



# **NOAA Response to the SAB External Review of the NOAA Ocean Exploration (OE) Program**

**A Presentation to the  
NOAA Science Advisory Board**

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# Outline



- Purpose
- Background
- Overview of the External Panel report
- Response to Recommendations
- Desired Outcome



# Purpose



Provide the SAB a summary of the formal NOAA response to the May 2012 External Panel recommendations



# Background

- First-ever independent review of NOAA's Ocean Exploration Program
- Charge: *“consider past performance, but more importantly, advise NOAA on the future of the Ocean Exploration Program and its leadership of the U.S. ocean exploration enterprise over the next decade”*



# Background

## Panelists asked to consider:

- *Relevance* of the Program to NOAA and the nation;
- Program *performance*, including effectiveness and efficiency;
- *Quality* of Program investments and results; and,
- *Guidance for the future*, including actions to maximize the Program's value to NOAA and the nation



# Panelists

- Panelists selected in consultation with review co-chairs and SAB liaison to the Ocean Exploration Advisory Working Group
- Panelists selected to reflect the inherently multidisciplinary nature of ocean exploration



# Panelists

- Paul Gaffney (Monmouth University\*) co-chair
- Jesse Ausubel (Rockefeller U.) co-chair
- Susan Avery (WHOI)
- Rodey Batiza (NSF)
- Jean May-Brett (LA Dept. of Education)
- James Delgado (Marine Sanctuaries)
- Terry Garcia (National Geographic)



# Panelists

- Cameron Hume (former Amb. to Indonesia)
- Jeffery Karson (Syracuse University)
- James Kendall (BOEM)
- Eric Lindstrom (NASA)
- Marcia McNutt (USGS\*)
- Steven Ramberg (National Defense U.)

\* *At time of review*





# Timeline

- Jan-May 2012: briefings and preparation for Review co-chairs and panelists
- 7-8 May 2012: Review Panel meeting, Silver Spring
- July 2012: Co-chairs brief SAB on recommendations
- November 2012: SAB accepts final report
- July 2013: NOAA provides status report on the response to SAB



# Overview of the External Panel Report



The External Panel noted “an undiminished motivation for ocean exploration” and acknowledged the accomplishments OE has achieved.

The Panel provided ten recommendations to help strengthen OE.



# Recommendation 1



## Recommendation 1 – Set Strategic Goals and Priorities

OE is updating the existing strategic plan with input from other federal agencies and external partners. The plan will:

- integrate the results of *Ocean Exploration 2020: A National Forum*;
- incorporate the authorizing language in 33 USC § 3401-3426, which describes NOAA's statutory authority and responsibilities for ocean exploration; and
- align with the NOAA strategic plan and support the National Ocean Policy Implementation Plans.

A draft plan will be completed by April 2014, and will be provided to the new Ocean Exploration Advisory Board (OEAB) for advice and consultation.



# Recommendation 2



## Recommendation 2 – NOAA Leadership Support

OE has engaged leadership from other NOAA Line Offices and programs in establishing ocean exploration priorities that meet their mission requirements. OE has:

- conducted expeditions that support the NOAA Habitat Blueprint;
- conducted the Atlantic Canyons Undersea Mapping Expeditions, a priority area of interest for NOAA, BOEM and other partners with marine resource management responsibility; and
- engaged multiple NOAA Programs and external partners in planning and executing telepresence-enabled expeditions.



# Recommendation 3

## Recommendation 3 – Conduct a National Forum on Ocean Exploration

*Ocean Exploration 2020: A National Forum* was conducted 19-21 July and was co-hosted by OE and the Aquarium of the Pacific. The primary objectives included:

- defining the attributes of a National Program of Ocean Exploration; and
- identifying strategies to shape and maintain a National Program of Ocean Exploration.

OE used *Ocean Exploration 2020* results to set priorities for FY14 and is using them to help guide planning for FY15 and FY16.

The National Aquarium in Baltimore has agreed to co-host the next National Forum.



# Recommendation 4



## Recommendation 4 – Radical New Management Models

- OE recognizes how critical innovative partnerships are, especially during times of declining federal budgets.
- As a prerequisite for defining new management models, OE provided the Panel additional information on how existing partnerships leverage base funds.
- OE will continue to build on existing partnerships such as the Ocean Exploration Trust, and has recently established an MOU with the Global Foundation for Ocean Exploration, which will provide new opportunities to leverage public and private funds to expand ocean exploration activities.



# Recommendation 5



## Recommendation 5 – Restore the Extramural Grant Program

- OE agrees a targeted exploration competitive grants program is critical and restored such a program in FY14 to advance national priorities.
- OE received over 100 pre-proposals and selected 23 for peer review. That process is ongoing.
- OE expects to offer more than \$3 million in awards this year.
- OE will work with other federal agencies with the objective of establishing a joint federal funding opportunity for FY15 that leverages funding from multiple federal agencies.



# Recommendation 6



Recommendation 6 – Consider Diverting Funds from the NOAA Ship *Okeanos Explorer* to Support an Extramural Grant Program; Identify Costs of Operating the *Okeanos Explorer*.

- A dedicated ship of exploration conducting collaborative expeditions provides important value to NOAA and to the nation.
- The *Okeanos Explorer* (and other dedicated ships of exploration such as the *Nautilus*) offer benefits that complement targeted exploration through grants.
- Baseline characterizations from collaborative expeditions provide critical environmental information and inform services to resources managers and the private sector.
- The cost of operating the *Okeanos Explorer* and its exploration systems is reasonable when compared to alternatives.
- NOAA will continue to operate the *Okeanos Explorer* as a dedicated ship of exploration given benefits and costs.





# Recommendation 7

## Recommendation 7 – Stay Abreast of New Technologies

OE sees its role in technology development as a coordinator:

- helping to identify compelling challenges that attract businesses that develop new technologies;
- providing opportunities to test and evaluate new technologies; and
- adopting new sensors and systems to increase the quantity and quality of the data and information acquired during ocean exploration expeditions.

Subsequent to the review Panel, OE formalized the Task Force on Ocean Exploration and Undersea Research Technology and Infrastructure (TFORT) as required under 33 USC § 3401-3426.



# Recommendation 8

## Recommendation 8 – Complete the Extended Continental Shelf Mapping (ECS) Effort

- OE represents NOAA as the co-lead on this interagency initiative, investing in mapping areas that have never been surveyed, as well as conducting the analyses necessary to determine potential extensions to the US continental shelf under Article 76, United Nations Convention on the Law of the Sea (UNCLOS).
- The interagency Task Force anticipates the bathymetric mapping effort will be complete within the next three years.
- OE intends to use the information to identify and prioritize targets in the ECS, and conduct missions to characterize habitats and marine resources, which is critical for making informed policy decisions within the ECS.



# Recommendation 9



## Recommendation 9 – Develop Icons and Cultivate Champions

- OE intends to use the results of the National Forum to develop a new brand identity for ocean exploration that will stimulate support for a national ocean exploration program.
- OE targeted organizations and experts engaged in public outreach and marketing while soliciting applicants for the Ocean Exploration Advisory Board.



# Recommendation 10



## Recommendation 10 – Ocean Exploration Advisory Board (OEAB)

OE has taken the following steps toward establishing the OEAB as required by 33 USC § 3401-3426:

- prepared a charter, membership balance plan, and other documents defining an OEAB, which FACA and the Department of Commerce require;
- prepared a conflict of interest statement modeled on similar policy prepared by the National Academy of Sciences, with criteria for evaluating whether potential candidates may experience a conflict of interest if they were to serve on the OEAB;
- solicited OEAB candidates through two Federal Register Notices; and
- recommended candidates and submitted for NOAA approval.

OE expects to seat the new OEAB in the summer of 2014



# Thank You

NOAA is pleased to provide this response to the SAB and thanks the External Panel for their efforts and recommendations.