

# COASTAL SERVICES

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LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

## **ECOSYSTEM-BASED MANAGEMENT: Finding the Interconnections in New York**

## **Assessing Flood Hazards Getting Easier in Hawaii**

## **Being Quick to Communicate Oil Spill Information in the Gulf of Mexico**



## From the Director

Since we heard from the Pew Oceans Commission in 2003 and the U.S. Commission on Ocean Policy in 2004, it has been clear that ecosystem-based management (EBM) is the approach of choice for addressing the interconnected relationships among all ecosystem components—including humans—in the oceans, coasts, and Great Lakes.

While coastal resource managers have clearly understood the direction in which we need to go, actually implementing EBM has not always been easy. Over the past several years, a number of successful EBM efforts have emerged that coastal managers can look to for lessons learned.

In this edition of *Coastal Services*, we look at efforts in New York that are effectively shifting the state from conventional segmented resource management to a system that focuses on the relationships between the environment, human activities, and the delivery of critical ecosystem services.

We also await the Ocean Policy Task Force's final *Framework for Effective Coastal and Marine Spatial Planning*, which will be a primary tool for collaboratively implementing EBM with federal, state, tribal, and local authorities; regional governance structures; and substantial stakeholder and public input.

The NOAA Coastal Services Center has been engaged in developing the nine priority objectives put forward by the Ocean Policy Task Force and is the NOAA lead for issues related to resilience and adaptation to climate change. Working with the task force is just one way in which the Center has been involved in coastal and marine spatial planning.

Other efforts include developing a website with NOAA partners featuring six real-world examples of ocean planning and management, resources, and information that relates to the principles of coastal and marine spatial planning. To view the examples, go to the "In Practice" page of NOAA's Coastal and Marine Spatial Planning website—[www.cmsp.noaa.gov](http://www.cmsp.noaa.gov).

Another article in this edition looks at how four Gulf of Mexico Sea Grant programs quickly responded to the BP *Deepwater Horizon* oil spill by putting up a regional oil spill Web portal.

The Center is supporting NOAA's overall response to the BP spill by providing staff assistance and expertise in geographic information systems (GIS), assessing the economic impacts, and helping to facilitate the federal response. ❖



Margaret A. Davidson

The mission of the NOAA Coastal Services Center is to support the environmental, social, and economic well being of the coast by linking people, information, and technology.



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## News and Notes

### Project Planning: Guaranteed Success

Planning meetings can leave participants feeling wrung out, almost like they've experienced an intellectual spin cycle. If it is a good meeting, good and bad ideas are explored and a variety of perspectives are heard. If it is a great meeting, measurable and attainable objectives are created, along with an action plan focused on success.

But what is success? How is it measured? Who is responsible for what and by when? Not identifying one or more of these components can cause a host of inefficiencies, including redundancy and gaps in effort. This happens more than one might think, at least partially because most people are drawn to the field of coastal resource management from their love of science and the coast; project planning might not be high on the skill set list.

Fortunately, the NOAA Coastal Services Center offers a number of classes designed to expand management skills. Topics include project negotiations, meaningful evaluations, and public issues and conflict management.

One course, Project Design and Evaluation, shows participants how to set up their initiatives with success in mind. Setting a realistic goal is an important step; a good example is provided below:

*Fifty percent of the coastal zone management programs will have three or more staff members using geographic information systems (GIS) by 2011.*

This goal is well stated because the language is specific, measurable, and includes a deadline. Furthermore, the goal is realistic yet ambitious, and the audience is clearly identified.

In addition to instruction about goal setting, Project Design and Evaluation also covers logic models, project design and assessment, implementation, and evaluation.

Participants benefit not only from the expertise of the instructors, but also the experience and time spent working through organizational or community issues with their peers. ❖

*Courses provided by the NOAA Coastal Services Center can be brought to your facility. When possible, the participants' data and challenges are incorporated into the learning experience. To see a complete training roster and get details about hosting requirements, visit [www.csc.noaa.gov/training/](http://www.csc.noaa.gov/training/).*



### Did we hit our mark? ←

In the Planning for Meaningful Evaluation course, instructors lead you and your co-workers through exercises designed to improve evaluation skills.

**Planning for Meaningful Evaluation**  
[www.csc.noaa.gov/training/](http://www.csc.noaa.gov/training/)

Prerequisites include the Project Design and Evaluation course or logic model experience.

# Assessing Flood Hazards in Hawaii Getting Easier

It used to be a difficult and time-consuming process to assess the flood hazards of a specific property in Hawaii. Today, it is easy for property owners and others in the state to search and view flood hazard information using an online geographic information system (GIS) mapping application.

*“Now that the technology is available to evaluate and analyze flood data in digital form, the possibility exists to develop many different applications.”*

*Carol Tyau-Beam,  
State of Hawaii National Flood  
Insurance Program*

“While the tool doesn’t provide a final regulatory assessment, it vastly improves the process by quickly performing initial assessments,” says Carol Tyau-Beam, State of Hawaii National Flood Insurance Program coordinator in the Hawaii Department of Land and Natural Resources. “This is a starting point for a customer who needs information for planning purposes, such as siting, construction, or property purchase.”

Since the Hawaii Flood Hazard Assessment Tool (FHAT) was released in January 2008, the

Department of Land and Natural Resources has continued to enhance the application by adding data and maps and creating an Elevation Certificate tool that allows users to automatically fill in fields in the certificate form.

“FHAT has become a valuable resource for many National Flood Insurance Program stakeholders,” says Tyau-Beam.

## Going Paperless

Before FHAT was released, the process of assessing flood hazards at the parcel level in Hawaii was a manual exercise, says Tyau-Beam. “It was challenging to determine the location of parcels and structures on the paper FEMA flood insurance rate maps (FIRMs). This made assessing the flood hazard of an existing parcel a difficult and time-consuming task.”

Six years ago, the Federal Emergency Management Agency (FEMA) began a map modernization program with the goal of making FIRMs available digitally.

“We saw a need,” says Tyau-Beam, “for people to know where to get the digital flood map information, and our office was in a position to receive the maps from FEMA. We needed a Web-based format for people without access to ArcGIS products to view the maps. We also needed to bring in county parcel information, which FEMA doesn’t include on the FIRMs, in order for people to search by properties.”

## Integrating Data

To help build the FHAT tool, Department of Land and Natural Resources staff members turned to a consultant who was not just a GIS practitioner, but who was also capable of programming Web applications.

The resulting tool integrates GIS data layers from federal, state, and local sources into a single statewide map. The map is made up of special flood hazard area GIS layers collected from FEMA, imagery collected from state sources, and parcel and road network layers collected from county sources.

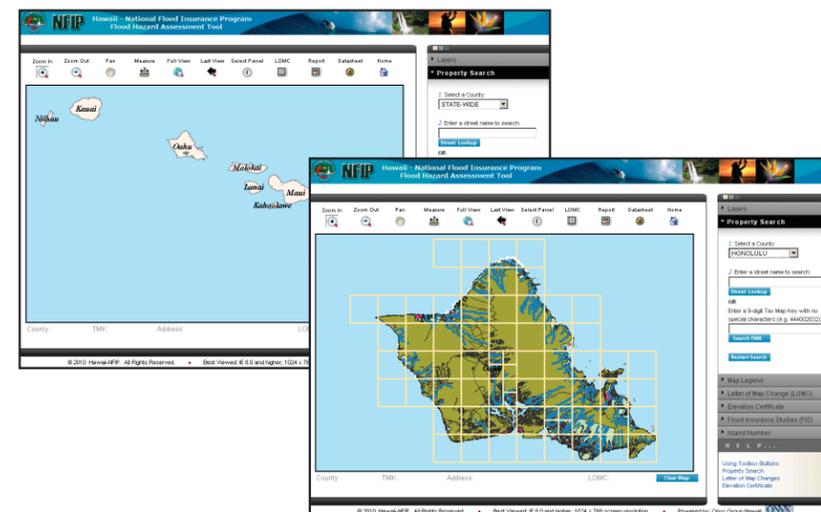
Users can search for their parcels either by location, address, or tax map key. Once located, a report can be generated providing flood hazard information about the property.

“Because FHAT is on a public website,” Tyau-Beam says, “it saves county personnel time by allowing anyone the ability to locate their parcel of interest and retrieve flood hazard information.”

“It is important to stress,” she adds, “that the FHAT is an informational, not a regulatory tool. Our state National Flood Insurance Program serves as a liaison between FEMA and the counties, so building permits are not issued through our office.”

## Enhancements

After publicly launching FHAT, the Department of Land and Natural Resources began working



with county officials to get their input. As a result of their and other users’ feedback, the FHAT was enhanced to improve its usability and functionality.

Added features include the capability of viewing letters of map change, which reflect official revisions to flood maps, preliminary digital flood insurance rate maps (DFIRMs), and National Geodetic Survey benchmark datasheets, which show the location of bronze disk survey monuments set in rock or permanent structures.

## Form Filling

The latest improvement that has been incorporated into the FHAT, Tyau-Beam says, is an Elevation Certificate tool, which is an online digital version of a paper FEMA form. The form is primarily used by floodplain administrators, surveyors, insurance agents, and their clients.

The expanded tool allows users to initiate an Elevation Certificate for a property by automatically inputting various form fields with data extracted from a search query.

The remainder of the PDF form can then be completed by the user, printed, and traditionally submitted to a county office for processing.

“Creating the Elevation Certificate tool is win-win—the auto-complete functions help us during review of the forms to ensure information provided is accurate, and it also helps the applicant in completing the forms accurately and more efficiently,” Tyau-Beam says. “Feedback we’ve gotten from the surveying community and from counties is they are applauding our efforts and promoting the tool.”

The FHAT tool also received ESRI’s 2009 Special Achievement in GIS award.

## Driving Interest

While press releases about FHAT had generated some users, Tyau-Beam says it was a major storm that helped drive interest in the website.

“At the end of December 2008, the state experienced severe storms and heavy flooding, and the FHAT received a huge spike in hits,” she recalls. “From that point on, we

pushed to promote the website and started training stakeholders on all the islands.”

Training on using the tool was held for insurance agents, mortgage lenders, and realtors. Agency staff members have also been promoting the site at building and home shows.

## Model Effort

Tyau-Beam notes that both the FHAT and Elevation Certificate tool could be populated with data specific to other states.

“Either tool would be useful for floodplain managers in any state with digital flood insurance rate maps,” she says. “In other disciplines, the availability of digital maps or databases opens up possibilities for useful search tools. Coastal managers may not use the Elevation Certificate tool specifically, but similar tools and applications may spawn from it.”

Tyau-Beam suggests that something similar to the FHAT that overlays shoreline setbacks with flood inundation lines could be used for planning or siting purposes, or a tool that queries data might aid in the coastal zone permitting process.

“Now that the technology is available to evaluate and analyze flood data in digital form, the possibility exists to develop many different applications,” she says. “It’s exciting to imagine the possibilities!” ❖

To view Hawaii’s Flood Hazard Assessment Tool, go to [www.hawaiiinfip.org](http://www.hawaiiinfip.org) and click on Flood Hazard Assessment Tool. For more information on the tool or its development, contact Carol Tyau-Beam at [Carol.L.Tyau@hawaii.gov](mailto:Carol.L.Tyau@hawaii.gov).



## Ecosystem-Based Management: Finding the Interconnections in New York

New York state officials listened when two national commissions studying ocean policy called on coastal resource managers to adopt ecosystem-based management (EBM) to address the myriad of issues facing the nation's shorelines. In 2006, New York passed legislation that is effectively shifting the state from conventional segmented resource management to a system that focuses on the interconnections between the environment, human activities, and the delivery of critical ecosystem services.

"This is not about creating a new program or adding more work, but rather building on existing efforts," says Greg Capobianco, director of the New York Department of State's New York Ocean and Great Lakes staff. "The way I view EBM is that we are expanding the lens through which coastal managers look."

He explains, "Right now, coastal managers mainly focus on the thin ribbon of coastal area. What we really need to do is look fully up into the watershed and out to the ocean, and bring these three elements

together. In New York, we are thinking, deliberating, and bringing the allocation of resources together to make these connections."

New York's 2006 Oceans and Great Lakes Ecosystem Conservation Act established a council of nine state agencies to work together to better manage human activities that affect New York's coastal ecosystems.

As a result of the council's efforts, the state's ecosystems have been identified, opportunities for ecosystem-based management have been recognized, the Ocean and Great Lakes Atlas has been created, projects are progressing in two pilot communities, and a broader regional partnership has been established.

"This act is unique," Capobianco says, "because it was the first—and is still—the only statute that really calls on a state to undertake EBM."

### National Spotlight

While not a new management approach in the coastal and marine environment, EBM was spotlighted by both the U.S. Commission on

*"The way I view EBM is that we are expanding the lens through which coastal managers look."*

*Greg Capobianco, New York Department of State*

Ocean Policy and Pew Oceans Commission as a solution to the combination of human activities on land, along the coasts, and in the ocean that are affecting marine ecosystems. Impacts include altering marine food webs, changing the climate, damaging habitat, eroding coastlines, introducing invasive species, and polluting coastal waters.

Traditional management approaches have considered each activity or threat to ecosystem health in isolation, says Kathryn Mengerink, coauthor of *Ocean and Coastal Ecosystem-Based Management: Implementation Handbook* and director of the Ocean Program at the Environmental Law Institute. "That's what EBM is trying to address."

EBM is defined in the U.S. Commission on Ocean Policy's September 2004 final report as managing ocean and coastal resources in a way that reflects "the relationship among all ecosystem components, including humans and nonhuman species and the environments in which they live."

The report notes, "Applying this principle will require defining relevant geographic management areas based on ecosystem, rather than political, boundaries."

Heather Leslie, coeditor of the recently published book, *Ecosystem-Based Management for the Oceans*, and assistant professor of environmental studies and biology at Brown University, describes EBM as "an integrated approach to the management of land and sea."

"Its core goal," Leslie says, "is to sustain the long-term capacity of coastal and marine systems to provide the benefits that people value—services such as seafood, access to clean water, healthy beaches, and protection from coastal storms—while allowing sustainable human uses."

### No Cookie Cutter

"Ecosystem-based management happens in so many different ways in different places," says Karen McLeod, the other coeditor of *Ecosystem-Based Management for the Oceans*, which examines EBM case studies from around the country.

"There is no cookie cutter way to go about doing this," says McLeod, who is also the director of science for Communication Partnership for Science and the

Sea (COMPASS). "Every place differs in its ecological, social, and historical context. In some places it's been implemented through a top-down government mandate; in others it's a bottom-up, grassroots effort, or something in between."

Leslie notes that "EBM can happen at a wide range of spatial scales, from the local to the watershed or regional scale. The key is to integrate understanding of both the ecological and human dimensions across scales."

### Day-to-Day

New York's legislation charges the Ocean and Great Lakes Ecosystem Conservation Council with developing comprehensive strategies, grounded in science, to embrace and advance EBM principles in order to "conserve, maintain and restore coastal ecosystems so that they are healthy, productive and resilient, and able to deliver the resources people want and need."

Among the council's tasks were to define executive and legislative steps to integrate EBM within existing state programs, create an ocean and Great Lakes resources atlas for the public and decision makers, demonstrate improvements in two study areas using EBM, and identify opportunities for EBM with neighboring states and the federal government.

Part of the state's EBM success, Capobianco says, is due to the diversity of the council, which brings together the commissioners of agriculture and markets, economic development, environmental

conservation, general services, transportation, and parks, recreation, and historic preservation. It also includes the secretary of state, the president of the Energy Research and Development Authority; and the chancellor of the State University of New York. The state's coastal management program staffs the council.

Capobianco says, "We are working to incorporate EBM principles into our day-to-day decision-making and the council agencies have made good progress doing this."

### Building Maps

One of the council's first achievements was to create the online Ocean and Great Lakes Atlas, [www.nyoglatlas.com](http://www.nyoglatlas.com), which allows users to build maps by selecting features of interest, print maps, and download information into Google Earth or two different software packages.

Currently, more than 200 data sets on resources such as storm drains, wetland boundaries, underwater vegetation, park locations, and fisheries are available through the atlas. Eventually, more than 900 data sets will be included.

"The atlas is an amazing tool," says Capobianco. "We are constantly building this as resources allow."

### Learning Laboratories

The act also established two demonstration areas—the Great South Bay on Long Island and the Sandy Creeks Watershed on the eastern shore of Lake Ontario—to

*Continued*

gain on-the-ground experience in applying EBM. Each project area was designed to address known problems and to learn how EBM might be applied.

In Great South Bay, implementation efforts are focused on hard clam and seagrass restoration activities. In the Sandy Creeks Watershed, a number of implementation projects are ongoing, including an aquifer study, a stream restoration project, and an invasive species control program.

“These areas have served as learning laboratories for the council agencies to collaborate on various approaches to EBM planning and implementation,” Capobianco says. “The goal is to apply lessons learned as the council begins to implement EBM statewide.”

### Documenting Direction

In its report released in April 2009, the council defined the state’s ecosystems, recognized existing EBM management efforts in the state, and identified executive and legislative steps to integrate EBM within existing programs. The council also identified 13 priority actions to be achieved by 2014 at current funding levels and called for the development of a state research and monitoring agenda.

One of the state’s priorities, Capobianco says, is marine spatial planning, starting with a pilot project in New York’s ocean waters. The pilot project will develop siting criteria for offshore wind development and identify critical ocean habitats in need of greater protection. When complete, it will result in an amendment to the state’s coastal management program.

### Reaching Out

While developing the report, the state held 14 “community conversations” across the state to provide public input. The document also emphasizes the need to partner with local governments, nongovernmental organizations, businesses, and citizens, as well as the state legislature and federal government.

On June 4, 2009, New York led the initiative to establish the Mid-Atlantic Regional Council on the Ocean (MARCO) with New Jersey, Delaware, Maryland, and Virginia. MARCO will work regionally to address shared ocean issues, with a focus on climate change, water quality, ocean habitat protection, and offshore renewable energy.

“Regional ocean governance is a priority,” Capobianco says. “We organized the mid-Atlantic region and worked together to craft an initial action plan for our states to tackle shared priorities in the mid-Atlantic ocean ecosystem.”

### Sharing Lessons

Capobianco believes other states can learn from New York’s EBM experience.

“I think New York is a good model,” he says. “When you read it, our statute is not like any others. It’s a very solid and detailed place to start.”

Capobianco adds, “Each state and region would put their own personality on it, but I think the approach and vision that New York initiated will be helpful to get people thinking about EMB in a comprehensive fashion.” ❖

*For more information on New York’s ecosystem-based management efforts, contact Greg Capobianco at (518) 474.8811, or [gregory.capobianco@dos.state.ny.us](mailto:gregory.capobianco@dos.state.ny.us). For more information on ecosystem-based management, contact Heather Leslie at (401) 863-6277, or [heather\\_leslie@brown.edu](mailto:heather_leslie@brown.edu), Karen McLeod at (541) 737-9822, or [karen.mcleod@science.oregonstate.edu](mailto:karen.mcleod@science.oregonstate.edu), or Kathryn Mengerink at (858) 822-5821, or [mengerink@eli.org](mailto:mengerink@eli.org).*

### FOR MORE INFORMATION

- New York Ocean and Great Lakes Ecosystem Conservation Council, <http://nyoglecc.org>
- The EBM Roadmap, [www.ebmtools.org/roadmap.html](http://www.ebmtools.org/roadmap.html)
- NOAA National Ocean Service and Coastal Ecosystem Science, <http://oceanservice.noaa.gov/ecosystems/coastalecsci/>
- Interagency Ocean Policy Task Force: *Interim Framework for Effective Coastal and Marine Spatial Planning*, [www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/](http://www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/)
- Communication Partnership for Science and the Sea (COMPASS), [www.compassonline.org/marinescience/solutions\\_ecosystem.asp](http://www.compassonline.org/marinescience/solutions_ecosystem.asp)
- *Ocean and Coastal Ecosystem-Based Management: Implementation Handbook*, [www.elistore.org/reports\\_detail.asp?ID=11350](http://www.elistore.org/reports_detail.asp?ID=11350)
- The Nature Conservancy’s Ecosystem-Based Management Decision-Support Toolkit, <http://marineplanning.org>

## Being Quick to Communicate Oil Spill Information in the Gulf of Mexico

As an explosion and subsequent fire damaged the BP *Deepwater Horizon* oil rig on April 22, communications staff members from the four Gulf of Mexico Sea Grant programs were meeting in Florida to discuss improving regional communications. When it became clear that a massive oil spill was occurring just off their coastlines, the communicators shifted their focus from long-term goals to the crisis at hand. Just over a week after BP’s oil rig capsized and sank, a regional oil spill Web portal went live.

“We wanted to cover the full gamut of information that people would want.”

Roy Kron, Louisiana Sea Grant College Program

The Gulf of Mexico oil spill website, <http://gulfseagrant.tamu.edu/oilspill/index.htm>, provides links to everything from the latest developments in the BP *Deepwater Horizon* oil spill to background information on oil spills in general. Organizations from around the country are linking to the site.

“Generally, the site is updated daily,” says Roy Kron, director of outreach and communications for the Louisiana Sea Grant College Program. “There was

a flurry of activity initially, but that has slowed down as far as new content is concerned.”

### Learning from Katrina

Kron says part of the idea for a comprehensive oil spill website came from a hurricane website that Louisiana Sea Grant created shortly after Hurricane Katrina in 2005.

“That site continued to evolve with additional information on hurricane preparation in general, impacts to communities, and how communities were responding,” he says. “That turned out to be a great resource for extension agents, as well as local planners and citizens to keep up with what was going on.”

### Auspicious Timing

For several years, the four Gulf of Mexico Sea Grant programs have had a regional website hosted by Texas Sea Grant. Late last year, the communicators in the Texas, Louisiana, Mississippi-Alabama, and Florida programs decided that the regional website needed a redesign, which Louisiana volunteered to lead.

While attending a sea level rise conference in Florida the week of April 22, the group—which included Kron; Jim Hiney, communications coordinator at Texas Sea Grant; Dorothy Zimmerman, interim director of communication at Florida Sea Grant; and Melissa Schneider, communications coordinator for Mississippi-Alabama Sea Grant—met to discuss the regional website.



Oil from the still-leaking BP *Deepwater Horizon* well was partially visible across the northern Gulf of Mexico in June.

“We were discussing projects that we can do together and what each program could contribute to the regional website,” Kron says. “We were looking more towards focusing on sea level rise at that point.”

### Shifting Focus

By the time the communicators returned to their respective state offices, it was clear the BP spill was not going to be a short-term event, and the collaborators’ attention quickly turned to making oil spill information available for extension staff members and coastal residents.

A search of the Internet found that a comprehensive oil spill website did not already exist. Instead of being able to refer people to one site, as they had expected, information had to be compiled from other sources, including the Extension Disaster Education Network (EDEN), NOAA, U.S. Fish and Wildlife Service, U.S. Environmental Protection

Continued on Page 9

# Visualizing the Impacts of Climate Change in California

Since many effects of climate change may not be seen for decades, it can be challenging for coastal resource managers to illustrate the coming impacts on coastal communities. A new online tool developed by California resource managers is showing residents and decision makers how warming temperatures, rising sea levels, precipitation shifts, and more frequent, intense wildfires could impact their environment.

**“Our goal was to make the information transparent and easily accessible by users.”**

*Tony Brunello, California Natural Resources Agency*

“This ability to access information and data about estimated changes in climate at the local levels by simply selecting a given region in California is an extremely powerful tool for decision makers,” says Tony Brunello, deputy secretary for climate change and energy in the California Natural Resources Agency.

CalAdapt—which is still in the prototype stage—isn’t a forecaster but rather is an electronic way to visualize the possible effects of climate change using current scientific data. The tool, which uses a Google Earth platform, allows users

to view interactive maps showing such things as the shrinking snowpack along the Sierra Nevada, and how a rise in sea level could submerge parts of San Francisco.

“Somebody doing a general plan for any town in California can go in and see the data that is being used, and what impacts are considered in their areas,” Brunello says. “It’s a whole new way of communicating research.”

CalAdapt grew out of efforts to coordinate the state’s first climate adaptation strategy, Brunello says. “When we went to find out what maps were available, we realized we didn’t have the information we needed... Our goal was to make the information transparent and easily accessible by users.”

Discussions with Google led to the idea and development of CalAdapt, he says. Researchers at several California universities helped take state-specific research, data from the Intergovernmental Panel on Climate Change 2007 report, and projections from global climate change models and translate them for the tool’s 7 by 7 kilometer radius.

The beta version of the tool was released last summer alongside the 2009 California Climate Adaptation Strategy. A more robust, easier-to-use version of the tool will go live by the end of 2010.

Although California worked with a consultant to create CalAdapt, Brunello believes “any state could



*California coastal managers can now visualize how rising sea levels will impact their state’s coastline.*

take their science and put it in Google Earth and share it with the world. Google has set it up so that anyone can do that.”

“What would be ideal,” he notes, “would be for NOAA or some other federal agency to create a common platform for downscaling global climate models so that everyone can easily access them.”

Brunello adds, “I’m convinced that this is the way science communication is going to evolve. Any tool that can get information out in ways people can utilize on the ground is absolutely necessary.” ❖

*To view CalAdapt, go to [www.climatechange.ca.gov/visualization/](http://www.climatechange.ca.gov/visualization/). For more information on California’s climate change adaptation strategy, go to [www.climatechange.ca.gov/adaptation/](http://www.climatechange.ca.gov/adaptation/). You may also contact Tony Brunello at (916) 653-5672, or [Tony.Brunello@resources.ca.gov](mailto:Tony.Brunello@resources.ca.gov).*

*Continued from Page 7*

Agency, various branches of the military, universities, and others.

A call for material also went out to various partner organizations and networks, and some original content was generated by Sea Grant programs.

“We wanted to cover the full gamut of information that people would want, from what is going on, to how do you respond if you run your boat through it, to where you could volunteer, to how do you handle animals that may be contaminated by the oil,” Kron says.

The oil spill website went live on April 30—eight days after the BP *Deepwater Horizon* explosion.

## **Evolving Effort**

The site has been publicized mostly through partner programs and networks, and has evolved to include a bulletin board system where researchers going out to collect samples can coordinate their efforts, saving time and resources.

While it’s still early to evaluate the site’s success, Kron notes that many other organizations, including EDEN and other Sea Grant programs, have asked to link to the portal. A button with the Sea Grant logo was designed for other organizations to add to their websites.

“Things just fell into place,” Kron says. “A lot of it was luck, but having good relationships with your partners makes it easier to respond to a crisis like this. We’ve taken advantage of each program’s strengths, and we’re not duplicating efforts. This truly was a collaborative effort that demonstrates the value of working together.” ❖

*To view the Gulf of Mexico oil spill website, go to <http://gulfseagrant.tamu.edu/oilspill/index.htm>. For more information on the site and its development, you may contact Roy Kron at (225) 578-6564, or [rkron@lsu.edu](mailto:rkron@lsu.edu).*

**NEW AND IMPROVED**

## **Coastal Climate Adaptation Resources for Coastal Communities**

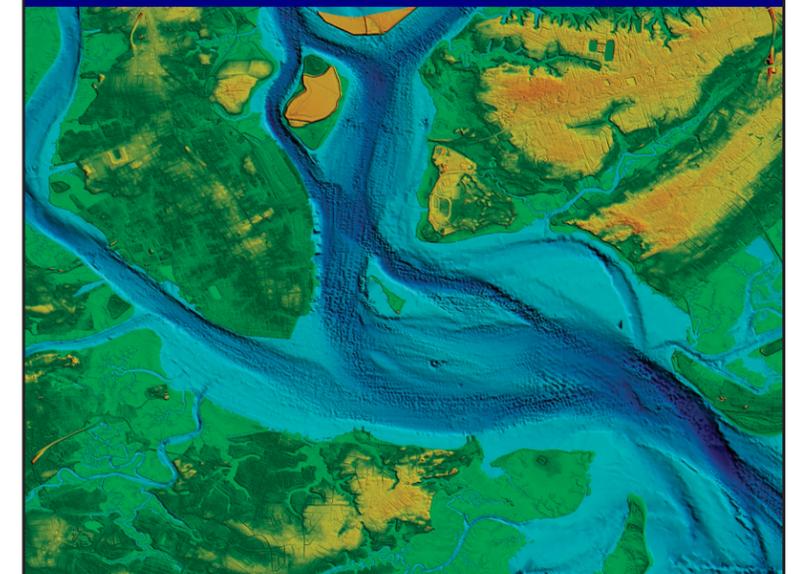
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<http://collaborate.csc.noaa.gov/climateadaptation>

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## COASTAL AND MARINE SPATIAL PLANNING

Before they come to you with the next big idea.

The website is for those who manage ocean resources, providing basic information plus the tools, data, and examples needed to make coastal and marine spatial planning a reality for your locale.

[www.cmssp.noaa.gov](http://www.cmssp.noaa.gov)



NOAA Coastal Services Center  
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY



**March 21 to 24, 2011**  
**Myrtle Beach, South Carolina**

The technical conference for the nation's  
coastal management community.

Submit your abstracts in August.

**Coastal GeoTools**  
[www.csc.noaa.gov/geotools/](http://www.csc.noaa.gov/geotools/)