

MEMORANDUM OF AGREEMENT

**PURSUANT TO THE
NATIONAL MARINE SANCTUARIES ACT
16 U.S.C. 1442(e)**

BETWEEN THE

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
OFFICE OF NATIONAL MARINE SANCTUARIES
PACIFIC ISLANDS REGION**

AND THE

UNIVERSITY OF HAWAI'I HILO

**FOR THE PURPOSE OF
COLLABORATIONS IN RESEARCH, EDUCATION
AND COMMUNITY OUTREACH**

NOS Agreement Code: MOA-2013-062/8763

I. PARTIES AND PURPOSE

- A. This Memorandum of Agreement (Agreement) is between the U.S. Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of National Marine Sanctuaries (ONMS), through the Pacific Islands Regional Office (PIR), and the University of Hawai'i Hilo (UHH).
- B. The purpose of this Agreement is to collaborate in the scholarly and environmentally based research, education and community outreach endeavors of the Parties. Such collaborations may include, *inter alia*:
1. Development of education opportunities utilizing concepts that embrace the Hawaiian worldviews, beliefs, ways of knowing, and coming to know and understand theory, research, and other knowledge from Hawaiian perspectives, and in promotion of the health of the Hawaiian environment, in areas including, but not limited to, Papahānaumokuākea Marine National Monument (PMNM);
 2. Engagement of UHH faculty and students in NOAA sponsored marine and coastal resource management oriented research and monitoring activities such as, but not limited to, NOAA's Mokuāpapa Discovery Center;
 3. Participation in data management and analyses for various Pacific Islands Region marine and coastal resource management purposes;
 4. Utilization of the UHH position of post-doctoral study of marine debris to showcase current research and activities related to marine debris, conduct collaborative research and monitoring, stimulate community/public awareness of marine debris issues, and assist in the identification of problems and solutions to marine debris issues;
 5. Participation in cetacean and sea turtle related research, monitoring and rehabilitation;
 6. Mentoring interns to ensure they are participating in activities to fulfill community service components of their educational programs through approved operations, as well as provide a mechanism whereby interns can continue their traditional practices while they develop western scientific techniques and methods; and
 7. Strengthening the protection and management of representative Pacific Island Region coastal ecosystems, increasing the use of protected coastal and marine sites to address priority coastal management issues, and enhancing island communities' ability and willingness to make informed

decisions and take responsible actions that affect coastal communities and ecosystems.

II. BACKGROUND

- A. The National Marine Sanctuaries Act (NMSA), 16 U.S.C. 1431 et seq, was enacted by Congress in 1972 to, among other things, protect and preserve underwater environments and maritime heritage artifacts of national and international significance. The two largest protected areas, Papahānaumokuākea Marine National Monument (PMNM) and the National Marine Sanctuary of American Samoa (NMSAS), are located within the PIR, along with the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS).
- B. The PIR's mission is resource protection, and the PIR provides assistance to the existing ONMS sites. Sanctuary staff are located on Kaua'i, Maui, the Big Island of Hawai'i and O'ahu. The PIR supports site offices on O'ahu, Kaua'i, Maui, the Big Island of Hawai'i, and in American Samoa, and there are visitor centers on Maui, the Big Island, and in American Samoa. The visitor centers offer residents and visitors the opportunity to learn not only about the ONMS, but also the local natural and cultural resources of the host island.
- C. The PIR seeks to develop and foster new and expanding partnerships with existing programs that have similar missions. To date, the PIR has created partnerships with such varied groups as the University of Hawai'i at Mānoa, the University of Hawai'i Maui College, Kaua'i Community College, Hawai'i Institute of Marine Biology, and the Territory of American Samoa.
- D. The PMNM was established by Presidential Proclamation 8031 on June 15, 2006 pursuant to the Antiquities Act 16 U.S.C. 431, et seq., to strengthen existing conservation and implement new lasting protections to ensure the natural and cultural resources of the PMNM continues to thrive for generations to come. Authority over activities in the PMNM is shared by co-trustee agencies: NOAA (ONMS and the National Marine Fisheries Service), US Fish and Wildlife Service and the State of Hawai'i. The area subject to this coordinated management comprises PMNM lands (all islands, atolls, reefs, shoals, banks, and seamounts from 50 miles east of Nihoa Island in the southeast to beyond Kure Atoll in the northwest) and PMNM waters 50 miles on either side of those lands. Pursuant to the National Marine Sanctuaries Amendments Act of 2000 (NMSAA), P.L. 106-513, and the NMSA, ONMS also manages the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (NWHICRER), which lies within the PMNM.
- E. UHH is located on the Big Island of Hawai'i, and its mission has evolved and expanded in recent years from a principally undergraduate teaching institution to one with a significant Science, Technology, Engineering and Math, (STEM) research focus in both its undergraduate and graduate student programs. UHH is

currently building the infrastructure, faculty and staff to become a leader in scientific research in both Hawai'i and the Pacific region, and has assembled a broad portfolio of both externally funded and State supported projects that are significant in their respective efforts to enhance institutional research capabilities and link research with education. UHH proactively seeks development of partnerships that creatively and strategically integrate ongoing research and education grants and programs at UHH to broaden participation, promote a more globally engaged workforce, and catalyze germination of new science and technology enterprises in Hawai'i.

- F. Currently at UHH there is extensive research that relates to coastal zone management, non-point source pollution, storm events, and climate change. The UHH Department of Marine Science conducts a well-rounded multi-disciplinary program which has been carefully designed to take full advantage of the unique variety of marine environments available for study around the island of Hawai'i. Its mission is to provide students with a comprehensive understanding of the world's oceans and an appreciation of the importance of marine ecosystems to the global environment and human life, through a combination of hands-on laboratory and field experience, inquiry-based instruction, and direct interactive learning. This is supported by a broad background in the marine sciences, including basic knowledge of the natural science disciplines of biology, chemistry, physics, geology, and mathematics.
- G. Special aspects of the UHH Marine Science Program include, *inter alia*: 1) the Kalākaua Marine Education Center which fully utilizes the Island of Hawai'i's variety of marine environments ranging from deep ocean to coral reef to estuarine, and emphasizes a hands-on approach to education; 2) the Marine Option Program available to all undergraduate students at the University of Hawai'i, regardless of major, with branches on campuses throughout the UH system; 3) the Marine Science Summer Program which has received the Excellence of Program Award from the Western Association of Summer Session administrators representing approximately 80 colleges and universities in the western United States, Canada, and Mexico; and 4) the QUEST (Quantitative Underwater Ecological Surveying Techniques) designed to offer training in underwater ecological surveying methodologies, including the design, implementation and analysis of a research project, and incorporates instruction in the identification of the common seaweeds, corals, invertebrates, and fishes of Hawaiian reefs off the west coast of Hawai'i.
- H. Special aspects of the UHH College of Agriculture, Forestry and Natural Resource Management (CAFNRM) include the Natural Resource Management (NRM) program, a new Bachelor of Science program under development that includes management of resources in the terrestrial and coastal zones. This includes courses in wildlife and plant management and management of marine resources subject to impact from coastal areas such as farming, industrial and population

centers. The College also houses the Pacific Aquaculture and Coastal Resources Center (PACRC) containing fresh and marine research systems, and education programs to raise marine vertebrate and invertebrate species. The Hawaiian Intern Program (HIP) and the Pacific Internship Programs for Exploring Science (PIPES) programs are housed with CAFNRM/PACRC and provide student interns to Federal, State and non-governmental (NGO) agencies for projects of mutual concern. A joint U.S. Geological Survey-UHH Hawai'i Cooperative Studies Unit operated through CARNRM supports joint research initiatives to answer questions and address issues associated with natural resource problems. Students in the College are expected to perform one semester of half time community service through Directed Research or Directed Studies programs or through a senior level capstone project.

- I. UHH was also recently named a Louis Stokes Alliance for Minority Participation (LSAMP) site funded by National Science Foundation. This Alliance is called the Islands of Opportunity Alliance, and with good reason, because it consists of post-secondary institutions from the entire Pacific region represented as United States citizens and the freely associated states in the Pacific. The cultural and educational framework exists already that will allow UHH to function as the nexus of this Pacific Islands regional network-in-the-making.
- J. The Tropical Conservation Biology and Environmental Sciences Masters of Science degree was developed to take advantage of the many scientific and cultural treasures available here on this island.
- K. UHH is committed to continued recruitment of under-represented students, particularly to the STEM disciplines. UHH is ranked 6th nationally in diversity by the U.S. News and World Report.
- L. UHH embraces the concept of integrating culture, science, and technology to prepare students of Hawai'i and the Pacific for global challenges and opportunities. UHH has a long history of operating internship programs that offer students the opportunity to participate in hands on research and resource management activities specifically geared toward the Pacific region in particular, and the tropics in general.
- M. UHH strongly desires to significantly expand its partnership efforts with key NOAA programs and provide greater opportunities for its diverse undergraduate and graduate student body to engage in research, education and community outreach experiences with NOAA colleagues.

III. AUTHORITIES

- A. The legal authority for the ONMS to enter into this Agreement is the National Marine Sanctuary Act (NMSA), 16 U.S.C. 1442 (e), which allows the Secretary of

Commerce, whenever appropriate, to enter into an agreement with a State or other Federal agency to use the personnel, services or facilities of such agency on a reimbursable or non-reimbursable basis, to assist in carrying out the purposes and policies of the NMSA.

- B. The programmatic authority for the ONMS is the NMSA, 16 U.S.C. 1431 et seq., and the NMSAA, P.L. 106-513, §6(g), including:
1. Section 1431 (b)(4) stating, in part as one of the Purposes and Policies, the enhancement of public awareness, understanding, appreciation, and wise and sustainable use of the marine environment;
 2. Section 1431 (b)(7) stating as one of the Purposes and Policies of the NMSA, to develop and implement coordinated plans for the protection and management of national marine sanctuaries with appropriate Federal agencies, State and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas;
 3. Section 1440, directing the Secretary of Commerce to conduct research and education programs to carry out the policies of the NMSA, and to promote and coordinate the use of National Marine Sanctuaries for research and education; and
 4. Section 1442(c), authorizing the Secretary of Commerce to accept the donation of services for use in administering national marine sanctuaries.

IV. TERMS AND CONDITIONS

- A. The PIR will:
1. Seek to create and provide volunteer opportunities for students and teachers from UHH at both PIR and Sanctuary offices on the island of Hawai'i, the offices on other islands, and other ONMS offices on the mainland, including the ONMS headquarters in Silver Spring, MD. Volunteer opportunities must be consistent with the Department's policies, including Department Administrative Order (DAO) 202-311;
 2. Provide training, education, volunteers and research materials (and other information as needed) to UHH for assistance with their programs;
 3. Access UHH facilities following all agreed upon procedures, as necessary;

4. Provide guidance, suggested training materials and other tools necessary for the successful performance of UHH students;
5. Provide a safe work environment and appropriate safety gear to UHH students and teachers should UHH employees need to utilize NOAA/PIR offices and/or boats in the field as appropriate to the project;
6. Make available, when practical, administrative areas and facilities for activities that provide opportunities for outreach and education to mutual constituents, for research and implementation of conservation, and for recovery actions for native species and habitats;
7. Provide assistance when practical for planning, implementation and monitoring of mutually beneficial work undertaken pursuant to this Agreement;
8. Train UHH staff and students about the PIR sites and programs, and other NOAA programs;
9. Promote UHH interpretive and educational programs as it relates to ONMS marine programs;
10. Provide interpretive trainings for UHH staff and students;
11. Provide multimedia materials for interpretive use;
12. Facilitate partnerships for UHH students and teachers with other ONMS sites and headquarters, providing an extended opportunity off-island; and
13. Facilitate other partnership opportunities with other NOAA offices in Hawai'i (i.e., the National Weather Service, the National Marine Fisheries Service, etc.) when appropriate.

B. The UHH will:

1. Provide staff training and mentoring of PIR/ONMS site staff and volunteers in interpretive techniques at ONMS visitor centers;
2. Promote PIR and HIHWNMS interpretive programs;
3. Integrate PIR interpretive themes into UHH science programs, field trips, walks and other interpretive programs;

4. Develop a science based curriculum utilizing PIR/ONMS office locations on the Island of Hawai'i and other PIR partners;
5. Facilitate projects on the local, county and NGO level that are limited at the PIR or do not exist locally or on the mainland;
6. Facilitate partnership with other University of Hawai'i programs, including but not limited to the University of Hawai'i Institute of Marine Biology, University of Hawai'i Sea Grant Program, etc.;
7. Seek other opportunities to support PIR conservation and educational programs for students, teachers and general public; and
8. Use of the ONMS logo and/or NOAA emblem is subject to prior approval and shall be in accordance with the Department of Commerce's policies and procedures.

C. Both Parties will:

1. Assist in the development of joint research, education and outreach plans that benefit the PIR and UHH;
2. Create joint outreach, education and other materials; and
3. Seek to continue a productive collaboration that will result in increased opportunities for both to engage in research, education, outreach, community development, and resource management activities in areas of mutual benefit and interest. Further development may result in one or more formal Memoranda of Agreement between the two entities.

V. TRANSFER OF FUNDING, PROGRAMMING, PAYMENT AND REIMBURSEMENT ARRANGEMENTS

A. This Agreement authorizes Fiscal Year 2013 funding, in the amount of \$40,000 as follows:

1. \$40,000 (See Attachments A1 and A2)

Appropriation Symbol:	13 13/14 1450
Type of Funds/Expiration:	Two-Year/September 30, 2014
CBS/ACCS ¹ :	14/2013/10-14-0007-03-00-00-

¹ Commerce Business System/Accounting Classification Code Structure

00/L8K5BPM/P00/2527

- | | | |
|----|--------------------------------|------------|
| 2. | UHH Fiscal Information | |
| | EIN ² | 99-6000354 |
| | DUNS ³ | 96-5088057 |
| 3. | NOAA Fiscal Information | |
| | EIN: | 52-0821608 |
| | DUNS: | 78-4769085 |

- B. Additional funding to be provided to the UHH from the ONMS will be specified in each annual SOW and budget, and transfer of funds will be approved and authorized by written amendments to this Agreements. Each amendment must include a detailed SOW and budget estimate, fiscal year accounting information, and must reserve legal review and clearance before being signed by both Parties.
- C. Funding will be disbursed to UHH based on the submission and approval of a detailed plan that will serve as an invoice. This may occur on an annual basis or as needed, pending approval by ONMS.
- D. Estimated Budgeted Amounts for Future Years
- | | | |
|----|---|----------|
| 1. | FY 2014 (October 1, 2013 to September 30, 2014) | \$40,000 |
| 2. | FY 2015 (October 1, 2014 to September 30, 2015) | \$40,000 |
| 3. | FY 2016 (October 1, 2015 to September 30, 2016) | \$40,000 |
| 4. | FY 2017 (October 1, 2016 to September 30, 2017) | \$40,000 |
- E. Annual SOW and Budget
- | | |
|----|--|
| 1. | The ONMS will work with the UHH to develop the annual SOW and Budget. |
| 2. | The UHH will work with ONMS to develop the annual SOW and Budget by March 30 of the current FY, provided that the ONMS has an approved budget for that FY, or no more than 60 days after ONMS receives notification of its budget for that FY. |

² Employer Identification Number

³ Dun and Bradstreet's Data Universal Numbering System

- F. This Agreement and any extensions thereof are subject to the availability of Congressionally-appropriated funds.

VI. CONTACTS

- A. The points of contact for activities under this Agreement are:

ONMS

Allen Tom
Regional Director
Pacific Islands Region
726 S. Kihei Rd.
Kihei, HI 96753
808-879-2818 PH
808-874-3815 FAX
allen.tom@noaa.gov

UHH

Daniel Brown
Interim Vice Chancellor for Research
200 W. Kawili St.
Hilo, HI 96720
808-974-7468 PH
808-974-7610 FAX
dbrown@hawaii.edu

- B. The Parties agree that if there is a change regarding the information in this section, the Party making the change will notify the other Party in writing of such change. A change to this section will not require an amendment.

VII. DURATION OF AGREEMENT, AMENDMENTS, OR TERMINATION

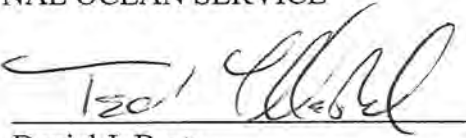
- A. This Agreement will become effective upon execution by both Parties, and will expire on September 30, 2018.
- B. The Agreement may be amended within its scope or renewed prior to the expiration date, through the written mutual consent of the Parties.
- C. The Agreement may be terminated by (1) written mutual consent; (2) one Party's written notice 30 days in advance; or (3) completion of the Terms and Conditions of the Agreement.
- D. The Parties will review this Agreement at least once every three years to determine whether it should be revised or terminated.

VIII. OTHER PROVISIONS

If the Parties disagree over how to interpret this Agreement, they shall present their differences to each other in writing, and they shall discuss them. If the Parties fail to resolve their differences within thirty (30) days, they may refer the matter to higher level of authority within their respective organizations.

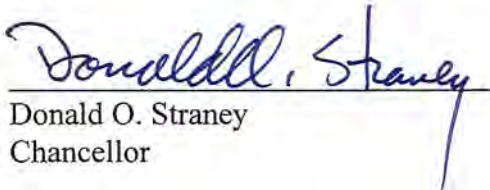
IX. APPROVALS

ACCEPTED AND APPROVED FOR THE
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

BY: 
Daniel J. Basta
Director
Office of National Marine Sanctuaries

DATE: SEP 23 2013

ACCEPTED AND APPROVED FOR THE
UNIVERSITY OF HAWAI'I HILO

BY: 
Donald O. Straney
Chancellor

DATE: 28 Sept 13

Attachment A-1

PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT
FISCAL YEAR 2013 – STATEMENT OF WORK 1
(Projected Completion Date: September 2014)

Principal Investigator: Dr. Jason Turner (University of Hawai‘i at Hilo)

The Papahānaumokuākea Marine National Monument (PMNM) conducts an annual coral reef monitoring cruise, the Northwestern Hawaiian Islands Reef Assessment and Monitoring Program (NWHI RAMP). The diving-intensive cruise utilizes the services of numerous scientific divers trained in survey techniques to assess abundances of marine life including fishes, corals, non-coral invertebrates, and macroalgae.

The University of Hawai‘i at Hilo’s (UHH) Marine Science Program conducts an annual for-credit training program for scientific divers to teach underwater ecological surveying techniques, including identification of common fishes, corals, non-coral invertebrates, and algae.

NOAA PMNM will provide partial support for QUEST in order to create a pool of well-trained scientific divers that can be drawn upon to staff NWHI RAMP cruises. NOAA PMNM and UHH will jointly train student divers and select the most qualified students to participate in NWHI field work, including the NWHI RAMP cruise.

A. The UHH agrees to:

1. Conduct QUEST in May 2014, incorporating references to NWHI flora and fauna, and incorporating NWHI RAMP-specific survey techniques where appropriate, and where allowable under UHH Diving Safety Program rules, regulations, and policies.
2. Draft an application form to be filled out by potential participants in the NWHI RAMP monitoring cruise. Successful completion of QUEST by the students shall be a prerequisite for application.
3. Circulate the application among potential student participants at all University of Hawai‘i campuses and Marine Option Program offices.
4. Provide PMNM with a list of applicants and their qualifications as scientific divers.
5. Jointly select finalists in consultation with PMNM scientists.
6. Offer scholarships to support student participation in the QUEST program. Scholarship recipients will be selected in consultation with PMNM scientists.

7. Arrange for post-cruise faculty mentoring of student NWHI RAMP participants as they analyze data collected during the RAMP cruise. The data analysis and writing process will earn directed studies credit for the student divers.
8. Encourage NWHI RAMP student participants to give at least one presentation of data analysis products at local, regional, and national scientific meetings.

B. The ONMS, Pacific Islands Region, agrees to:

1. Provide \$40,000 in FY 2013 funds for activities under this SOW.
2. Monitor performance for all aspects of this SOW.
3. Provide opportunities for participation by qualified student scientific divers in NWHI RAMP or other NWHI research cruises.
4. Provide UHH cruise participants with NWHI RAMP data for their research projects.
5. Provide scientific staff for mentoring of UHH students, including, but not limited to, mentoring on directed studies courses using NWHI and other data, and serving as members on master's thesis committees.

Attachment A-2

PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

FY 2013 BUDGET

(Indirect cost is rounded up)

Scholarships.....		\$9,000
Salaries.....		11,499
Dr. Jason Turner – 3 credit teaching release to administer QUEST	\$8,317	
Fringe	\$3,182	
Supplies.....		14,334
Total Direct.....		\$34,833
Modified Total Direct (less Scholarships).....		25,833
Indirect Cost (20.0%).....		5,167
GRAND TOTAL.....	\$	\$40,000