FELLOW NEWS

News for and about the NOAA Fellows

Fellows Look Ahead: 2017–2019

Our new fellows will tackle critical coastal issues.

In April, NOAA's Office for Coastal Management matched NOAA Coastal Management Fellowship candidates with coastal zone programs in five U.S. states. Recipients of the two-year fellowships will carry out innovative projects addressing living shorelines, ecosystems services, marine spatial planning, oil spill response, and the beneficial reuse of dredge material.

Vidya Balasubramanyam, from the University of Missouri and nominated by New Hampshire Sea Grant, was matched with the New Hampshire Coastal Program to inform the development of the New Hampshire Tidal Shoreline Management Plan by identifying sites suitable for living shorelines and developing a strategy to increase understanding of how these approaches can preserve important environmental services.

Sean Duffey, from the University of Rhode Island and nominated by Rhode Island Sea Grant, was matched with the Massachusetts Office of Coastal Zone Management to protect critical ecosystem services by designing and applying a method to prioritize habitats at risk and inform robust policies and strategies that will increase the resilience of important resource areas.

Emily Hall, from Duke University and nominated by North Carolina Sea Grant, was matched with the Connecticut Coastal Management Program to work with the program, a statutory advisory committee, partners, and stakeholders to integrate and finalize a marine spatial planning document for Long Island Sound.

Sarah Idczak, from the University of Washington and nominated by Washington Sea Grant, was matched with the Oregon Coastal Management Program to create updated geographic response plans for the Oregon coast that incorporate new natural resource data and a new understanding of spill response techniques, and that are easier to update in future years through formalization of an automated approach to development.

Jackie Specht, from Rutgers University and nominated by New Jersey Sea Grant, was matched with Maryland's Chesapeake and Coastal Service to understand the challenges, options, and practices for beneficial reuse of dredge material; identify opportunities to enhance community resilience with this material in Maryland; and develop a policy document and decision-support tool for beneficial reuse of dredge materials on Department of Natural Resources lands.

Guardians of the Coast: 2015–2017

We say farewell to six amazing coastal fellows.

Rachel Bouchillon worked with the Commonwealth of the Northern Mariana Islands' Division of Coastal Resources Management to help achieve resilient and sustainable growth by centralizing data and creating decision-support tools. Rachel developed a map-based decision-support tool for the agency's coastal permitting division. Her web application enables staff members to get reports on environmental, social, and climate-related conditions by entering a land parcel number in a query feature. Her application will centralize permit-related data and streamline the application review process.

Abbie Sherwin worked with the Maine Coastal Program to bolster the resilience of Maine's coastal communities to flood hazards through a two-part project. First, Abbie developed the Maine Flood Resilience Checklist. This simple and practical self-assessment tool helps communities understand their vulnerability to current and future flood hazards, evaluate preparedness for flood events, and gauge the resilience of their social, natural, and physical systems. It includes a facilitated discussion process and guides communities in using results to identify specific flood resilience actions. Second, she worked to boost community participation in the Federal Emergency Management Agency's Community Rating System (CRS). This system is a voluntary incentive program that provides discounted flood insurance in exchange for floodplain management activities that go beyond minimum national requirements. Abbie conducted education and outreach efforts to increase awareness of CRS and developed guidance materials to streamline the application process.

Ashley Green worked with the Massachusetts Office of Coastal Zone Management to provide the state's coastal communities with stormwater management tools that can strengthen climate change resilience and improve water quality. Many of the tools address runoff associated with higher precipitation and extreme rain events. Ashley's outreach to municipal planners and planning board members is particularly important because in Massachusetts, these officials' decisions on zoning, subdivision control, and site, master, and open space planning can greatly affect how stormwater is managed. To reach these audiences and others, Ashley developed a guidebook addressing new stormwater permit requirements; best management practices and ways to coordinate local planning efforts; funding sources and strategies; planning and zoning tools for stormwater management at municipal, neighborhood, and site scales; and ways to determine each community's needs, strengths, structure, and resources.

Simone Barley-Greenfield worked with the New Hampshire Coastal Program and the Piscataqua Region Estuaries Partnership to systematically integrate social science into ecosystem management for New Hampshire's estuaries. Simone studied how other coastal management agencies have captured the way humans engage with, and benefit from, local coastal and watershed resources, and applied what she found to the social ecological system in the Piscataqua Region watershed. Simone also interviewed stakeholders who study and manage the watershed—and those who live and do business in it—to discover ecosystem aspects they value. She captured those values and benefits through the collection of regional social ecological data, and her work will be published in the 2018 State of Our Estuaries report, a regional publication. After her fellowship ends, the Piscataqua Region Estuaries Partnership will build on the social research agenda Simone established during her time as a fellow and will continue to monitor these social indicators as vital components of a healthy watershed.

Julie Sepanik worked with the Oregon Coastal Management Program to plan for sea level rise by building an inventory of vulnerable estuary shoreland resources. She produced six future flooding scenarios and inventoried assets— such as infrastructure and socioeconomic and natural resources—at risk within each scenario. Julie's final reports and a map viewer identify sea level rise exposure for each estuary in the project area and shed light on associated flooding statewide. With these aids, the state can pinpoint vulnerable communities most in need of adaptation funds. On the local level, communities can use these products for sea level rise vulnerability assessments and to begin adaptation planning.

Amanda Leinberger worked with the Puerto Rico Coastal Zone Management Program to coordinate the Puerto Rico Climate Change Council, co-lead the development of Puerto Rico's State of the Climate report for 2014 to 2017, and begin creating a Climate Resilience Toolkit for Puerto Rico. The climate report features the most up-to-date information for the island. Amanda coordinated the efforts of more than 100 experts to write various sections. She also planned the working group meetings and annual climate change summits, and she chairs the group charged with communicating climate change science effectively to the public. The Climate Resilience Toolkit will include numerous resources, but Amanda's main focus is the Vulnerability Self-Assessment Tool for Coastal Communities. With this tool, communities and officials can assess hazard risks and determine adaptation actions that can protect their localities.