



FELLOW NEWS

News for and about the NOAA Fellows

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FOCUS ON FELLOWS

Kathy Johnson



Coastal Fellow Kathy Johnson says she is having “the time of my life” working for the Wisconsin Coastal Management Program in a career—and a climate—that was not on her radar 20 years ago.

Kathy, a lifelong South Carolinian before the fellowship, grew up in the coastal city of Georgetown and describes herself as a

“beach fanatic” who spent many childhood weekends picnicking, boating, and hunting for seashells along the Grand Strand.

Graduating from Clemson University with a B.S. in mathematics, Kathy used her analytical talents to help design telephone facilities and a GIS platform for telecommunications companies. But for more than two decades, much of her time and attention was devoted to raising two children and supporting her husband’s career as the family moved to various South Carolina locations.

Then her marriage ended. With two adult children launched and living away from home, Kathy says, “I found myself single and trying to put my life back together. I felt I really needed to make a change.”

She started reading about planning and noticed its relevance to her background in GIS. She also noticed that Clemson University offered a master’s degree in city and regional planning and decided to apply. “My daughter had just finished her sophomore year at Clemson and was not exactly thrilled about me going to the same college. I told her, ‘I promise not to interfere in your life!’” she laughs.

Starting out in the graduate program, Kathy wondered whether she’d be accepted by the other students, most of whom were in their twenties. “They were wonderful! In fact, my best friend in

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the program was 23 years old, and she'll be a lifelong friend of mine," adds Kathy. Caitlin Dyckman, an environmental planning professor, and Anne Dunning, a transportation planning professor, were also very supportive in mentoring Kathy.

While working as a research assistant for Dyckman, Kathy found out about the fellowship. She felt a little intimidated at the matching workshop, noticing the intense science backgrounds of other fellowship nominees. "My son, who lives in Colorado, kept encouraging me and saying, 'Mom, you can do it!' I relaxed a little once I realized that all of the fellowship proposals had some relationship to planning."

As Wisconsin's first NOAA Coastal Management Fellow, Kathy has experienced her first cold and snowy winter—plus a very warm welcome from her colleagues in the state. She singles out three colleagues for their special support—Kate Angel, the Wisconsin Coastal Management Program's federal consistency and coastal hazards coordinator; Michael Friis, the program's manager; and David Hart, a GIS specialist at the University of Wisconsin Sea Grant Program.

Kathy's GIS skills are coming in handy as she researches and develops a decision-support toolbox for the Great Lakes that will be part of the online



New to Wisconsin's winter sports, Kathy takes a snowmobile out for a spin.

Wisconsin Coastal Atlas. At least one product in the toolbox will address the state's bluff erosion and bluff failure hazards.

"Wisconsin's minimum setbacks don't always give enough protection, because many bluffs continue to erode from wind action, wave action, and rain. Also, people resist building farther from the bluff edge because they want the view," adds Kathy. The Wisconsin Oblique Photo Viewer aids decisions by enabling viewers to compare 1976 shoreline and bluff photos with those taken in 2007 and 2008. (It was developed by the Association of State Floodplain Managers and is located at www.floodatlas.org/wcmp/obliqueviewer.)

Kathy has also developed the Coastal Management Grants Map,

which uses Google Earth. "The map tool is important because the bulk of federal funds our program receives go to support smaller organizations and agencies. We want to highlight the fact that Wisconsin has completed lots of projects in the coastal zone this way," she emphasizes. Kathy is also developing a tool that features data from C-CAP [NOAA's Coastal Change Analysis Program] brought down to the municipal level.

Although she misses South Carolina's coast and climate, Kathy is open to jobs in other coastal regions once the fellowship ends. "I'd really like to keep working with GIS. Also, I love getting out to view the areas I'm working on and meeting with local planners and stakeholders, so I hope to keep doing these things." 

FOCUS ON THE CENTER

Lidar Data and Services at the Ready

So many coastal professionals need lidar data to finish important tasks—whether the task involves visualizing inundation and sea level rise, gauging coral reef threats, figuring out lake bluff recession rates, or carrying out dozens of other projects. A lidar collection housed and distributed by the NOAA Coastal Services Center can become the key to completing these projects (see www.csc.noaa.gov/lidar/).

The lidar collection is featured on the Digital Coast website and includes downloadable data from every coastal state. The data come from NOAA programs, other federal agencies, state and local governments, academic institutions, and private firms.

The most frequently downloaded lidar sets focus on the U.S. shoreline and are collected approximately every five years by the U.S. Army Corps of Engineers' National Coastal Mapping Program. Managers and researchers often

use the data to detect coastal and sediment changes and consider land use plans and decisions (see www.csc.noaa.gov/digitalcoast/data/chartstopobathy/).

The Center also provides the means for local and state officials to contract the flying and processing of lidar. The lidar contractors have already undergone a stringent, competitive contracting process.

“Sea level rise is driving lots of requests for our lidar contract vehicle,” says Kirk Waters, the Center’s program manager for coastal remote sensing. Using lidar to address sea level rise requires more stringent specifications than does mapping the floodplain using FEMA’s [Federal Emergency Management Agency] guidelines. “Our customers figure they’ll get more bang for their buck if they contract for lidar with sea level rise in mind, because the data will help them deal with floods, too.”

The Center manages the contract so the customer is not burdened by day-to-day tasks.

“We may also agree to help with technical issues, examine the data, supply extra information on the data, and provide quality assurance or else have quality assurance performed by an independent, third-party contractor,” notes Waters. Once the data are gathered, approved, and delivered to the customer, the set is placed on the Digital Coast and available to any user.

In addition, the Center provides two online lidar trainings (see www.csc.noaa.gov/training/). Introduction to Lidar teaches basic lidar concepts and explains how different types of data address specific coastal applications. Understanding Map Projections, Datums, and Coordinate Systems teaches participants about the considerations that go into applying GIS data to specific coastal management challenges.

To learn more about the Center’s lidar data and services contact Kirk.Waters@noaa.gov. 

WHAT’S NEW ON DIGITAL COAST?

Social Vulnerability Index – Generated by the University of South Carolina, this data set measures the social vulnerability of U.S. counties to environmental hazards and can be found at www.csc.noaa.gov/digitalcoast/data/sov/.

Viewer Upgrade – New features on the Data Access Viewer include higher-resolution base imagery and an increased download limit. Download your data at www.csc.noaa.gov/dataviewer/.

Tech Blog – A new blog invites customer interactions and provides timely discussions on technical topics relevant to coastal management at www.csc.noaa.gov/digitalcoast/techblog/.

To subscribe to the *Digital Coast Updates* e-newsletter, visit www.csc.noaa.gov/publications/subscriptions.html.

2012

FOCUS ON THE COASTAL FELLOWSHIP: 2012 State Projects Selected

Six exciting new projects have been selected for the 2012-2014 NOAA Coastal Management Fellowship. Below is a summary of each of these projects for the coming year. Recruiting efforts are well underway, but we need your help to spread the word to eligible fellowship applicants. Remember that applications should be submitted to area Sea Grant directors and are due no later than January 27, 2012.

State Projects

Host Agency: Commonwealth of the Northern Mariana Islands Coastal Resources Management Office
Location: Saipan, Commonwealth of the Northern Mariana Islands
Project Goal: Identify communities and sectors at risk to climate change impacts and assist in developing locally relevant models to sea level rise and inundation scenarios

Host Agency: Delaware Coastal Program
Location: Dover, Delaware
Project Goal: Develop a marine spatial plan for Delaware's Atlantic Ocean and Delaware Bay area to ensure the conservation of important marine resources

Host Agency: Maryland Chesapeake and Coastal Program
Location: Annapolis, Maryland
Project Goal: Integrate water quality and coastal resources into a marine spatial plan for Maryland's Chesapeake and Atlantic Coastal Bays to target restoration and conservation activities

Host Agency: Massachusetts Office of Coastal Zone Management
Location: Boston, Massachusetts
Project Goal: Assess and promote beach and dune nourishment as a viable and cost-effective climate change adaptation tool for shore protection

Host Agency: San Francisco Bay Conservation and Development Commission
Location: San Francisco, California
Project Goal: Develop and evaluate climate adaptation strategies for vulnerable park and recreation assets in the San Francisco Bay area

Host Agency: Washington State Department of Ecology
Location: Bellevue, Washington
Project Goal: Develop guidance for incentives, education, and regulation to help promote appropriate green shoreline approaches for Puget Sound

For more information on the 2012 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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UPCOMING CONFERENCES AND EVENTS

JANUARY

16 to 20: Alaska Marine Science Symposium
Anchorage, Alaska
www.alaskamarinescience.org

FEBRUARY

15 to 16: Social Coast Forum 2012: Social Science for
Coastal Decision-Making
Charleston, South Carolina
www.csc.noaa.gov/socialcoastforum/location.html

MARCH

19 to 23: American Society for Photogrammetry and
Remote Sensing Annual Conference
Sacramento, California
www.asprs.org/Annual-Conferences/Sacramento-2012/

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

NOAA COASTAL SERVICES CENTER TRAINING

JANUARY

Online:

4: Digital Coast Webinar: Supporting Ocean Energy Planning
with the Multipurpose Marine Cadastre

On-Site:

19 to 20: Project Design and Evaluation,
Greenland, New Hampshire

FEBRUARY

Online:

1: Digital Coast Webinar: Coastal County Snapshots:
An Issue-Specific Data Communication Tool
7: Nonpoint Source Pollution and Erosion Comparison Tool

On-Site:

7 to 8: Coastal Inundation Mapping,
Baton Rouge, Louisiana

MARCH

On-Site:

6 to 7: Coastal Inundation Mapping,
Poughkeepsie, New York

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

CREDITS AND INFORMATION

Fellow News is published by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center to relay information about the fellowship program and provide a forum for information exchange among fellows, mentors, Sea Grant, and the Center.

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

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