Progress Report: NOAA Response to the SAB
External Review of the NOAA Ocean
Exploration (OE) Program

A Presentation to the
NOAA Science Advisory Board

Craig McLean
Deputy Assistant Administrator
NOAA Office of Oceanic and Atmospheric Research

July 23, 2013
Outline

• Purpose
• Overview of the External Panel report
• Progress on Recommendations
• Desired Outcome
Purpose

Provide the SAB a summary of the progress OE is making in response to the recommendations made by the May 2012 External Panel
Overview of the External Panel Report

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

• The Panel provided ten recommendations to help strengthen OE.
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 the National Forum on Ocean Exploration, held on 19-21 July 2013

• incorporate the authorizing language in 33 USC § 3401-3426, which describes NOAA’s statutory authority and responsibilities for ocean exploration

• align with the NOAA strategic plan and support the National Ocean Policy Implementation Plans

A draft plan will be completed by December 2013, and will be provided to the Ocean Exploration Advisory Board (OEAB) for review.
Recommendation 2

Recommendation 2 – NOAA Leadership Support Required

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
• engaged multiple NOAA Programs and external partners in planning and executing telepresence-enabled expeditions
Recommendation 3 – Conduct a National Forum on Ocean Exploration

The 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—a public-private partnership that includes federal agencies, academia, and the private sector

• identifying strategies and tactics to shape and maintain a National Program of Ocean Exploration that provides incentives for partners to collaborate on planning, executing, and evaluating results

OE will use the results of the National Forum to set priorities for FY14-15, and work with partners to develop a national strategy for ocean exploration
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 MOA with the Global Foundation for Ocean Exploration, which will provide new opportunities to leverage public and private funds to expand ocean exploration activities.

• Examining methods beyond the existing model.
Recommendation 5 – Restore the Extramural Grant Program (Targeted Expeditions)

• OE agrees a competitive grants program is critical, and worked to ensure the FY14 President’s Budget Request included an increase to implement an extramural funding program.

• Under a Continuing Resolution in FY14, OE will seek to reestablish an extramural funding program, and to pursue opportunities to leverage investments in competitive ocean exploration with other federal agencies.
Recommendation 6 – Consider Diverting Funds from the NOAA Ship *Okeanos Explorer* to Support an Extramural Grant Program

OE prepared an assessment of the cost of operating the *Okeanos Explorer* and found it is less expensive than comparable UNOLS vessels.

OE intends to build on this by preparing an assessment of the new telepresence paradigm that evaluates the costs and benefits of:

- engaging hundreds to thousands of shore-based explorers in real-time exploration as opposed to small teams of scientists on ships
- delivering data and information in real- and near real-time as opposed to years later under the traditional competitive model
- providing unprecedented opportunities for formal education and training, as well as engaging many diverse audiences
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

• 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 – Complete the Extended Continental Shelf Mapping (ECS) Effort

• OE represents NOAA as the 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 – 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 – 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

OE expects to meet its target of seating the new OEAB in January 2014
Desired Outcome

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

NOAA will provide the final response document to the SAB at the November meeting.
Backup Slide
In addition to the final report, OE can provide the SAB:

- A first draft of the new OE Strategic Plan
- Testimonials of support for ocean exploration from NOAA leaders
- A summary report of the National Forum
- The Request for Proposals for an FY14 extramural grant program
- The TFORT priorities plan
- A roadmap for completing ECS
NOAA prepared an assessment of the cost of operating the NOAA Ship *Okeanos Explorer* at the request of the External Panel and found it is less expensive than comparable vessels, and delivers more:

<table>
<thead>
<tr>
<th>Vessel</th>
<th>$K/ Exploration Mapping Day</th>
<th>$K/ ROV Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAA Ship <em>Okeanos Explorer</em></td>
<td>30.1</td>
<td>49.0</td>
</tr>
<tr>
<td>R/V Ka`imikai-o-Kanaloa</td>
<td>37.5</td>
<td>68.8</td>
</tr>
<tr>
<td>R/V Thomas G. Thompson</td>
<td>38.5</td>
<td>69.8</td>
</tr>
<tr>
<td>R/V Kilo Moana</td>
<td>42.5</td>
<td>73.8</td>
</tr>
</tbody>
</table>