



The NOAA – Smithsonian Partnership Memorandum of Understanding Renewal



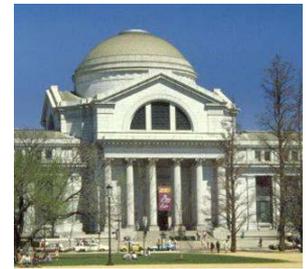
*A Presentation to the
NOAA Education Council*

June 17, 2015

*Given by Joanne Flanders
NOAA - NMNH Liaison
OAR Office of Ocean Exploration and Research*



Purpose



The purpose of this presentation is to inform NOAA's Education Council about the effort to renew the partnership MOU between NOAA and the Smithsonian Institution's National Museum of Natural History and to provide the Council with an opportunity to provide recommendations and input on a renewed MOU.



Partnership Background



The Smithsonian Ocean Initiative (OI), and NOAA support for the OI, was a recommendation of the U.S. Ocean Action Plan – the Bush Administration’s Response to the U.S. Commission on Ocean Policy.

It is designed to bring science and education together and increase ocean awareness and includes an:

- ❖ Exhibit on the global ocean called Sant Ocean Hall at the National Museum of Natural History (NMNH)
- ❖ Online Ocean Education Program via the Smithsonian Ocean Portal website
- ❖ Enhanced Marine Science Program led by an endowed Sant Chair for Marine Science
- ❖ Ocean Endowment to ensure the Hall and Education Program reflect the latest and best ocean science.

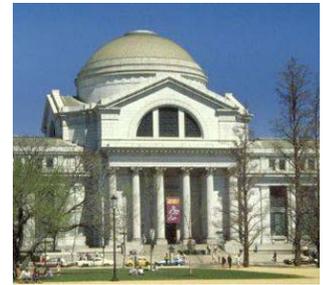
NOAA received \$22.6M in congressional earmarks from FY03 to 05 in support of the OI and was the Smithsonian’s key partner in design/development of the Hall and Ocean Portal website prototype.

Sant Ocean Hall opened in Sep. 2008 as a permanent (25+ years) Smithsonian exhibit.

The interagency partnership is formalized in an MOU which describes types of activities the institutions may want to build upon, collaborate on, or develop anew, related to marine research, collections, and ocean science education and outreach. The MOU expires in Nov. 2015.



MOU Status and Process



- NOAA and NMNH are considering how to characterize the partnership in a renewed MOU.
- On June 3rd, Sant (NMNH) Director Kirk Johnson met with his staff to discuss the museum's preferred approach to a renewed MOU and topics they want included. They considered whether science-related efforts should be in a separate MOU and decided the renewed MOU should continue to be all encompassing and reflect education, outreach and science-related efforts, including research and collections.
- NMNH is also developing a 5-year strategic plan, with input from all departments, which will determine priorities for the next five years. It is expected to be complete by Sep. 2015.
- Dr. David J. Skorton, MD, has been named 13th Secretary of the Smithsonian, effective July 2015. Ratification of the strategic plan is expected to take "some time" given timing of this leadership transition. It is anticipated final ratification will not alter intent of the renewed NOAA NMNH MOU, which both institutions want to have complete by Nov. 2015.
- NOAA will draft the 1st version of the MOU to which the NMNH will respond and contribute to.
- The new MOU will be an umbrella document with broad-brush language and follow-on collaborative projects can be characterized in detailed implementing agreements.
- NOAA input for the new MOU has/is being sought via LO/SO Ocean Initiative representatives used to vet NOAA-wide OI related requests, the NOAA Research and Education Councils, and the NEC.
- Education Council input can be incorporated into the 1st version of the MOU, including references to metrics and output measures.



NOAA - NMNH collaborative efforts to date include

Education, Exhibits, Outreach & Communications

Workshops/Summits: National Hurricane Museum and Science Center educational goals workshop, professional development offerings, Ocean Education Summit.

Docent Continuing Education: lectures for museum volunteers.

YES! Youth Engagement Through Science: career immersion program instruction and round table discussion e.g. ocean acidification and climate change.

The Smithsonian Associates: instructor and lecturers e.g. Deepwater Horizon/Lafayette Parish School System, The Return Visit to Galapagos Rift Rose Garden Vent Site/25th Anniversary.

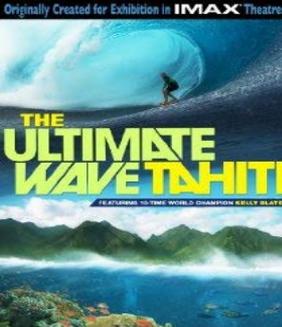
Smithsonian Science Education Center: weather modeling app promotion offering.

New Exhibits & Exhibit Updates: project management and exhibit idea proposal e.g. RU27 Scarlet Knight Glider exhibit, Living on Ocean Planet Gallery upgrade.

Ocean Today Kiosks: 2.12M content views (9/08-1/15) w/ over 8M views to all 43 kiosks since inception.

Video Production: expertise, content and production support for new SOS climate change video.

Q?rius: NOAA Expert is In and Teacher-at-Sea speakers, interpreted live-feed programs.



NOAA - NMNH collaborative efforts to date include

Ocean Portal: NOAA content for Smithsonian-hosted website, editorial board members.

Public Programs: NOAA Scientist is In speakers.

Festivals: staffing and expertise e.g. Coral, Folklife, World Ocean Day/COPUS Year of Science.

Special Events Initiation: Sustainable Seafood Weekend, Sea Grant Experts, Arctic Spring.

Arts: Second Saturday Arts & Science program proposals and event staffing.

IMAX Films: scientific accuracy reviews, educator's guide content.

“Jukebox” Project: Sounds of the Southern Ocean.

Smithsonian Business Ventures Publications: authoring, scientific accuracy reviews e.g. *Smithsonian Ocean – Our Water, Our World and Hidden Depths – Atlas of the Oceans*.

Science/Research

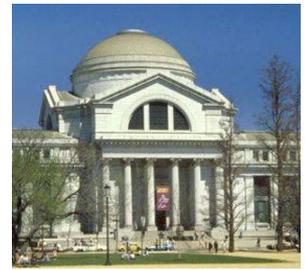
Museum Support Center: genomics lab facility tour and preliminary discussion.

Joint Science Expedition: preliminary discussion.

Science Meeting Collaboration: co-hosted 2008 U.S. Coral Reef Task Force Meeting.



Receipt, Distribution and Response to NMNH OI Opportunities and Queries



NOAA cross-agency POCs – a clearinghouse approach

- NOAA - NMNH Liaison: Joanne Flanders
- OEd & NOAA Headquarters: Carrie McDougall
- NESDIS: Nina Jackson
- NMFS: Courtney Gerstenmaier/Kate Naughten
- NOS: Carol Kavanagh
- NWS: Deborah Jones
- OAR: Rochelle Plutchak
- NOAA Communications & External Affairs: Ben Sherman
- OMAO: David Hall
- NOAA – NMNH Ocean Portal Liaison: *Vacancy*



NMNH Education & Outreach Leadership and Structure



Shari Werb, Assistant Director for Education and Outreach

Rebecca Bray, Chief of Experience Design and Evaluation (*creation and assessment of experiences for museum visitors, youth, families, and schools, including those held in Q?rius, The Carolyn W. Whitney Science Education Center*)

Trish Mace, Manager Ocean Education and liaison to NOAA

Jen Collins, Ocean Education

Colleen Marzec, Chief of Content Development and Strategy (*online experiences*)

Barbara Stauffer, Chief of Community Engagement (*community partners, events, adult audiences*)

Donna Tuggle, Chief of Learning Venues and Visitor Experience (*volunteer management, visitors services and managing learning spaces, including Q?rius*)

Nancy Knowlton, Sant Chair for Marine Science and oversees Ocean Portal website: <http://ocean.si.edu/>

Emily Frost, Ocean Portal co-Producer

Hannah Waters, Ocean Portal co-Producer

High Level NMNH FY15 Education & Outreach Priorities

NMNH Education and Outreach Office – Fiscal Year 2015 Goals
THRILL, ENGAGE, AND ENLIGHTEN OUR MANY AUDIENCES
Plan and deliver innovative programs and products for Museum visitors, youth, schools, families and adults
Increase frequency of encounters with scientists, collections objects, technology and current research
Expand and improve K-12 school science programs
Strengthen diverse youth/teen science learning and communication opportunities
Produce and expand and local adults and family public programming
Increase the quality of services for Museum Visitors (Visitor Services and Volunteers)
Improve Museum visitor information from staff, volunteers, and signage
Pilot at least 2 new programs and implement new practices that are responsive to the needs of diverse Museum visitors
Standardize and expand the Adult public-facing volunteer program
Evaluate and refine exhibitions and programs and share findings broadly
Conduct user testing and evaluation to guide Museum program improvements and development
Provide leadership in the science education and science communication fields through publishing, presentations, and service on advisory boards



Select Areas Provided by NMNH for Possible E&O Collaboration with NOAA



Platforms

- Expert-led programs for museum visitors in Sant Ocean Hall and Q?rius
- Events such as Family Festivals, teen career events and evening events for Young Adult Professionals
- Exhibit based experiences, including Ocean Today Kiosk and Science On a Sphere
- Ocean Portal
- Programs for school groups/teachers
- Citizen Science

Audience Priorities for collaboration: museum visitors, local teens, families, adults, students and teachers (local and online)

- Reach to NOAA audiences e.g. NERRS, Sanctuaries, online workshops

Content

- Ocean literacy and human connections e.g. fisheries, coastal habitats, resilience and management, ocean exploration, protected areas, marine debris
- Climate change education and literacy e.g. climate change/OA content, activity development, programming, training, workshops
- Feeds from ships and research stations



NOAA MOU Renewal Input to Date



Line Office

- Clarification is needed on whether the phrase “ocean processes” should be interpreted to include “coastal processes” and “ocean-atmosphere interaction”.

Research Council

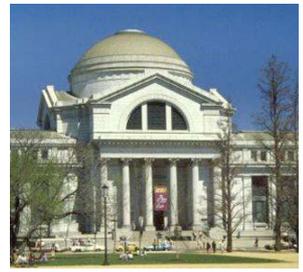
- The NMFS National Systematics Lab MOU, which is being renewed given a recent NMFS reorganization, should continue to be handled via a separate document although references to the NSL agreement may be referenced in the renewed MOU.
- Sant Ocean Hall should reflect the best and latest in climate science and our changing ocean including the topics of ocean acidification, ocean warming, anoxia, and other related topics.
- The 2010 Deepwater Horizon spill in the Gulf of Mexico was the largest accidental release of crude oil in modern history. It was not included in the Hall’s content due to the exhibit’s 2008 opening date. Consideration should be given on ways to include the topic, its cleanup, and after effects.

Additional Research Council Input:

- Consider looking into opportunities for NOAA content in the National Air and Space Museum.
- Consider exploring NMNH/Smithsonian interest in NOAA-held meteorological instruments/objects for exhibits.



Background: Current MOU Education Relevant References



Pursuant to MOU

Parties may build upon existing collaboration on ocean science and climate literacy and develop new areas of collaboration in marine research, marine collections, and ocean science education and outreach. Both organizations are interested in expanding and building upon their mutual interest in marine research, education and outreach.

Overall collaboration goals are

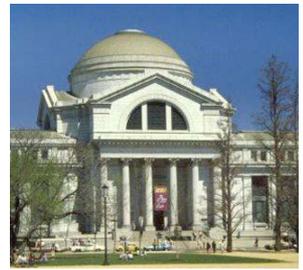
To collaborate on education and outreach projects, exhibits and computer interactive exhibitry with the purpose of promoting environmental stewardship and enhancing the awareness, understanding, and engagement of the public with respect to key environmental science and technology subjects under NOAA and NMNH's mission...

Future projects may include

Providing ocean science education leadership through the management and integration of a broad network of partnerships and programs including design, development and implementation of informal and formal ocean science education programs and public programming activities including jointly targeting efforts on specific audiences, such as science teachers, family groups, and the science-attentive general public.



Background: Current MOU Education Relevant References



Future projects may include (cont.)

Developing educational materials that support each institution's education efforts, such as teacher professional development workshops; new education materials that reflect the efforts of both institutions, the Ocean Literacy essential principles, and ocean-relevant Climate Literacy Essential principles...;

Collaboration with the Ocean Portal team of producers... to adapt current and/or develop new NOAA content for use on the Ocean Portal Website;

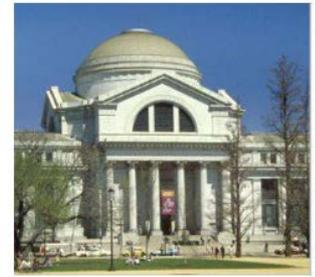
Support for and collaboration on fora and other communication tools to support the Ocean Initiative collaboration including lecture series, books, educational film series, workshops, docent programs, and special events; and,

Collaboration on additional relevant educational and outreach activities.



Background

NMNH Science, Research, Collections



- NMNH science departments include: Anthropology, Botany, Entomology, Invertebrate Zoology, Mineral Sciences, Paleobiology, Vertebrate Zoology (birds, fishes, mammals, amphibians & reptiles), and a Collections Program.
- Government agencies onsite include: DOI/USGS Biological Resources Division, USDA/Systematic Entomology Lab, NMFS National Systematics Lab, and the DOD Walter Reed Biosystematics Unit.
- NMNH collections form the largest, most comprehensive natural history collection in the world and the museum has a state-of-the-art collections storage facility in Suitland, Md.
- Labs & Resources: Research Centers and Stations (Marine) e.g. Smithsonian Marine Station at Ft. Pierce, NMNH Biorepository, Global Genome Initiative, Global Genome Biodiversity Network, Laboratories of Analytical Biology, Informatics and Collections, and the Field Book Project.
- MarineGEO & Tennenbaum Marine Observatories Network: SI's international biodiversity observation system, coastal in orientation. More sites will be established with collaborators around the globe with a goal of at least 10 new sites in the next decade. It ties in Smithsonian centers and stations.

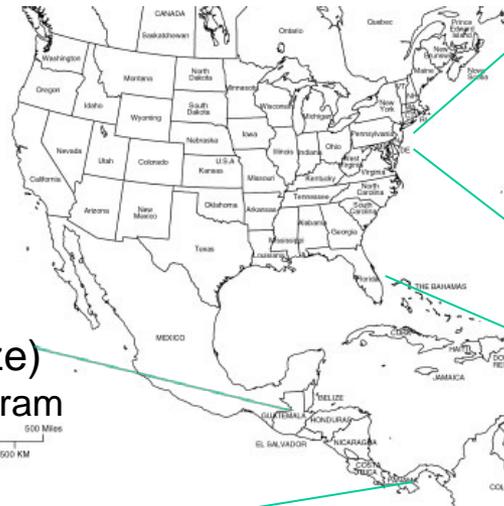


Smithsonian Research Centers and Stations (Marine)



Tiburon Branch of SERC's
Marine Invasions Lab

National Systematics
Laboratory (NMNH)*



Smithsonian Environmental
Research Center (Edgewater, Md.)

Carrie Bow Cay Field Station (Belize)
Caribbean Coral Reef Ecosystems Program

Marine Station at Ft. Pierce

Smithsonian Tropical Research Institute/STRI
(Panama)

*NOAA/NMFS Laboratory housed at NMNH



Budget History and Visitor Statistics



- NOAA provided \$22.6M (congressional earmarks) for design and development of Sant Ocean Hall and related OI efforts. Since FY07, NOAA OI obligations have been requested via the Direct Bill process and primarily include support for the Ocean Today Kiosk and an Ocean Education manager at NMNH. Attempts were made to incorporate funding into budget requests without success. In FY11, the budget director recommended continuing with the Direct Bill approach.
- NMNH provided \$25.4M for the OI. In addition, they fundraised \$25M for the Sant Marine Chair and Ocean Hall endowments and raised another \$50M+ for the Initiative.

NOAA Direct Bill

FY07	170.0K
FY08	490.0K
FY09	446.8K
FY10	521.0K
FY11	468.9K
FY12	400.5K
FY13	333.6K
FY14	334.0K
FY15	334.0K
FY16	<i>in development</i>

2014 Visitorship

- NMNH: 7.3M
- Sant Ocean Hall: 5.2M (~ 70% of all museum visitors)
- Smithsonian Ocean Portal Website: 1.7M visits
- Ocean Today Kiosks: 2.12M content views (9/08-1/15)