NOAA Sea Grant Extension Liaison Program Review
Presented to the National Sea Grant Advisory Board
August 12, 2016

I. Background and Rationale

Since 1966, the National Oceanic and Atmospheric Administration (NOAA) National Sea Grant College Program (Sea Grant) has demonstrated its effectiveness in extending science-based ocean and coastal research to coastal stakeholders. Sea Grant is a program administered by NOAA's Office of Oceanic and Atmospheric Research (OAR) and in the past 50 years, millions of constituents have benefited from an outreach infrastructure that consists of Sea Grant Extension (SGE) agents and specialists, communications professionals, and educators in 33 coastal states and territories. Some 400 university-based SGE agents and specialists serve as educators who apply science-based knowledge to solving many of the urgent problems confronting coastal, marine, and Great Lakes audiences.

By the late 1990s, it was determined that SGE and many of its stakeholders would benefit from closer collaboration between Sea Grant and OAR's research laboratories. By doing so 1) Sea Grant would gain wider access to OAR's expertise and products; and 2) Sea Grant's constituents would be better served with additional scientific and technological information. At around this time, the National Sea Grant Advisory Board was tasked with evaluating the Sea Grant Extension Program (SGEP) including its role within NOAA. The Advisory Board enlisted former NOAA Administrator, John Byrne, to chair a committee of experts in developing findings and recommendations to guide the SGEP in the future. The resulting seminal report, "A Mandate to Engage Coastal Users: A Review of the National Sea Grant College Extension Program and a Call for Greater National Commitment to Engagement," considered the placement of Sea Grant within NOAA and the need for NOAA to improve its contact with its user community. The Panel recommended improving the role of Sea Grant within NOAA, improving NOAA's organization with respect to its engagement with the public, and improving the ability to deliver extension services to the public by the National Sea Grant Office (NSGO), SGEP, and their university partners.

The Mandate to Engage Coastal Users report provided the impetus for Sea Grant to work with its NOAA partners to develop extension liaison relationships. These liaison positions serve as a conduit for a two-way flow of information: the transfer of NOAA Labs and Programs' research and educational information to operations and the transfer of community needs to inform NOAA Labs and Programs' research through the Sea Grant Extension framework. The early positions with OAR labs [Great Lakes Environmental Research Laboratory (GLERL), Atlantic Oceanographic and Meteorological Laboratory (AOML), National Severe Storms Laboratory (NSSL)]

originated from discussions at NOAA headquarters by both the NSGO and OAR leadership in part as a reaction to the report. At first and in general, the reaction from the Sea Grant network to establishing liaison positions ranged widely, from wariness about becoming too closely aligned with NOAA and thus losing its education neutrality to recognition that the SGEP provided Sea Grant an ideal vehicle to enhance its utility to NOAA. Over time the Sea Grant network and the NOAA programs involved have been convinced of the value of the partnerships and by 2016, the NSGO now provides partial funding for 13 NOAA-Sea Grant Extension Liaison (Liaison) positions, shown in Table 2.

The first Liaison was established in 2001 at the Great Lakes Environmental Research Laboratory (GLERL) following a March 1999 meeting between Great Lakes Sea Grant Network's outreach/ extension staff and GLERL leaders. It was agreed that such a position would facilitate the transfer of information between extension agents and specialists in the Great Lakes Sea Grant Network and the scientists and managers at GLERL. The position is funded by the three project partners: GLERL, the National Sea Grant Office (NSGO) that administers Sea Grant, and Michigan Sea Grant.

Shortly after the GLERL position was established, scientists from the Atlantic Oceanographic and Meteorological Laboratory (AOML) noted the need for a coordinated outreach and education effort to address the long-term management and restoration goals for South Florida ecosystems. An outreach specialist was hired in 2002 to conduct a South Florida Ecosystem Education Project and a partnership was established among the NSGO, AOML, and Florida Sea Grant.

A third Liaison position was created in 2005 at the National Severe Storms Laboratory (NSSL) after several years of conversations between OAR administrators, NSSL managers, and NSGO. It was deemed desirable to increase collaboration between the Lab and the SGE network by helping build a weather/climate/coastal management infrastructure for both Sea Grant and OAR that would allow all involved parties to make mutual use of available expertise. A Weather and Climate Extension Specialist (WCES) position at the University of Oklahoma's (OU) Cooperative Institute for Mesoscale and Meteorological Systems the (CIMMS/NSSL) is funded by the NSGO with match provided by OU's Office of the Vice President for Research and CIMMS.

In 2013, a shared liaison position was established by the NSGO, Washington Sea Grant (WASG) and Pacific Marine Environmental Laboratory (PMEL) to address tsunami hazards and ocean acidification issues. The tsunami hazards position is currently vacant. There was also mutual interest on the part of the NSGO, WASG and the Northwest Fisheries Science Center (NWFSC) that led to the establishment of a jointly funded social science liaison focusing on social wellbeing indicators for marine management and other fishing community issues.

NOAA's Sentinel Site program began in 2011 and is made up of five initial Cooperatives located in the Chesapeake Bay, Hawaii, North Carolina, Northern Gulf of Mexico, and San Francisco Bay. These locations were selected based on the potential for measuring

ecological impact of sea level change; socioeconomic factors, such as large population centers; the potential to expand the use of existing NOAA tools, services, and other assets in a given region; and the potential to apply science-based solutions to solve specific regional coastal problems. The Sentinel Site Cooperatives Sea Grant Liaison position was initiated in 2014 and five outreach coordinators were recruited. Two-year funding for this effort involves National Ocean Service (NOS)/Office for Coastal Management, the NSGO and the five Sea Grant programs in Maryland, North Carolina, Mississippi-Alabama, California and Hawaii. The outreach coordinators facilitate the transfer of information related to the impacts of climate change, sea level change, and coastal inundation to stakeholders in nearby coastal communities.

In January of 2016, Sea Grant developed a new liaison position in Alaska where, starting in 2015, OAR's Climate Program Office (CPO), Alaska Ocean Observing System (AOOS), the National Sea Grant Office, and Alaska Sea Grant are cost-sharing a coastal community resilience position.

Most recently, Sea Grant partnered with the National Weather Service (NWS) to create an Integrated Water Extension Liaison position located at the National Water Center in Tuscaloosa, AL. A competition was held to find a partnering state Sea Grant program for the position. Initially, it will be a four-year position funded by NWS, NSGO, and the winning state Sea Grant program.

Thus, by leveraging resources, Sea Grant programs and NOAA partners are providing a viable solution to the transfer of scientific information, tools and technologies to coastal stakeholders.

In 2015, Dr. Nikola Garber, Sea Grant's Acting Director, requested that the National Sea Grant Advisory Board (NSGAB) review the progress of the Liaisons' efforts to date and suggest practical improvements to the existing management practices, if any. Mr. Rollie Schmitten, the NSGAB's Chair at the time, was asked to appoint a small committee to explore successes and shortcomings of various models/arrangements, highlight best practices, and recommend opportunities for improvement, and perhaps, expansion or contraction of these positions.

Mr. Dale Baker, the NSGAB's Vice-Chair and former New York Sea Grant Extension Program Leader, heads the committee which also includes Mr. Schmitten, Dr. Jim Murray, and Dr. Amber Mace. The National Sea Grant Office's Ms. Helen Cheng (National Sea Grant Knauss fellow 2015), Ms. Laura Early (National Sea Grant Knauss fellow 2016), Mr. Michael Liffmann (Former Program Director for Extension), and Ms. Elizabeth Rohring (Engagement Lead) staff the Committee.

II. NOAA-Sea Grant Extension Liaison Positions

Sea Grant liaison professionals play a vital role, taking the best science-based solutions and making it understandable and useful to coastal residents, businesses and

communities. In addition, Sea Grant extension liaison professionals bring expertise within NOAA on applied research and processes of collaborative science stakeholder engagement to solve problems through needs analysis and provide a mechanism for engaging NOAA scientists with stakeholders on developing decision-making tools and exploring alternatives.

Much of the background and related information used to produce this report was obtained from documents in NSGO's files, and supplemented through personal conversations with NSGO staff. Telephone conversations were held with the incumbent liaisons, several of the Sentinel Site outreach coordinators, as well as immediate and other Sea Grant and Lab supervisors. They provided updates and additional details concerning their roles, interactions with SGE, accomplishments to date, expectations, and suggestions for improvements. See Table 1 for a complete listing of Sea Grant/Partner contacts. As of late 2015, the following individuals serve in these positions:

1) Dr. Rochelle Sturtevant is located at the Great Lakes Environmental Research Laboratory (GLERL), Ann Arbor, Michigan. She has been in the position since it was established in 2001. Her immediate supervisors are Ms. Margaret Lansing (GLERL's Information Services Branch Chief) and Dr. Heather Triezenberg (Michigan Sea Grant's Extension Program Leader).

2) Dr. Pamela Fletcher, Atlantic Oceanographic and Meteorological Laboratory (AOML), Miami, Florida. 2002. Immediate supervisors are Dr. James Hendee (Supervisory Oceanographer and Director, Ocean Chemistry and Ecosystems Division) and Dr. Martin Main (Florida Sea Grant Extension Leader and Associate Dean for UF/IFAS Extension).

3) Dr. Kodi Monroe, National Severe Storms Laboratory (NSSL), Norman, Oklahoma. 2005. Immediate supervisor is Mr. Alan Gerard (WRD Deputy Division Chief, NSSL).

4) Dr. Meg Chadsey,(Ocean Acidification) Pacific Marine Environmental Laboratory (PMEL), Seattle, Washington. 2013. Immediate supervisors are Dr. Richard Feely (Senior Scientist) and Ms. Penny Dalton (Director, Washington Sea Grant)

5) (Vacant), (Tsunami Hazards) Pacific Marine Environmental Laboratory (PMEL), Seattle, Washington. 2013. Immediate supervisors are Dr. Diego Arcas (Director, NOAA Center for Tsunami Research) and Ms. Penny Dalton (Director, Washington Sea Grant)

6) Dr. Melissa Poe, NOAA Northwest Fisheries Science Center, (NWFSC) Seattle, Washington, 2013. Immediate supervisors are Dr. Jameal Samhouri (Supervisory Research Biologist) and Ms. Penny Dalton (Director, Washington Sea Grant).

7) Dr. Davin Holen, Alaska Center for Climate Assessment and Policy; Anchorage, Alaska, 2016. Immediate supervisory committees are Alaska Regional Integrated

Sciences and Assessments (RISA) as part of the OAR Climate Program Office (CPO), Alaska Ocean Observing System (AOOS), the National Sea Grant Office, and Ms. Paula Cullenberg (Director, Alaska Sea Grant).

8) Ms. Sarah Wilkins, Chesapeake Bay NOAA Sentinel Site. 2014. Immediate supervisors are Galen Scott (Chair of the NOAA Sentinel Site Program) and Dr. Fredrika Moser (Director, Maryland Sea Grant).

9) Ms. Maya Walton, Hawaiian Islands NOAA Sentinel Site. 2014. Immediate supervisors are Galen Scott (Chair of the NOAA Sentinel Site Program) and Dr. Darren Lerner (Director, Hawaii Sea Grant)

10) Ms. Jennifer Dorton, North Carolina NOAA Sentinel Site. 2014. Immediate supervisors are Galen Scott (Chair of the NOAA Sentinel Site Program) and Dr. Susan White (Director, North Carolina Sea Grant)

11) Ms. Renee Collini, Northern Gulf of Mexico NOAA Sentinel Site. 2014. Immediate supervisors are Galen Scott (Chair of the NOAA Sentinel Site Program) and Dr. LaDon Swann (Mississippi-Alabama Sea Grant).

12) Dr. Jenna Judge, San Francisco Bay NOAA Sentinel Site. 2014. Immediate supervisors are Becky Smythe (NOAA-OCM) and Dr. James Eckman (California Sea Grant).

13) To be hired, Integrated Water Extension Liaison, National Water Center. 2016. Immediate supervisors will include the Director of the National Water Center (NWS) and the competitively selected state Sea Grant program.

Please see Appendix A for examples other Agency - Sea Grant partnership positions that are not funded through the NSGO.

III. Funding of the NOAA-Sea Grant Liaison Positions

By and large, funding of the NOAA-Sea Grant Liaison positions has involved three (and in one instance, four) parties: the NSGO, a NOAA partner, and the host Sea Grant program. But since each position was created under special circumstance, there is no single funding model. In some instances, the costs are shared equally between three or four partners while in others, the NSGO and NOAA partner share 80% of the cost and the host Sea Grant program provides the balance by matching the NSGO portion. In one case, the Sea Grant program's share exceeds the 50% match requirement and in two instances, the cooperative institutes affiliated with the OAR laboratory pay a sizable portion of the costs while the OAR labs themselves contribute little to the funding.

To provide a better historic funding context, when the first liaison position (GLERL) was created, the NSGO, GLERL and Michigan Sea Grant agreed to split the costs three

ways.[1] But currently, the NSGO and GLERL provide 80 percent of the salary and the remaining 20 percent is covered by Michigan Sea Grant.[2] The original agreement also stated that the Sea Grant program's costs (in this case Michigan Sea Grant) could also be paid by "the Great Lakes Sea Grant Network." The operating expenses (travel, computer system, phone, email, office space, graphics support, visualization lab, etc.) are provided by GLERL.

Unlike the GLERL arrangement, the AOML liaison has historically relied heavily on extramural funding from the NOAA Lab's partner cooperative institute, the University of Miami's Cooperative Institute for Marine and Atmospheric Studies (CIMAS) and other sources, and the funding amounts from each partner has varied. Florida Sea Grant has been working with the NSGO, CIMAS, and AOML to see if there is a more effective funding arrangement for this position and feels confident that a more equitable arrangement can be found.

The NSSL position is funded by the NSGO (67%) with a 33% matching amount from the University of Oklahoma's Cooperative Institute for Mesoscale Meteorological Studies (CIMMS).[3] The NSSL does not contribute directly to this position and the liaison does not have a host Sea Grant program. The funding mechanism is also different. The project is funded through a biennial proposal submitted by NSSL to the NSGO. The other liaison positions are included in the Sea Grant host programs' four-year, omnibus proposals.

A new funding model is being used to fund two positions, one at PMEL (2013) and one at NWFSC (2013). The costs are divided equally among the NSGO, Washington Sea Grant, and either PMEL or NWFSC. The projects are being piloted over a five-year period.[4] [5]

A similar arrangement is in place for the Alaska coastal resilience position. Four parties contribute 25% each: the NSGO, Alaska Sea Grant, the Alaska Center for Climate Assessment and Policy (ACCAP) which is part of NOAA's Regional Integrated Sciences and Assessments (RISA) program, and the Alaska Ocean Observing System (AOOS).[6]

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[1] "Model for Sea Grant/ OAR/ NOAA Outreach Pilot Position Description; Sea Grant Outreach position at GLERL"

[2] Memorandum for: Arlene Simpson Porter, Director Grants Management Division; From: Leon Cammen, Director, National Sea Grant College Program / Subject: FY2014-17 Sea Grant Funding Plan for Omnibus Proposals // (Sea Grant Spend Plan 2014-2017).

[3] National Sea Grant Weather and Climate Extension Specialist: Continuation of support for Sea Grant Outreach Position at NSSL and the Cooperative Institute for Mesoscale Meteorological Studies at the University of Oklahoma Sept 1 2015 – Sept 30 2016.

[4] Washington Sea Grant and PMEL Project Proposal Narrative: 'Establishment of a Liaison between Washington Sea Grant and the Pacific Marine Environmental Laboratory'

[5] Washington Sea Grant and NWFSC Project Proposal Narrative: 'Establishment of a Social Science Liaison between Washington Sea Grant and NOAA Fisheries.'

[6] 'Enhancing Alaskan Coastal Community Resilience and Adaptation to a Changing Environment' Proposal and Budget Justification June 8, 2015.

Five liaison positions were created in 2015 to serve as liaison/outreach coordinators at five NOAA Sentinel Site Cooperatives in Maryland-Virginia, North Carolina, Alabama-Florida, California and Hawaii. Funding is only available for two years and involves cost-sharing between three parties: the NSGO contributes 40%, the host Sea Grant Program's matching amount (20%) and 40% from NOAA's Sentinel Site Program that is administered by National Ocean Service.[7]

The new Integrated Water Extension Specialist position is funded by the National Weather Service (60%) and the NSGO (40%) with matching funds from the competitively selected state program for the NSGO 40%. The position will be funded for a four-year period.

Please see Table 2 for a complete table of funding.

IV. Findings

Below are specific findings from each Lab/Program Liaison

GLERL

The Great Lakes Sea Grant programs and GLERL administrators laud the liaison's work, ability to think regionally, and coordinate with GLERL and other NOAA regional efforts. The annual travel budget is a concern. It is very limited and makes working with the eight Sea Grant programs in the region very difficult.

The Great Lakes Sea Grant Network, Michigan Sea Grant, Michigan State University and GLERL are proposing (see Appendix B) that the NSGO be a signatory to a five-year and renewable Memorandum of Understanding (MOU) between the parties. The MOU would address funding, programmatic oversight, recruitment and supervision, and an annual plan of work.

AOML

The AOML liaison is considered a valuable asset by AOML, the University of Miami's Cooperative Institute for Marine and Atmospheric Studies, and Florida Sea Grant. The position has helped make South Florida coastal marine ecosystems science more available to environmental managers and has produced excellent outreach products and services.

The single biggest concern involving this position has been the heavy dependence (nearly 50 percent) on soft money procured through grant competitions. AOML and Florida Sea Grant agreed that this arrangement has precluded the liaison from becoming better integrated in AOML and Florida Sea Grant strategic priorities and developing more of a niche(s) as a liaison. Florida Sea Grant, AOML and the NSGO are

[7] Sentinel Site Proposals 2015-2016; Funding Availability Announcement: NOAA Sentinel Sites Cooperative

working to address the funding and programming issues which should be completed shortly.

NSSL

The current NSSL Liaison along with her predecessor worked with North and South Carolina Sea Grant programs on the Lab's Coastal and Inland Flooding Observation and Warning (CI-FLOW) project. Project emphasis has shifted, and while the current liaison still explores opportunities for coastal flooding/inundation research, it is done under the umbrella of FACETs (Forecasting a Continuum of Environmental Threats), a next-generation hazard forecasting and communication approach, and application of social, behavioral, and economic sciences to high-impact environmental threats.

The NSSL project would greatly benefit from closer collaboration with Sea Grant programs involved in risk communication and hazard resilience which is at the heart of the FACETs program. Also, unlike the other Liaison positions, this project has no host Sea Grant program. Currently, the NSSL liaison attends selected regional and professional meetings with many of her Sea Grant colleagues but the bulk of the communication and project planning involves coordination with other meteorologists, civil engineers, social scientists, and hydrologists, as well as National Weather Service (NWS) forecasters, federal researchers, university faculty, and private businesses.

PMEL

The Sea Grant-PMEL Liaison for ocean acidification has worked with PMEL scientists to produce and distribute several meaningful publications on ocean acidification and established an ocean acidification-monitoring program for local high school students.

The Liaison office is at Washington Sea Grant and she frequently interacts with PMEL scientists at the nearby Lab. The broader Liaison effort would, however, benefit from an increased presence at the Lab but this requires improvements to physical workspace and better IT support services at the PMEL campus.

NWFSC

The Sea Grant-NWFSC Liaison is a social scientist that, among other research and coordination activities, partners with researchers at Swinomish Indian Tribal Community and the University of British Columbia to study the connections between shellfish harvesting, sense of place, and quality of life. The PMEL Liaison is involved with the NOAA California Current Integrated Ecosystem Assessment (IEA), and has been deeply involved in developing approaches to include the representation of human well-being in the IEA. This has included collaboration with more than 10 different institutions including universities, agencies, and tribes.

The Sea Grant-NWFSC Liaison work is greatly valued by the NWFSC and Sea Grant and there is interest at the NWFSC to make this a permanent position rather that the current five-year term.

Sentinel Sites and Alaska Coastal Resilience Specialist

The five Sentinel Site Outreach Coordinators have been in these positions since spring 2015 and the Alaska coastal resilience specialist was hired very recently. All partners are pleased with the new arrangements and optimistic that the Coordinators will be able to achieve the objective stated in their respective work plans.

Below are general and overall findings of the Liaison Program itself.

1) Each of the Lab Liaison positions was established on different dates and agreed upon through correspondence and grant proposals. Thus, there is no consistency as to roles, responsibilities, funding, reporting requirements, etc.
2) Found that there was varying and uncertain commitments to duration of funding for the position which could make it difficult to build networks and establish trust necessary for effective extension programming.
3) There is no collaboration or communication between all of the liaisons to discuss successes, challenges, and provide opportunities for learning from each other.
4) The National Sea Grant Office does not have any one individual to oversee the Lab Liaisons. Such a role in the NSGO might help to address Finding 3.
5) Overall, the positions are highly valued by the relevant NOAA Labs, the Northwest Fisheries Science Center, Sentinel Sites, and host Sea Grant programs. In general NOAA is unaware of these positions and more importantly, the potential for these positions to help integrate NOAA with its constituents.

V. Recommendations

Based on the findings of the committee, the following recommendations outline some general standard operating procedures intended to improve clarity and efficiency, while still maintaining the flexibility and adaptability of each unique partnership. Some of the recommendations may be more or less relevant depending on the scope of each position. These recommendations are organized around 1) funding sources, 2) the recruitment process, 3) operations, 4) reporting, and 5) evaluation.

Funding Sources

1) Funding: The NSGO should provide more clarity on the availability of resources including funding and NSGO support staff to create and sustain partnerships. In situations where the Sea Grant benefits are regional or national, the NSGO should consider modifying or waiving local program match to reflect the relative value of the position to the program vs. the larger Sea Grant network.

Time Commitment: Since effective extension programming requires establishing trust and building networks among relevant user groups which takes time, the parties establishing liaison positions should typically be considering a minimum of a three-year commitment to the position.

Recruitment Process

2) Application Process: The NSGO should provide more clarity about the process to apply for available resources to sustain existing or create new partnerships. A competitive process to establish new positions is desired but may not be necessary depending on the situation. For example, it may make more sense to award a position to a single program based on the requisite location of the position.

3) Host Sea Grant Program: All placements should have a host Sea Grant Program. Mechanisms and opportunities should be discussed with the Sea Grant Association and Sea Grant Extension Assembly.

Operations

4) Point of Contact: The Liaisons and their hosts and partners would benefit from having a NSGO point of contact that has responsibility for managing, coordinating, and marketing the liaison program throughout NOAA and the Sea Grant network. The Extension Leader is best positioned to help integrate within the broader network and coordinate among the positions.

5) MOUs: When positions would benefit from memorandums of understanding or equivalent agreements between the Labs and the NSGO, it could be modeled after the proposed Great Lakes MOU (see Appendix B) and would address funding responsibilities, supervision, programming and a work plan. MOU should be in effect for four years to coincide with NSGO Strategic Planning and Omnibus cycles. The next cycle begins on February 1, 2018.

6) All Liaisons Meeting: The Liaisons would benefit from occasional joint meetings and, where relevant, coordinated programming. An exchange of ideas would foster further collaborations and partnerships. As Sea Grant ambassadors within NOAA, the Liaison should be encouraged and supported to promote the value of Sea Grant extension to NOAA.

7) Advisory Board: Each Liaison should establish a small Advisory Board (AB) whose members are drawn from the Lab, the host Sea Grant program, key constituents, and the NSGO's Extension POC. The AB would primarily advise annual plans of work and opportunities for improved coordination.

Reporting

8) Reporting: Reporting needs to be strengthened with a greater emphasis on deliverables and outcomes. Whereas the Liaisons report annually to their host Sea Grant programs, that information needs to be fully captured and reported to the NSGO as well as the NOAA partner(s). Some information is embedded in the host programs annual PIER reports but the Liaison efforts are typically understated given the reporting limitations.

9) Outreach: The Sea Grant network, in particular, and NOAA OAR in general, know

very little if any about these positions and their roles in helping integrate NOAA with its constituents. A strategy should be devised to raise awareness and the profile without undue burdening of all parties. The NSGO should consider establishing a periodic competition within NOAA to encourage the establishment of additional liaison positions. Such a competition would provide an ideal opportunity to advertise and promote Sea Grant's unique extension strengths within the agency and encourage additional NOAA offices to partner with Sea Grant to enhance the delivery of informational services to the public. NSGO should consider a periodic competition within NOAA to promote the liaison program.

Evaluation

10) Impacts: A summary of Liaisons' impacts and accomplishments, based on the information collected via PIER or another mechanism, should be included as part of the SGAB's Biennial Report to Congress and reported both orally and in writing to NOAA leadership by the SGAB.

Table 1 List of Contacts

Affiliation	Personnel	NOAA Lab Director	NOAA Lab Point of Contact	Year Initiated	Sea Grant Program
Great Lakes Environmental Research Laboratory	Rochelle Sturtevant rochelle.sturtevant@noaa.gov	Deborah Lee Phone: 734-741-2244 deborah.lee@noaa.gov	Margaret Lansing; Information Services Branch Chief 734-741-2210 margaret.lansing@noaa.gov	2001	Michigan: James Diana/ Heather Triezenberg
Atlantic Oceanographic and Meteorological Laboratory	Pamela Fletcher Pamela.Fletcher@noaa.gov	Robert Atlas Phone: 305-361-4300 robert.atlas@noaa.gov	James C. Hendee; Supervisory Oceanographer and Director of Ocean Chemistry and Ecosystems Division 305-361-4396 Jim.Hendee@noaa.gov	2002	Florida: Karl Havens/ Martin Main
Pacific Marine Environmental Laboratory	Meg Chadsey mchadsey@u.washington.edu	Chris Sabine Phone: 206-526-6800 chris.sabine@noaa.gov	Richard Feely; Senior Scientist 206-526-6214 richard.a.feely@noaa.gov	2013	Washington: Penelope Dalton
Pacific Marine Environmental Laboratory	TBA	Chris Sabine Phone: 206-526-6800 chris.sabine@noaa.gov	Diego Arcas, 206-526-6800 diego.arcas@noaa.gov	2013	Washington: Penelope Dalton
National Severe Storms Laboratory	Kodi Monroe Kodi.Nemunaitis@noaa.gov	Steve Koch Phone: 405-325-6904 Steven.Koch@noaa.gov	Alan Gerard; WRD Deputy Division Chief 406-325-6477 alan.e.gerard@noaa.gov	2005	
Northwest Fisheries Science Center	Melissa R. Poe melissa.poe@noaa.gov	John Stein Phone: 206-860-3438 john.e.stein@noaa.gov	Jameal Samhouri 206-302-1740; jameal.samhouri@noaa.gov	2013	Washington: Penelope Dalton
Sentinel Sites MD	Sarah Wilkins sarah.wilkins@maryland.gov	Galen Scott, galen.scott@noaa.gov		2014	Maryland: Fredrika Moser
Sentinel Sites MS-AL	Renee Collini rcollini@disl.org	Galen Scott, galen.scott@noaa.gov		2014	Mississippi-Alabama: LaDon Swann
Sentinel Sites NC	Jennifer Dorton dortonj@uncw.edu	Galen Scott, galen.scott@noaa.gov		2014	North Carolina: Susan White
Sentinel Sites CA	Jenna Judge Jenna.judge@noaa.gov	Galen Scott, galen.scott@noaa.gov		2014	California: James Eckman
Sentinel Sites HI	Maya Walton altonm@hawaii.edu	Galen Scott, galen.scott@noaa.gov		2014	Hawaii: Darren Lerner
Alaska Center for Climate Assessment and Policy	Davin Holen dlholen@alaska.edu	TBA		2016	Alaska: Paula Cullenberg
National Water Center	TBD	TBD	TBD	2016	Mississippi-Alabama: LaDon Swann

NOTE: This table will continue to be updated as information changes. All information is current as of 9/2/16.

Table 2 - Funding

NOTE: This table will continue to be updated as information changes. All information is current as of 9/2/16.

NOAA Affiliation	Original intent	Reference	Current funding arrangement	Reference
GLERL	Salary is provided by OAR headquarters (75%) and Michigan Sea Grant or the Great Lakes Network (25%)	Model for Sea Grant/ OAR/ NOAA Outreach Pilot Position Description: Sea Grant Outreach Position at GLERL 2001	The current arrangement is as follows: NSGO (30%), OAR/ GLERL (30%), and MISG (40%)	From 2014-2017 Omnibus Spend Plan
AOML	Originally, the position was grant funded by NSG/FSG with in-kind support from NMFS/SEFSC, NMS, South Florida Water Management District,. From 2011-2016, salary was provided by NSG (50%), AOML (8%), and the remainder of the salary was obtained through grants acquired largely through the Cooperative Institute at the University of Miami. In August 2016, the position transitions to a University of Florida faculty position with support from NSG (40%) and the University of Florida (60%)	In 1999, initial documentation to develop a liaison position (pers comm. Mike Spranger). Regional meeting at AOML in 2000 (pers comm. Erica Rule and Mike Spranger). Model for Sea Grant OAR outreach 2001 with grant support in 2002.	The current arrangement is 60% Florida Cooperative Extension Service/40% Florida Sea Grant College Program)	Pers. Comm. With Mike Spranger (UF) and Erica Rule (AOML)

NSSL	No historical documents were found from the original intent. However a draft version of "Proposed Sea Grant Outreach position at NSSL stated: "1) Salary for the positon will be provided by OAR headquarters 2) Operating expenses will be provided by NSSL and OU 3) Additional travel support will be provided in the amount of $3,000 per program annually by the four Gulf of Mexico Sea Grant Programs 4) Space will be made available in the offices of the Gulf of Mexico Sea Grant Programs as necessary when the specialist is working the coastal states. 5) Annual evaluations of the specialist for possible promotion and salary increases will be conducted by the appropriate administrator at OU and by the director of the NSSL	Draft version of "Proposed Sea Grant Outreach position at NSSL. Created in 2005, Modified in 2013	The current arrangement is as follows: NSGO (60%); OU (3%); NSSL (10%)	National Sea Grant Weather and Climate Extension Specialist: Continuation of support for Sea Grant Outreach Position at NSSL and the Cooperative Institute for Mesoscale Meteorological studies at the University of Oklahoma. May, 2016
PMEL	For five year duration of this pilot position, the proposed funding is as follows: PMEL 33%, NSGO 33%, WSG 33%. The federal funding request totals #345,184 for February 1, 2013-January 31, 2018 with match of $172,592, to give a total of $517,775	Establishment of a Liaison between Washington Sea Grant and the Pacific Marine Environmental Laboratory" Project Narrative & Sea Grant Budget Form 90-4 (OMB Control NO. 0648-0362)	The current covers salary, benefits, and UW indirect costs of 26%. PMEL and NSGO split federal costs evenly and WSG provides cost share	From 2014-2017 Omnibus Spend plan

NWFSC	The funding arrangement covers salary, benefits, and UW indirect costs of 26%. PMEL and NSGO split federal costs evently and WSG provides cost share.	"Establishment of a Social Science Liaison between Washington Sea Grant and NOAA Fisheries" Project Narrative & Sea Grant Budget Form 90-4 (OMB Control NO. 0648-0362	The current covers salary, benefits, travel, and UW indirect costs of 26%. PMEL and NSGO split federal costs evenly and WSG provides cost share	From 2014-2017 Omnibus Spend plan
Sentinel Site Coordinators	The NOAA National Sea Grant Office and the NOAA Sentinel Site Program anticipate that up to $200,000 in total Federal funding will be available to support Sea Grant Extension (SGE) projects at the NOAA's Sentinel Sites under this announcement. (Also consult the Federal Funding Opportunity NOAA-OAR-SG-2014-2004033 on grants.gov	Funding Availability Announcement for Competition: NOAA Sentinel Sites Cooperative. Date of posting April 22, 2014	The current arrangement is as follows: NSGO (40%); NOS/ OCM (40%); and SG Program match (20%)	From two-year (2015-2016) Sentinel Site Proposals
Alaska Coastal Resilience Specialist	This position is new. The current arrangements for this position are as follows: Year 1 Request Budget Narrative Total funds: $73,000/ Year 1 Total Match Budget UAF: $36,371; Year 2 Request Budget Narrative Total funds: $73,000/ Year 2 Total Match Budget UAF: $36,629	Enhancing Alaskan Coastal Community Resilience and Adaptation to a Changing Environment: UAF Budget Justification" Sent to National Sea Grant Office 2014-2017.	The current arrangement is as follows: AKSG = $30k AK RISA = $30k AK OOS = $30k CPO/COCA = $5k CPO/RISA = $5k NOS/OCM = $20k NWS/AK Region = $10k OAR/NSGO = $33K	Enhancing Alaskan Coastal Community Resilience and Adaptation to a Changing Environment: UAF Budget Justification" Sent to National Sea Grant Office 2014-2017.
National Water Center	This position is new. The current arrangements for this position is $600K over four years, plus match on Sea Grant Funds only (National Weather Service funds do not require match.)	Funding availability announcement for competition: Integrated Water Extension Specialist at NOAA NWC	The current arrangement is %150K.yr plus match: NWS = $90K/yr NSGO=$60K/yr Sea Grant program match=$30K/yr	National Water Center Liaison proposal