Environmental Information Services Working Group (EISWG)

Terms of Reference Update

Presented by John T. Snow, EISWG Co-Chair

Current Membership

Tom Altshuler - Vice President And Group General Manager, Teledyne Marine Systems

Ronald J. Birk - Associate Principal Director, Vaeros Development, The Aerospace Corporation

Ann Bostrom - Professor, Daniel J. Evans School of Public Affairs, University of Washington

Eddie Hicks - Director, Morgan County Alabama Emergency Management Association

Bill Hooke - Associate Executive Director, American Meteorological Society **Kevin Petty** - Chief Science Officer, Vaisala Inc.

Jonathan Porter - Vice President of Innovation and Development, AccuWeather. Inc.

Mohan Ramamurthy - Director, Unidata

Jennifer Read - Director, University of Michigan Water Center

Cheryl Rosa - Deputy Director, U.S. Arctic Research Commission

Justin Sharp - Owner, Sharply Focused LLC

Jean E. Vieux - President, Vieux, Inc.

Robert Weller - Senior Scientist, Woods Hole Oceanographic Institution **May Yuan** - Professor, School of Economic, Political, and Policy Sciences, University of Texas at Dallas

Xubin Zeng - Professor, Dept. of Atmospheric Sciences, University of Arizona

Co-Chairs



John Snow, Regents' Professor Emeritius of Meteorology; Dean Emeritus, College of Atmospheric and Geographic Sciences, University of Oklahoma; Principal, Snow & Associates, LLC



Bradley Colman, Director of Science - Weather Science, The Climate Corporation



Robert S. Winokur (retired) NOAA and Navy

^{***} One vacancy is in the process of being filled



The primary changes to the EISWG Terms of Reference (ToR) include:

- The movement of the largely historical Background section to be an Appendix.
- The addition of a preamble.
- A revised Charge section.
- The addition of a Reporting section.
- Language reflecting what is written about the EISWG in the Weather Research and Forecasting Innovation Act of 2017 (PL 115-25).



131 STAT, 91

Public Law 115-25 115th Congress

An Act

To improve the National Oceanic and Atmospheric Administration's weather research through a focused program of investment on affordable and attainable advances in observational, computing, and modeling capabilities to support substantial improvement in weather forecasting and prediction of high impact weather events. to expand commercial opportunities for the provision of weather data, and for

Apr. 18, 2017

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled SECTION 1 SHOPT TITLE TABLE O

Research and

(a) SHORT TITLE.—This Act may be cited as the "Weather (b) Table of Contents.—The table of contents for this Act

is as follows: Sec. 1. Short title; table of contents Sec. 2. Definitions.

TITLE I-UNITED STATES WEATHER RESEARCH AND FORECASTING

IMPROVEMENT

Sec. 101. Public safety priority.
Sec. 102. Weather research and forecasting innovation. Sec. 103. Tornado warning improvement and extension program.

Sec. 104. Hurricane forecast improvement program. Sec. 105. Weather research and development planning

105. Weather research and development planning.
106. Observing system planning.
107. Observing system simulation experiments.
108. Annual report on computing resources prioritization.
109. United States Weather Research program. Authorization of appropriations.

TITLE II—SUBSEASONAL AND SEASONAL FORECASTING INNOVATION Sec. 201. Improving subseasonal and seasonal forecasts

TITLE III-WEATHER SATELLITE AND DATA INNOVATION

Sec. 301. National Oceanic and Atmospheric Administration satellite and data management.

Commercial weather data Lessary duplication.

TITLE IV—FEDERAL WEATHER COORDINATION

nvironmental Information Services Working Group.

Interagency weather research and forecast innovation coordination.

3. Office of Oceanic and Atmospheric Research and National Weather Service exchange program.
Visiting fellows at National Weather Service.

Warning coordination meteorologists at weather forecast offices of Na-

tional Weather Service.

Improving National Oceanic and Atmospheric Administration communica-

Sec. 401. Environmental Information Services Working Group. Sec. 402. Interagency weather research and forecast innovation coordination.

Sec. 403. Office of Oceanic and Atmospheric Research and National Weather Service exchange program.

Sec. 404. Visiting fellows at National Weather Service.

Sec. 405. Warning coordination meteorologists at weather forecast offices of National Weather Service.

Improving National Oceanic and Atmospheric Administration communication of hazardous weather and water events.

National Oceanic and Atmospheric Administration Weather Ready All Hazards Award Program.

Background Section

Previous April 2013 Version

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

Currently Submitted Version

Background:

In 2012, the NOAA Science Advisory Board (SAB) confirmed the Environmental Information Services Working Group (EISWG) as a standing working group of the SAB. SAB charged EISWG to 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), in order 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, and 4) evaluate NOAA effectiveness in responding to advice received from the EISWG, and the environmental information enterprise as a whole. The EISWG also leverages the knowledge and expertise of the other SAB working groups as necessary.

In 2017 the President signed PL 115-25 into law. *The Weather Research and Forecasting Innovation Act of 2017* affirmed and authorized the EISWG as a standing working group of the SAB and assigned additional, specific charges to the working group.

Additional historical information about the origins of the EISWG can be found in an appendix to this document, Appendix One: Historical Overview of Environmental Information Services Working Group Evolution.

Changes:

- Language about the EISWG's creation and original charge is included.
- Language about the EISWG's authorization under the Weather Research and Forecasting Innovation Act of 2017 was added.
- Background section from previous ToR is now noted as an appendage.

Charge Section

Previous April 2013 Version

Currently Submitted Version

Charge

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, and 4) evaluate NOAA effectiveness in responding to advice received from the EISWG, and the environmental information enterprise as a whole.

Charge:

- (1) to provide advice for prioritizing weather research initiatives at the National Oceanic and Atmospheric Administration to produce real improvement in weather forecasting;
- (2) to provide advice on existing or emerging technologies or techniques that can be found in private industry or the research community that could be incorporated into forecasting at the National Weather Service to improve forecasting skill;
- (3) to identify opportunities to improve communications (A) between weather forecasters, Federal, State, local, tribal, and other emergency management personnel, and the public; and (B) communications and partnerships among the National Oceanic and Atmospheric Administration and the private and academic sectors; and
- (4) to address such other matters as the Science Advisory

Changes:

- Information contained in the charge section of the previous ToR was used to create the current preamble in the Background section of the revised ToR.
- Current charge reflects what is mandated of the EISWG by the Weather Research and Forecasting Innovation Act of 2017.

Membership Section

Previous April 2013 Version

Membership

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. The EISWG members will be appointed for three-year terms with the opportunity for one additional term. Initial appointments will include one-third each 4-year terms, one-third 3-year terms and one-third 2-year terms. The EISWG will provide suggestions of new candidates annually to the NOAA SAB for consideration.

Currently Submitted Version

Membership:

In general, the Working Group shall be composed of leading experts and innovators from all relevant fields of science and engineering including atmospheric chemistry, atmospheric physics, remote sensing, meteorology, hydrology, social and behavioral sciences (including risk communication), electrical engineering, and computer sciences.

In carrying out its charge, the Working Group may organize into subpanels.

The Working Group shall be composed of no fewer than 15 members. Nominees for the Working Group may be forwarded by the Working Group for approval by the Science Advisory Board. Members of the Working Group may choose a chair (or co-chairs) from among their number with approval by the Science Advisory Board. EISWG members will be appointed for one three-year term renewable for one additional three-year term.

Changes:

 The current version contains language that is consistent with what is expressed in the EISWG composition section of the Weather Research and Forecasting Innovation Act of 2017 (PL 115-25).

Reporting Section (new)

 A Reporting section was added to the revised ToR due to the reporting requirement of the working group in the Weather Research and Forecasting Innovation Act of 2017 (PL 115-25).

Reporting:

Not less frequently than once each year, the Working Group shall transmit to the Science Advisory Board, for submission to the Under Secretary, a report on progress made by National Oceanic and Atmospheric Administration in adopting the Working Group's recommendations. The Science Advisory Board shall transmit this report to the Under Secretary. Within 30 days of receipt of such report, the Under Secretary shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a copy of such report.

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PUBLIC LAW 115-25-APR. 18, 2017

- (A) communications between weather forecasters, Federal, State, local, tribal, and other emergency management personnel, and the public: and
- (B) communications and partnerships among the National Oceanic and Atmospheric Administration and the private and academic sectors; and
- (4) to address such other matters as the Science Advisory Board requests of the Working Group. (b) COMPOSITION.—
- (1) IN GENERAL.—The Working Group shall be composed of leading experts and innovators from all relevant fields of science and engineering including atmospheric chemistry, atmospheric physics, meteorology, hydrology, social science, risk communications, electrical engineering, and computer sciences. In carrying out this section, the Working Group may organize into subpanels.
- (2) NUMBER.—The Working Group shall be composed of no fewer than 15 members. Nominees for the Working Group may be forwarded by the Working Group for approval by the Science Advisory Board. Members of the Working Group may choose a chair for the Working Group may
- (c) ANNUAL REPORT.—Not less frequently than once each year, the Working Group shall transmit to the Science Advisory Board for submission to the Under Secretary a report on progress made by National Oceanic and Atmospheric Administration in adopting the Working Group's recommendations. The Science Advisory Board shall transmit this report to the Under Secretary. Within 30 days of receipt of such report, the Under Secretary shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the Bross of Representatives a copy of such report.

Section of P.L. 115-25 requiring EISWG Annual Report

Questions?