Engaging the Public in Ocean Exploration

David McKinnnie, Engagement Division Lead
Emily Crum
Engagement Focus

Target Audiences

• Ocean-interested public
• Science community
• Resource managers and decision makers
• Educators
• Internal NOAA
Engagement Groups

- Communications and Media
- Education
- Special Projects
  - National Ocean Exploration Forums
  - Publications
  - etc.
- Diversity and Inclusion
- Technical (Web) Services
National Forum

2013: Ocean Exploration 2020
2014: NOAA and Ocean Exploration
2016: Beyond the Ships
2017: Ocean Exploration in Sea of Data
2018: All Hands on Deck
OER Education Review Response: Implementation Update
Leveraging partnerships to reach all age groups across the education spectrum.
I. Promote and Strengthen the Community of Ocean Exploration Programs

• OET-SOI-OER-NOAA Education “alliance” “Cuerpo de Exploración”
• Octonauts and The Deep
• Ocean Discovery Institute focus on underserved communities
• Inner Space Center new livestreaming/live interaction approaches
II. Enhance Value of Expeditions to the Education Community

- SOI-OET-OER Website with shared education resources, including ship schedules and other information about expeditions (July 2020)
- Increase number and format of live interactions. Not ship schedule dependent
- Linking expedition results to educators in underserved communities (Puerto Rico, American Samoa)
III. Enhance Professional Development Workshops to Increase Impact

- Expert observers engaged to advise on ways workshops can incorporate current pedagogy, standards, and learning. (First workshop using recommendations two weeks ago).
- Regular updates to workshop materials to reflect current expedition results, other information; pending revamp of OER education materials (with outside facilitation, OET, SOI).
- New evaluator hired through NMSF to assess and inform future implementation using qualitative approaches as well as quantitative measures.
Education Review Recommendations

IV. Improve Organization of Educational Materials and Website

• Rebuilding OER website and reorganizing Education content to improve user experience.
• Strengthening education focus of expedition videos and other engagement products.
• Increasing engagement of education community through Facebook
• Launch cooperative ocean exploration education OER-SOI-OET web space on (noaa.gov)
V. Update/Develop Educational Materials to Reflect Current Research and Standards

**Short term**
- Rebuild “theme pages” into modular packages based on specific topics/phenomena

**Medium Term (2019-2021)**
- Redesign OER product line in collaboration with OET and SOI using design services to ensure education content has maximum impact
- Build out new OER-OER-SOI education website with new content
VI. Expand the Ocean Exploration Education Alliance Network, with a Particular Emphasis on Inland States

- Since the review, added new Alliance partners:
  - Albuquerque BioPark, NM
  - Great Lakes Aquarium, Duluth, MN
  - EcoExploratorio, San Juan, PR
  - American Samoa through Hawaii Alliance Partner
  - US Virgin Islands, Guam, and CNMI to be added
  - NMSF to help identify other inland opportunities (such as Detroit and Denver)
VII. Enhance diversity in program participants

Explore more effective approaches to educators serving Spanish-speaking, Native American, and Pacific Island communities

- Using existing relationships and experience

**Spanish-Speaking**

- Puerto Rico (linked to 2015 and 2018 expeditions)
- Ocean Discovery Institute
- Translation, new services

**Pacific Island**

- Teacher workshops in American Samoa through Waikiki Aquarium
- Potential to expand to CNMI and Guam
- Leverage CAPSTONE legacy
“Ocean Exploration Act of 2009”

To the extent appropriate, the Administrator shall seek to facilitate coordination of data and information management systems, outreach and education programs to improve public understanding of ocean and coastal resources, and development and transfer of technologies to facilitate ocean and undersea research and exploration.
Establishing an OER Identity
Visual Identity Guide
The visual language for all OER products, print and digital.

1. Introduction

Consistent branding helps to promote our efforts by clearly indicating our office as the source of information. We do great work and these guidelines were created to maximize the impact of that work. The typefaces, colors, and design assets in this style guide are your starting point and can be applied to all OER produced collateral, including:

- External Documents
- Fact sheets
- PowerPoint presentations
- Maps
- Posters

Logo files and official Word and PowerPoint templates are available on our OER Google site at https://sites.google.com/a/noaa.gov/oar-oer/communications-guidance

If you need help creating a more complex document for external publication or if you have any questions about applying these guidelines, please contact Matt King at matthew.king@noaa.gov.
OER Messages

Ocean exploration is valuable

OER is leading national efforts to explore America’s deep ocean

OER applies the tools and expertise needed to explore the deep ocean
Ocean Exploration
A National Priority

A healthy ocean and its resources are critical to a strong America, yet significant gaps exist in our basic understanding of U.S. deep waters and seafloor and the resources they hold. By leading national efforts to explore our ocean and making ocean exploration more accessible, the NOAA Office of Ocean Exploration and Research (OER) is filling gaps in the basic understanding of U.S. deep waters and seafloor, providing critical deep-ocean data, information, and awareness needed to sustain and accelerate the economy, health, and security of our nation.

EXPLORE

Windows to the Deep 2019
EX1903 Leg 2 (EX1903L2) Cruise Report
Southeast U.S. Continental Margin
Port Canaveral, FL to Nantucket, MA
(June 20 – July 12, 2019)

EXPERIENCE

UNDERSTAND

Watching in 3D

Windows to the Deep 2019: Exploration of the Deep-Sea Habitats of the Southeastern United States (EX1903 L2)
Evolving OER’s Online Presence
Why would a strong Loop Current affect our ability to deploy remotely operated vehicle *Deep Discoverer* on some expeditions and not others?
Hunting for Alien Life at the Bottom of the Arctic Ocean

From September 19-October 16, a team of oceanographers will conduct HACON: Hot Vents in an Ice-covered Ocean, a mission to explore in detail for the first time a hydrothermal vent field in the Arctic Ocean.
Fiscal Year 2019 Website Content

**Expedition coverage:** 18 total; 10 “full” and 8 “summary”

**OER Updates:** 9 stories added

**Top 3 content sections:**
- Ocean Facts
- Expeditions (including *Okeanos*)
- Education

**Devices:** 54% Desktop | 40% Mobile | 6% Tablet

**Sources:** 56% Search Engines | 25% Social Media
Website Metrics

Fiscal Year 2019: ~4.3 million page views total

Page views
Average time on page
FY2019 Metrics:

- ~85,700 subscribers
- +14 million minutes of view time
- ~535,000 live video views

Top 3 Videos:
- Giant Squid Filmed in America’s Backyard
- Titanic 2004
- Gulf of Mexico 2012 Shipwreck Discovery

youtube.com/user/oceanexplorergov/
FY2019 Metrics:

~143,000 likes  |  7% increase  |  total reach: +3.5 million
FY2019 Metrics:

~188,300 followers
~50 tweets per month
~6.9 million impressions | ~1.2% engagement rate
FY2019 Metrics:

~72,200 likes | +7 million impressions
Watch live: NOAA’s deep-sea expedition to seamounts and canyons off U.S., Canada

Tune in online August 28 through September 14

Updated: August 26, 2019. Starting date for live video was changed to August 28 (weather permitting) from August 27 due to a change in weather conditions.

August 26, 2019 — Get ready: We’ve got more “must-see TV” of mysterious creatures and features of the deep sea coming your way.

Watch: 'Octonauts' make a visit to NOAA Ship Okeanos Explorer
June 26, 2019

See this? Giant squid in Gulf of Mexico is captured on video for first time
June 21, 2019

Watch live: NOAA expedition to unexplored waters off U.S. Southeast coast
June 20, 2019
Building Engagement Support for Okeanos Expeditions
2017 American Samoa Expedition:
Suesuega o le Moana o Amerika Samoa
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Engagement Plan
• Team members
• Key spokespeople
• Key messages
• Audiences
• Media strategy
• Events and activities
• Web plan
• Social media plan
• Hard copy materials
• Internal communications
• Event calendar
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Engagement Planning Team Members

Ocean Explorer and Research

NOAA Fisheries

National Marine Sanctuaries
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Key Messages

- Seamounts as hotspots of biodiversity
- Deep and shallow water connections
- Assessing past and future geohazards
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Community Events
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Web and Social Media

Landslide Hazards in Samoa
February 20, 2017 | by Jasper Hunter

Explosive eruptions, such as those from hotspot volcanoes, may generate volcanic sediment layers that form weak zones between the predominant submarine pillow lavas and/or lava flows, leading to volcanic flank failure. This has led to the common occurrence of large-scale (mainly submarine) landslides around volcanic ocean islands, as has been defined in areas such as Hawai‘i and the Canary Islands.

Read more

Cosmic Jellyfish: February 21, 2017
NOAA Office of Ocean Exploration and Research
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Communication Products
2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

Media Coverage

CNN  CBS NEWS  FOX NEWS

SCIENTIFIC AMERICAN

samoa news

HUFFPOST  GIZMODO

TALANEI News & more for American Samoa
Current State of Engagement Planning
Looking Ahead...What’s Next?

• Develop and implement a comprehensive media strategy
• Enhance use of social media
• Leverage web content services
• Leverage web technical services
• Enhance approach to planning public events and interactions