



FELLOW NEWS

News for and about the NOAA Fellows

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FOCUS ON FELLOWS: Matt Slagel



Twenty years ago on North Carolina's windswept Outer Banks, a boy named Matt Slagel spent lazy autumn days riding a boogie board on Atlantic Ocean waves and building sand castles with his brother and sister. Little did he know that those special days at the family's beach cottage would lead him, years later, to pursue a career devoted to keeping the coast vibrant and healthy.

"We often stayed at the cottage in the fall, when it was less crowded by tourists. I have a real attachment to the Outer Banks, and beaches in general, because of those experiences," says Slagel, a coastal fellow with South Carolina's Office of Ocean and Coastal Resource Management (OCRM), a component of the state's Department of Health and Environmental Control.

As a first-year student at the University of Virginia, Matt thought he would major in environmental engineering. "After the first few semesters, I realized I was not as interested in the engineering career track. I was much more interested in conservation and policy issues. I guess you could say that, instead of learning how to modify the environment, I wanted to learn how to live with it," he emphasizes.

Matt began working on a B.S. in environmental sciences, and his work with Professors Bob Dolan and Patricia Wiberg sparked his interest in coastal issues. Matt worked as Dolan's teaching assistant in a "Beaches, Coasts, and Rivers" course, and he spent a summer as Wiberg's research assistant studying sediment characteristics and ripple dynamics.

As his undergraduate years came to an end, Matt began to look at graduate schools.

"I was dating my future wife, Laura, and we visited the University of California-Santa Cruz. Immediately, we fell in love with the beauty

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of the place. The campus is right in the middle of a redwood forest,” says Matt, and Monterey Bay had “cliff-backed pocket beaches in little coves, where you could hear the sound of barking sea lions and smell the seaweed.” Matt and Laura moved to California, where Matt began his M.S. in ocean sciences and Laura accepted an architecture position in San Jose.

Matt learned a lot from Gary Griggs, his professor and thesis advisor and an expert in studying shoreline processes, coastal engineering, and coastal hazards. The two eventually co-wrote an article, “Cumulative Losses of Sand to the California Coast by Dam Impoundment,” which was published in the May 2008 issue of the *Journal of Coastal Research*.

“The article examines how much of the sand in rivers and streams is trapped behind coastal dams and unable to reach the beach,” says Matt. He discovered that the pre-dam annual sand flux in southern California has been reduced by an estimated 50 percent—a factor that undoubtedly plays a prominent role in California’s beach erosion problems. Matt hopes that the article can be used by state planners who are considering which dams should be removed.

While Matt and Laura enjoyed their time in Santa Cruz, they missed their families on the East Coast. After completing his graduate degree, Matt took a position with the NOAA Office of Coast Survey in Silver Spring, Maryland. While there, he heard about the coastal fellowship from two former fellows and thought it would be a great opportunity to diversify his skills.




Matt hiking in Big Basin Redwoods State Park in the Santa Cruz Mountains.

“Before the fellowship, I was comfortable with research and technical projects but not as comfortable with policy development and management. At OCRM, I work with the science and policy division as well as with the regulatory division. So I learn about the science and see how it is put into action through management and policy,” notes Matt.

Several agency colleagues and mentors are helping Matt make the most of his fellowship experience. Matt works with Braxton Davis, the agency’s science and policy director, and Melissa Rada, the science and policy program coordinator, on supporting the South Carolina Shoreline Change Advisory Committee. Committee members represent academia, government agencies, the private sector, and nongovernmental conservation and research organizations. Together, they are examining which beachfront management policies have been successful in the past and which can be improved upon for the future,

especially in light of emerging threats such as accelerated sea level rise.

Matt is also working with Bill Eiser, OCRM’s oceanographer, on updating and revising beachfront jurisdictional lines. Matt combines geographic information systems, lidar, historical shoreline data, and long-term erosion rates to determine these new line positions. Matt is also updating a digital beachfront structure inventory, including houses, swimming pools, and erosion control devices within OCRM’s jurisdiction, so that post-storm damage assessments can be carried out more efficiently.

So, what does the future hold for Matt? “I’m not sure, although I’ve certainly fallen in love with Charleston during my time here,” says Matt, who adds that he and Laura spend many weekends enjoying nearby beaches and exploring the history and architecture of the city. “That said, I’m open to possibilities,” says Matt. “I really enjoy working in coastal zone management, and as long as I’m close to a beach, I’m happy.” 

FOCUS ON THE CENTER

Publication Highlights Strategies to Meet the Climate Change Challenge

Climate change is a far-reaching problem, potentially increasing the intensity of everything from nonpoint source pollution to natural hazards such as hurricanes and flooding.

However, coastal resource managers around the nation are already making significant strides in tackling the multiple threats posed by climate change. Some states strive to make their communities more resilient to natural hazards. Others have tackled “smart growth” innovations that can help their communities mitigate, or adapt to, the coming changes. Still others are working to reduce runoff and improve water quality.

A publication of the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center, *Local Strategies for Addressing Climate Change*, spotlights some of the tools, programs, and projects that are already in place to address issues related to climate change. The publication contains articles previously published in the Center’s industry magazine for coastal professionals, *Coastal Services*.

The publication also features a quick reference guide to Center products and services that help coastal professionals address issues related to climate change. These resources include topographic and bathymetric data, data assistance, visualization tools, social science technical assistance, and trainings in coastal community planning and coastal inundation mapping.

Stories of Success

Some of the local- and state-led strategies featured in the publication include the following:

- Hazards such as flooding—resulting from sea level rise and an increase in the severity of tropical storms and hurricanes—are predicted consequences of climate change. With the debut of the StormSmart Coasts website, Massachusetts is preparing communities to “bounce back” after natural disasters. The Web resource consolidates and simplifies information on everything from hazard identification and mapping to legal information and funding.

- Climate change is likely to increase certain water pollution problems, including polluted stormwater runoff. But sometimes it’s hard to persuade homeowners that some simple steps can reduce runoff and improve water quality. In Minnesota, an award-winning website uses real-time stream-monitoring data to paint a picture of what’s happening in the Lake Superior watershed. The website also incorporates the data into community information venues and includes a toolkit for reducing stormwater impacts.

- Rhode Island is proactively responding to sea level rise predictions by updating building codes and developing related coastal regulations. These regulations not only explain the science of sea level rise and provide historical data, but they also will help the coastal council and others in the state better manage development and related concerns.

To download *Local Strategies for Addressing Climate Change*, visit www.csc.noaa.gov/magazine/climatechangestrategies.pdf. To receive a hard copy of the publication, contact Donna.McCaskill@noaa.gov.

FOCUS ON THE COASTAL FELLOWSHIP: Sea Grant Endorsements

The NOAA Coastal Services Center has received the 2009–2011 Coastal Management Fellowship endorsements from Sea Grant. The Center received 36 applications from 22 Sea Grant programs across the country. Using four criteria—academic performance and diversity of educational background, endorsement by the applicant’s Sea Grant director, support from two letters of recommendation, and content of the applicant’s goal statement—12 finalists will be selected from among these candidates.

A workshop to match states with fellows will take place in Charleston, South Carolina, from May 4 to 8, 2009. Of the finalists selected, six will be placed with a host state. Each of the selected host states will send its fellow mentor to the placement workshop, and the finalists will be brought to the workshop at the expense of the Center.

The workshop consists of an orientation, project proposal presentations, finalist presentations, finalist and host state interviews, and fellow matching. If a state does not find a suitable candidate during the workshop, it will be given the option to defer fellow placement for one year. States will only be allowed one deferment before they have to reapply. No contact between prospective hosts and finalists should be made before the placement workshop.

This year, the host states are California (both the California Coastal Commission and the San Francisco Bay Conservation and Development Commission), Maryland, New Jersey, Oregon, and Wisconsin. For more information on 2009 state projects, please visit the fellowship website at www.csc.noaa.gov/cms/fellows/stateprojects.html or contact the fellowship coordinator at csc.fellowships@noaa.gov.

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CREDITS AND INFORMATION

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Please send your questions and suggestions for future editions to
csc.fellowships@noaa.gov

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UPCOMING CONFERENCES AND EVENTS



APRIL

6 to 10: **2009 National Hurricane Conference**
Austin, Texas
www.hurricanemeeting.com

20 to 24: **The NatureServe Conservation Conference 2009**
Gettysburg, Pennsylvania
www.natureserve.org/visitLocal/gettysburgConference/call.jsp

25 to 29: **American Planning Association 2009 National Planning Conference**
Minneapolis, Minnesota
www.planning.org/nationalconference/

29 to 30: **Land Trust Alliance Northeast Regional Conference**
West Point, New York
www.landtrustalliance.org/learning/training/rc/northeast

MAY

4 to 6: **2009 American Water Resources Association Spring Specialty Conference**
Anchorage, Alaska
www.awra.org/meetings/Anchorage2009/index.html

11 to 14: **U.S. Hydro 2009 Conference**
Norfolk, Virginia
www.hypack.com/hydro09/

JUNE

7 to 12: **Association of State Floodplain Managers Annual National Conference**
Orlando, Florida
www.floods.org/conferences,%20Calendar/Orlando.asp

June 29 to July 1: **2009 American Water Resources Association Summer Specialty Conference**
Snowbird, Utah
www.awra.org/meetings/SnowBird2009/

For more information on upcoming events, please visit www.csc.noaa.gov/cms/conferences.html.

NOAA COASTAL SERVICES CENTER TRAINING

Coastal Applications Using ArcGIS
April 22 to 23
Grand Bay National Estuarine Research Reserve

Coastal Inundation Mapping
June 23 to 24
University of Connecticut Geospatial Technology Program

June 25 to 26
University of Rhode Island Geospatial Extension Program

GIS Tools for Strategic Conservation Planning
June 23 to 26
NOAA Coastal Services Center and The Conservation Fund

Introduction to ArcGIS
April 20 to 21
Grand Bay National Estuarine Research Reserve

Negotiating for Coastal Resources
May 13
Maritime Civil Affairs

Project Design and Evaluation
April 15 to 16
Hudson River National Estuarine Research Reserve

April 30 to May 1
Washington Sea Grant and City of Bainbridge Island

May 14 to 15
Maritime Civil Affairs

Public Issues and Conflict Management
May 6 to 8
Mississippi-Alabama Sea Grant

May 11 to 12
Maritime Civil Affairs

June 24 to 26
Brevard County Office of Natural Resources Management

For more information on virtual and site-specific trainings, visit www.csc.noaa.gov/training/.