National Environmental Satellite, Data, and Information Service – NESDIS, and National Weather Service - NWS). As part of its work the EISWG will take into consideration the eight themes set forth by the NOAA SAB: 1) Quality, Creativity and Credibility; 2) Timeliness and Scale; 3) Science Connected to the Application and Operational Implementation of Policy; 4) Capacity Building; 5) Education and Outreach; 6) Efficiency; 7) Social Science Integration; and 8) Diversity.

The EISWG, in its role as a sanctioned working group of the NOAA SAB, will advise the SAB on the condition and capabilities of improving communications among the various public, private, and academic entities engaged in environmental information matters and will submit formal reports to the SAB that identify current issues, deficiencies, recommendations for remedial action, and proposed initiatives.

The EISWG is charged to: 1) provide advice on improving communication among the sectors, 2) provide advice on incorporating scientific and technical capabilities to enhance NOAA products and services, 3) provide a sounding board regarding implementation of NOAA's Policy on Partnerships in the Provision of Environmental Information, 4) evaluate NOAA effectiveness in responding to advice received from the EISWG, and the environmental information enterprise as a whole, and 5) evaluate after two years whether this working group is an effective mechanism for working with external partners or whether other mechanisms should be considered.

The EISWG shall be composed of 15-18 members, who, by reason of knowledge, experience or training, are especially qualified to represent users of NOAA environmental information services, including, but not limited to, the commercial weather industry (both value-added and end-users), academia, and the media. Membership may also include federal, state and regional government agencies and non-governmental agencies. To form this diverse and balanced membership, nominations will be solicited through a widely distributed Federal Register Notice (FRN). The SAB will review the list of nominees received and select those best suited to carry out the charge of the working group.

The EISWG members will be appointed for three-year terms with the opportunity for one additional term. Initial appointments will include one-third each 3-year terms, one-third 2-year terms and one-third 1-year terms. The EISWG will provide suggestions of new candidates annually to the NOAA SAB for consideration.

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As highlighted above in PWG's recommendation to the SAB, the initial approach of the EISWG will focus on interaction between the various entities above and NOAA's National Weather Service. As experience is gained with this approach, the EISWG may be expanded to include other NOAA elements.