

Ocean Exploration Advisory Board
Meeting 27
October 9 and 10, 2024
NOAA SSMC3, Room 4527

Agenda

Meeting Objective: OEAB Members will conduct a program review to consider the past five years of NOAA Ocean Exploration’s program activities, with a focus on three critical areas:

- 1) The development of a coordinated national program of ocean exploration;
- 2) The promotion of technological innovations and applications, and
- 3) The promotion of public understanding and engagement with ocean exploration topics.

Meeting Outcomes: 1) OEAB members will hear from NOAA Ocean Exploration staff about the Quality, Relevance, and Performance of the organization’s scientific, operational, and programmatic activities over the previous 5-year rating period and will be prepared to provide findings and recommendations, to NOAA executive-level leadership, for how the Program can improve its mission functions.

Required Preparation Work for OEAB Members: Extensive background materials were assembled for Board Members to review prior to the date of the meeting. Those materials can be found [HERE](#) and include:

- **Pre-recorded presentations** by NOAA Ocean Exploration staff detailing various aspects of the Program’s objectives, activities, and accomplishments.
- **Fact Sheets** and one-page overview documents that highlight, at a high level, the broad strokes of a particular initiative.
- **An array of background documents;** reports, guidance documents, reviews, papers, and historical presentations were cataloged to provide Members with easy access to the appropriate reference materials

It is essential that Members review the materials aligned with their assigned Focus Area prior to the date of the meeting (Oct 9 and 10).

Given the extensive portfolio of collected materials, Members are advised to focus their attention on the pre-recorded presentations. These presentations form the backbone of NOAA Ocean Exploration’s messaging for the program review and should be the center of preparations for the meeting.

Location: NOAA Silver Spring Campus, 1315 East West Hwy, Silver Spring, MD

Access: From street level, take elevators to Level “1” and present a photo ID to clear security. Then, from Level 1 take elevators to 4th floor, Room 4527.

Attendees without government IDs must be escorted to the room. Ocean Exploration staff will be onsite and also can be reached at: Joanne Flanders (240) 620-3808 and Kristen Crossett (301) 325-2113.

Virtual Access:

GoogleMeet meet.google.com/tfi-hcxb-wgs
 (US) +1 240-794-4114 PIN: 960 953 898#

NOAA Guest Wi-Fi

After entering the meeting room, visitors can request access to the [Guest Wi-Fi](#) and will be asked to enter a Sponsor’s name. Joanne Flanders will serve as a sponsor. Detailed access instructions are [here](#).

Notes:

- [Notes](#)

Retreat Notes:

Day 1 October 9, 2024

9:00 am - 9:10 am	<p>Review the Agenda and Opening Remarks <u>Purpose:</u> Bring the event to order, set expectations, define event outcomes, and welcome participants <u>Outcome:</u> All participants will be prepared to work productively during the retreat <u>Process:</u> Oral remarks</p>	<p>Dr. Vicki Ferrini, Chair David Turner, DFO</p>
9:10 am - 9:15 am	<p>Approve Minutes from Meeting #26 <u>Purpose:</u> Members review, validate, and approve the Minutes from the previous meeting. <u>Outcome:</u> Members vote on the Minutes document being an accurate representation of the discussion at the previous meeting <u>Process:</u> Oral remarks leading to a voice vote</p> <ul style="list-style-type: none"> • Minutes: Meeting #26 	<p>David Turner, DFO</p>
9:15 am - 9:45 am	<p>Preview Recommendations and Advice Letter to Dr. Spinrad <u>Purpose:</u> Members will have time to discuss the form and content of the draft advice letter for Dr. Spinrad that was developed in response to the May 2024 Board Meeting <u>Outcome:</u> Members will provide feedback and approve the document for submission to the NOAA Administrator</p>	<p>Dr. Vicki Ferrini, Chair David Turner, DFO</p>

	<p><u>Process:</u> Facilitated Discussion</p> <ul style="list-style-type: none"> • Minutes Meeting #25 • Draft Advice Letter • Recommendation Statement 	
9:45 am - 10:00 am	<p>Review Results from FY2020 Program Review and Define the Evaluation Criteria for the FY2025 Review</p> <p><u>Purpose:</u> To provide Board Members with some background on the FY2020 Program Review, how that process influenced NOAA Ocean Exploration planning and operations, and to review the evaluation criteria for the current review cycle.</p> <p><u>Outcome:</u> Attendees will 1) have an appreciation for how the results of the previous program review were incorporated into the management of NOAA Ocean Exploration and 2) validate a shared understanding of the evaluation criteria that will be applied to the Program in the FY25 cycle.</p> <p><u>Process:</u> Short Presentation followed by Question and Answer session.</p>	David Turner, Senior Advisor, NOAA Ocean Exploration
10:00 am - 10:45 am	<p>NOAA Ocean Exploration: Director’s Comments</p> <p><u>Purpose:</u> To present a strategic overview of the Program’s role in driving national ocean exploration initiatives; to reflect on past progress; and to highlight the opportunities for future success</p> <p><u>Outcome:</u> Board members will gain a comprehensive understanding of NOAA Ocean Exploration’s operational strengths, technological innovations, and strategic future direction. This information will support the Board’s ability to provide actionable feedback and recommendations for enhancing the program’s impact in the next five years.</p> <p><u>Process:</u> Short Presentation followed by Question and Answer session.</p>	Jeremy Weirich, Director, NOAA Ocean Exploration
10:45 pm - 11:00 am	Break	
11:00 am - 11:45 am	<p>Focus Area #1: “Ensuring a Coordinated Program of National Ocean Exploration” (Quality)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p>	Dr. Vicki Ferrini, Chair Jeremy Weirich, Director, NOAA Ocean Exploration

	<p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> • Review Question: How well has NOAA Ocean Exploration led efforts to coordinate and integrate exploration activities across various stakeholders, ensuring alignment with the Nation’s ocean exploration goals? • Review Question: How effective has the program been in establishing and maintaining high operational standards across the ocean exploration community (i.e. shared Standard Operating Procedures (SOPs), best practices, and unified national exploration efforts)? • Review Question: How well has NOAA Ocean Exploration demonstrated leadership in advancing and managing data as a strategic asset ensuring that data are high-quality, accessible, and preserved for long-term scientific and public use? 	<p>Rachel Medley, Chief, Expeditions and Exploration Division</p> <p>Open Board Discussion</p>
<p>11:45 am - 12:15 pm</p>	<p>Focus Area #1: “Ensuring a Coordinated Program of National Ocean Exploration” (Relevance)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p> <p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> • Review Question: How well have NOAA Ocean Exploration’s activities aligned with and supported the strategic goals and measures of success outlined in national and agency-level strategies, particularly in addressing key strategic guidance (e.g. NOMECE, OAR, and the OER strategy)? • Review Question: How successful has NOAA Ocean Exploration been at engaging multi-sector and multi-disciplinary stakeholders to address and advance national 	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p> <p>Rachel Medley, Chief, Expeditions and Exploration Division</p> <p>Open Board Discussion</p>

	and international initiatives that advance Ocean Exploration?	
12:15 pm - 1:15 pm	Lunch	
1:15 pm - 2:00 pm	<p>Focus Area #1: “Ensuring a Coordinated Program of National Ocean Exploration” (Performance)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p> <p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> • Review Question: Have metrics collected by NOAA Ocean Exploration demonstrated contributions and progress to achieving national and international ocean mapping and exploration initiatives? • Review Question: What tangible impacts has a coordinated national program on ocean exploration had on the state of ocean exploration, particularly in terms of advancing scientific understanding, operational capabilities, and contributions to the growth of Ocean Exploration and its value to the ocean community both domestic and international? 	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p> <p>Rachel Medley, Chief, Expeditions and Exploration Division</p> <p>Open Board Discussion</p>
2:00 pm - 2:45 pm	<p>Focus Area #3: Enhancing Public Engagement and Education (Quality)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p> <p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> • Review Question: How effectively has NOAA Ocean Exploration’s Education Program 	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p> <p>Kristen Crossett,</p>

	<p>developed and delivered high-value educational content while being accessible, engaging, and tailored to the needs of students, educators, and the general public?</p> <ul style="list-style-type: none"> ● Review Question: How well has NOAA Ocean Exploration tailored its outreach efforts to engage and support historically underrepresented communities? 	<p>Chief, Outreach and Education Division</p> <p>Open Board Discussion</p>
2:45 pm - 3:00 pm	Break	
3:00 pm - 3:45 pm	<p>Focus Area #3: Enhancing Public Engagement and Education (Relevance)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p> <p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> ● Review Question: How effectively have NOAA Ocean Exploration’s educational strategies engaged audiences with varying levels of scientific literacy, ensuring that content is accessible, inclusive, and relevant to all, particularly underserved communities? ● Review Question: How well have collaborations with educational institutions, non-profits, and industry partners enhanced the reach, effectiveness, and DEIA objectives of NOAA Ocean Exploration’s public engagement? 	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p> <p>Kristen Crossett, Chief, Outreach and Education Division</p> <p>Open Board Discussion</p>
3:45 pm - 4:00 pm	<p>Adjourn the Meeting for Day 1</p> <p><u>Purpose:</u> Close out the events of Day 1, review the major developments, decisions, and action items, and set expectations for next steps</p> <p><u>Outcome:</u> All participants will have a shared understanding of the major decisions made throughout the day</p> <p><u>Process:</u> Oral remarks</p>	<p>Dr. Vicki Ferrini, Chair</p> <p>David Turner, DFO</p>

4:00 pm - 8:00 pm	Optional Happy Hour Mi Rancho 8701 Ramsey Avenue, Silver Spring, MD	
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Day 2 October 10, 2024

9:00 am - 9:15 am	<p>Opening Remarks</p> <p><u>Purpose:</u> Bring the event to order, set expectations, define event outcomes, and welcome participants</p> <p><u>Outcome:</u> All participants will be prepared to work productively during the retreat</p> <p><u>Process:</u> Oral remarks</p>	<p>Dr. Vicki Ferrini, Chair</p> <p>David Turner, DFO</p>
9:15 am - 9:45 am	<p>Focus Area #3: Enhancing Public Engagement and Education (Performance)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p> <p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> • Review Question: How effectively has NOAA Ocean Exploration measured and demonstrated the impact of its educational programs on public awareness, understanding, and behaviors related to ocean science and conservation? • Review Question: How successful have NOAA Ocean Exploration’s early career opportunities, internships, and professional development programs been in advancing DEIA and fostering a more inclusive and diverse ocean science workforce. 	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p> <p>Kristen Crossett, Chief, Outreach and Education Division</p> <p>Open Board Discussion</p>
9:45 am - 10:45 am	<p>Focus Area #2: Advancing Technological Innovation in Ocean Exploration (Quality)</p> <p><u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p> <p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p>	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p>

	<ul style="list-style-type: none"> ● Review Question: How effectively has NOAA Ocean Exploration identified promising new technologies, platforms, and data management tools? ● Review Question: How has NOAA Ocean Exploration approached developing technologies and tools for integrating and managing large-scale video data from ocean exploration activities? 	<p>Mashkoor Malik, Chief, Science and Technology Division</p> <p>Open Board Discussion</p>
10:45 am - 11:00 am	Break	
11:00 am - 12:00 pm	<p>Focus Area #2: Advancing Technological Innovation in Ocean Exploration (Relevance) <u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area <u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area <u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> ● Alignment with Research and Operational Needs: Consider how technological innovations have been aligned with the most pressing challenges and requirements among the ocean exploration community. ● Revolutionizing Data Collection: Assess how well NOAA Ocean Exploration’s investments in emerging technologies have contributed to the improved collection and processing of ocean exploration data, particularly in improving efficiency, accuracy, and the ability to analyze data in real-time. 	<p>Dr. Vicki Ferrini, Chair</p> <p>Jeremy Weirich, Director, NOAA Ocean Exploration</p> <p>Mashkoor Malik, Chief, Science and Technology Division</p> <p>Open Board Discussion</p>
12:00 pm - 1:00 pm	Lunch	
1:00 pm - 1:45 pm	<p>Focus Area #2: Advancing Technological Innovation in Ocean Exploration (Performance) <u>Purpose:</u> Members have the opportunity to ask questions of OER staff and to discuss the issues and topics associated with this Focus Area</p>	<p>Dr. Vicki Ferrini, Chair</p>

	<p><u>Outcome:</u> Board members will have the information they need to provide meaningful findings and recommendations about this Focus Area</p> <p><u>Process:</u> Facilitated Discussion and Q&A</p> <ul style="list-style-type: none"> • High-Risk, High-Reward Technological Innovation: Assess how well NOAA Ocean Exploration invested in high-risk, high-reward technologies, and how well has the program managed the balance between the risks of these innovations and their potential to achieve transformative breakthroughs in ocean exploration. • Enhancements to Operational Capabilities: Reflect on how well NOAA Ocean Exploration’s investments in advanced technologies have improved the program’s operational capabilities, and to what extent have these enhancements enabled the achievement of key exploration and research goals, while also driving innovation across the broader ocean exploration community. 	<p>Jennifer Lukens, Deputy Director NOAA Ocean Exploration</p> <p>Mashkoor Malik, Chief, Science and Technology Division</p> <p>Open Board Discussion</p>
1:45 pm - 2:45 pm	<p>Working Session for the Board Members: Initial Reactions and Deliberations</p> <p><u>Purpose:</u> Set aside time for OEAB Members to discuss the events of the meeting and begin developing potential findings and recommendations</p> <p><u>Outcome:</u> Board members will have an opportunity to formally raise any questions, observations, or concerns</p> <p><u>Process:</u> Open Discussion</p>	<p>Dr. Vicki Ferrini, Chair</p> <p>Open Board Discussion</p>
2:45 pm - 3:00 pm	<p>Public Comment Period</p>	<p>David Turner, DFO</p>
3:00 pm	<p>Adjourn the Meeting</p> <p><u>Purpose:</u> Close out the entire meeting, review the major developments, decisions, and action items, and set expectations for next steps</p> <p><u>Outcome:</u> All participants will have a shared understanding of major decisions made over the course of the meeting, outstanding action items to be completed, POCs for those action items, and the timeline for completion</p> <p><u>Process:</u> Oral remarks</p>	<p>Dr. Vicki Ferrini, Chair</p> <p>David Turner, DFO</p>