

COASTAL SERVICES

VOLUME 12, ISSUE 1 • JANUARY/FEBRUARY 2009

LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

SUSTAINABLE TOURISM: Increasing the Economic Impact While Preserving the Environment in Ohio

Using Science to Create Dune and Beach Protection Policy in Virginia

Providing GIS Services to Conserve Lands in Maine



FROM THE DIRECTOR

Community resilience does not just mean having communities that are better prepared to bounce back from severe weather or impacts from climate change. While rebounding from natural hazards is an important element, community resilience is all-inclusive—the ability to recover whether the impact is economic, environmental, physical, or societal.

And the reality is that climate change may hit some communities in all these areas.

Coastal resource managers have more opportunities than some may realize to play significant roles in creating truly resilient communities. Much of this can be accomplished by only slightly adjusting traditional program focuses and partners.

For instance, in the cover story of this edition of *Coastal Services*, we look at how coastal managers in Ohio are making sustainable tourism a primary program focus to help communities become more resilient economically, environmentally, and socially.

Not only is coastal tourism big business, but it also impacts our natural resources and is impacted by the resources' quality and health.

As one of the sources for this article puts it, "what happens to the tourism industry and tax revenues and jobs if water quality takes a turn

for the worse?" Or if sea level rise impacts beaches, or if changes in precipitation due to climate change leave ski resorts without guests?

The Ohio Sea Grant College Program is actively working to mitigate these impacts by simultaneously diversifying tourism audiences, protecting the environment, and creatively educating visitors about the importance of our natural resources.

Other articles in this edition look at how Virginia used science to help get legislation passed expanding the state's dune and beach protection, and how Florida managers are working to prevent harassment of dolphins.

Also featured is an article on the success of the Wells National Estuarine Research Reserve in supporting geographic information system mapping in southern Maine—an effort that has been the beneficiary of capacity-building efforts by the National Oceanic and Atmospheric Administration's Coastal Services Center.

As always, we hope you find these articles interesting and informative. ❖



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.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Coastal Services Center

National Oceanic and Atmospheric Administration

U.S. Secretary of Commerce
Carlos M. Gutierrez

Under Secretary of Commerce for Oceans and Atmosphere, and Administrator, National Oceanic and Atmospheric Administration (NOAA)
William J. Brennan, Ph.D., acting

Assistant Administrator for Ocean Services and Coastal Zone Management, National Ocean Service
John H. Dunnigan

NOAA Coastal Services Center
Director: Margaret A. Davidson

Deputy Director: Jeff Payne

Coastal Geospatial Services, Division Chief: Nicholas Schmidt

Integrated Information Services, Division Chief: Tony LaVoie

Management and Budget, Division Chief: Paul Scholz

Regional Coastal Services, Division Chief: Rebecca Smyth

Coastal Management Services, Division Chief: Ginger Hinchcliff

Communications Director: Donna McCaskill

Magazine Writer and Editor: Hanna Goss

Copy Editor: Gerald Esch

Graphic Designer: Frank Ruopoli

Back issues of *Coastal Services* can be viewed at www.csc.noaa.gov/magazine/

To subscribe to *Coastal Services*, please direct correspondence to:

Hanna Goss
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405-2413
Phone: (828) 246-0958
Fax: (843) 740-1313
E-mail: Hanna.Goss@noaa.gov

For more information about the Coastal Services Center, call (843) 740-1200 or visit our home page on the Internet: www.csc.noaa.gov

Coastal Services is produced bimonthly as a trade journal for coastal resource managers. Editorial content is unofficial and not authority for action. Views and opinions expressed may not reflect those of the Department of Commerce or NOAA.

NEWS AND NOTES

Improving Your Writing Skills

All organizations have a message. But how well this message is delivered can make a big difference in how your audience responds—or if they respond at all. Previous articles on this page have covered speaking skills, PowerPoint presentations, and working with the media. Today's topic is writing skills.

The communications department of the National Oceanic and Atmospheric Administration's Coastal Services Center sees some mistakes made over and over again, hence these writing tips.

Start with a plan. Before you begin to write the actual document, write a theme statement. This statement will relay, in a conversational tone, what your document is trying to say and to whom. In fact, one of the best ways to come up with the theme statement is to tell someone in two sentences or less what you hope to communicate with your document. This statement will help you focus your work.

Cut out unnecessary words. Many government officials, particularly

in the technical field, cringe when asked to make something succinct. "But the detail is important," they say. Being succinct often doesn't have anything to do with detail. And it's not about "dummying down." Rather, it's about saying something clearly with the fewest words possible. It's about having respect for the time the reader must put into reading and understanding your points.

Know your audience. Speaking about respect, that theme statement you wrote—surely the topic and information interests you, but will it interest your audience? Do they really care about the history of the project or the people who worked so hard to bring it to them? Make sure your focus and the bulk of your text addresses what the audience is interested in, not what you wish they were interested in.

Be mindful of too many words or phrases in a series. A sure sign that someone is trying to overexplain something is a document littered with an excessive amount of words

or phrases in a series. Instead of saying, "This legislation will help preserve coastal resources," the text will say, "These laws, policies, memorandums of agreement, and regulations will help protect and conserve the beaches, freshwater wetlands, saltwater wetlands, sand dunes, and isolated wetlands of the region, the state, and the community." Aughhhh!!!

Lose the acronyms. Technically, you can define an acronym in the first occurrence and then use the acronym for the rest of the document. Acronyms slow the reader down, however, and can greatly impede communication. Spell out the word each time, or instead of writing the Best Beach Planning Commission or BBPC, use "the planning commission."

Before you begin your next document, write that theme statement and then figure out the most succinct way to communicate this message. The audience will thank you for it. ❖

Using Science to Create Dune and Beach Protection Policy in Virginia

Over the past 10 years, a series of studies have been conducted to inventory and analyze Virginia dune and beach resources. This extensive examination ultimately resulted in legislation passing unanimously last year that expanded dune and beach protection from nine communities to all the communities in the state's coastal zone.

"This is what we all dream about when we talk about wanting science-based policy," says Laura McKay, program manager for the Virginia Coastal Zone Management Program.

The expanded Coastal Primary Sand Dunes and Beaches Act protects an additional 1,300 estuarine beaches and dunes along about 75 miles of shoreline that includes 24 counties and 14 cities.

The result is that communities and the state are now better able to protect dune and beach resources from shoreline hardening structures designed to control shoreline erosion, as well as other coastal development.

First Line of Defense

Dunes and beaches are critical resources for any coastal state, says Shep Moon, coastal planner for the Virginia Coastal Program.

The first line of defense during a hurricane or nor'easter, dunes and beaches act as buffers and absorb wave energy so that properties are protected from shoreline erosion.

"Dunes really work better than anything man-made as far as protecting land from storms," says

"We now have the authority to ensure that more of these important coastal resources remain intact to buffer upland areas from future storms and climate change impacts."

Shep Moon, Virginia Coastal Zone Management Program



Rock revetments and bulkheads (Left), as well as primary dunes and the sandy beaches above the mean high water line (Right), will be managed under the new legislation.

Moon. "It's been shown time and time again that if you build on top of dunes, you lose protection and those houses are put in danger."

Dunes and beaches also provide critical habitat for a number of important plant and animal species, and protect water quality by filtering freshwater before it reaches saltwater or brackish water.

Original Legislation

The state's original legislation protecting primary dunes was passed in 1980. At the time, there was no comprehensive inventory of dune or beach resources, and only nine localities were covered, explains Moon.

In 1984, the legislation was expanded to include protection of beaches above the mean high water line in those same nine communities.

Other legislation, including the Tidal Wetlands Act, protected the state's shoreline below the mean high water line.

But there was a "hole in the Virginia shoreline protection system," says Lyle Varnell, assistant director of Advisory Services at the Virginia Institute of Marine Science (VIMS).

In many communities, sandy beaches above the mean high water line and primary dunes were given little or no protection, especially from the construction of shoreline hardening structures.

It was, however, concern about the protection of secondary dunes—older dunes found landward of primary dunes—which are not covered in any Virginia legislation, that led to the evaluation of the state's dune and beach resources.

Secondary Questions

"That was really the impetus to start this," acknowledges McKay. "Some people took me out and were showing me some really spectacular secondary dunes that were completely unprotected."

Scott Hardaway, a VIMS geologist, recalls that "when the coastal program posed the question about the secondary dunes, we responded that we couldn't question the status of the secondary dunes because we didn't know the status of the primary dunes."

Enhancing the Coastline

The coastal program used federal 309 coastal zone enhancement grants to fund the series of studies conducted by VIMS that resulted in a comprehensive inventory and analysis of the state's dune and beach resources.

Section 309 of the Coastal Zone Management Act is a voluntary grant program for federally approved coastal management programs to identify the highest state priorities related to public access, coastal hazards, ocean resources, wetlands, marine debris, cumulative and secondary impacts of growth and development, special area management planning, energy and government facility siting, and aquaculture.

Research Says

VIMS research showed that extensive dune and beach resources beyond the nine localities in the original legislation were

unprotected, especially from the impacts of shoreline hardening structures such as rock revetments and wooden bulkheads.

Designed to control shoreline erosion, these structures can also affect dune and beach habitats and decrease the amount of sand necessary to maintain beaches.

The analysis also showed that most of Virginia's secondary dunes were either already protected through conservation, were significantly altered by development, or faced little threat of development because of limited access.

Forming Policy

Using the VIMS research, the network of coastal agencies and communities that make up the coastal program's Coastal Policy Team supported the idea of expanding the act to cover the unprotected beaches and primary sand dunes.

To protect the small number of ecologically valuable secondary dunes, efforts will include acquisition or conservation easements.

Unanimous Support

With the research and program support in hand, Moon says the "next step was to package it to make it easier for the public, local elected officials, and general assembly members to understand the issues. VIMS did a publication with our grant support."

The bill moved quickly through the state legislature, passing unanimously. It went into effect July 1, 2008.

Local in Approach

The expanded legislation enables communities to adopt a model

ordinance that gives them the power to administer dune and beach permits through existing local wetlands boards, says Tony Watkinson, deputy chief of the Habitat Management Division of the Virginia Marine Resources Commission.

If a community chooses not to adopt the ordinance, then the Marine Resources Commission regulates development affecting dunes and beaches in that area.

"What the expansion really got us," explains Moon, "is protection of dunes and beaches where they were unprotected. We now have the authority to ensure that more of these important coastal resources remain intact to buffer upland areas from future storms and climate change impacts," such as sea level rise.

McKay adds, "We had the wonderful opportunity of using federal grant funds to analyze an issue and determine what the situation is, and how to make improvements. This is a fine example of how section 309 coastal zone enhancement grants did exactly what Congress—and we in coastal zone management—wanted it to do." ❖

For more information on Virginia's dune and beach research, go to www.vims.edu/physical/research/shoreline/cbdunes/. You may also contact Shep Moon at (804) 698-4527, or shep.moon@deq.virginia.gov, or Laura McKay at (804) 698-4323, or laura.mckay@deq.virginia.gov. For more information on VIMS research, contact Lyle Varnell at (804) 684-7764, or lyle@vims.edu, or Scott Hardaway at (804) 684-7277, or hardaway@vims.edu. For more information on regulatory implementation of the act, contact Tony Watkinson at (757) 247-2255, or Tony.Watkinson@mrc.virginia.gov.

SUSTAINABLE TOURISM:

Increasing the Economic Impact While Preserving the Environment in Ohio

Intentionally increasing the number of tourists visiting natural areas may cause alarm for some coastal resource managers worried about the unintended harm that can come from environmental resources being “loved to death” by too many visitors.

Coastal resource managers in Ohio, however, are finding that making tourism a primary program focus is sustainably increasing visitors’ economic impact in the region while preserving the special places and stories that make Lake Erie unique.

“The tourism arena is a huge segment of Ohio’s economy, and Lake Erie is the driving force,” says Jeff Reutter, director of the Ohio Sea Grant College Program and Stone Laboratory. “There was not only an opportunity—there was a need for us to get involved.”

Ohio Sea Grant hired a full-time extension tourism director to focus on tourism programs, partnerships, capabilities, and services to benefit the public.

The intent of the tourism program, says its director, Melinda Huntley, one of eleven Ohio Sea Grant extension agents, is to create sustainable tourism that helps communities become more resilient in these changing times.

“Sustainable tourism diversifies the economy and gives a dollar

value to the resources that make our communities unique,” Huntley says. “We need to help diversify our tourism base to protect the economy, protect the environment, and help address environmental issues ranging from harmful algal blooms to climate change.”

Through the Ohio Sea Grant Extension Tourism Program and partner efforts, \$4.8 million has been awarded for environmental protection and restoration projects, environmental-based tourism activities, such as birding, have been successfully marketed while simultaneously easing visitor impacts, and the public’s awareness of environmental issues has been increased.

“I think every coastal program should be involved,” says Reutter. “If you really look at tourism’s portion of the business economy, it’s huge.”

Big Business

Lake Erie tourism in Ohio accounts for more than \$10.7 billion in revenue, employing 119,100 Ohio residents and generating more than \$750 million in state and local tax dollars.

In the U.S., travel and tourism is a \$1.6 trillion industry, according to the Travel Industry Association of America. Travel and tourism generates \$110 billion in tax



revenue for local, state, and federal governments, and the travel and tourism industry is one of the country’s largest employers, directly generating 7.5 million jobs.

Outdoor activities are third on the list of top activities for domestic travelers, and in 2004 all top-10 destination states for traveling U.S. residents were coastal states.

Interrelated

“Tourism and the environment are so interrelated,” says Huntley. “Tourism is viewed as an economic driver, but in reality it has the ability to impact and be impacted by environmental quality. That’s the connection that’s often overlooked.”

Reutter asks, “Don’t we have a responsibility as scientists—as educators—to try to inform people of the importance of our natural resources, why they are valuable, the issues that we are working on, and the value in protecting the resources?”

“If we can simply change our style of presentation and try to do it in a fun and enjoyable

way, now we’re talking tourism development and we’re enhancing the tourism experience.”

Comprehensive Approach

In 2006, Ohio Sea Grant hired Huntley, who has an extensive tourism background, and partnered with Lake Erie Coastal Ohio, Inc., a nonprofit organization representing the tourism bureaus of seven Lake Erie counties.

“The tourism industry is a great partner that is often overlooked,” Huntley says. “These are people who know how to creatively do marketing and promotion with very little money. They can help us emphasize why our coastal resources are important and unique.”

Responding to Change

Huntley says tourism is also important to include in broader environmental discussions, such as algal blooms, and precipitation and water level changes resulting from climate change.

“What happens to the tourism industry and tax revenues and jobs

“We need to help diversify our tourism base to protect the economy, protect the environment, and help address environmental issues ranging from harmful algal blooms to climate change.”

Melinda Huntley,
Ohio Sea Grant Extension

if water quality takes a turn for the worse?” Huntley asks. “This is one of the primary reasons we don’t operate in isolation and are doing a comprehensive program.”

Huntley adds, “The biggest thing we can do to help coastal communities is to help make sure the market base is diversified and that they are not focusing on just one type of visitor. We need to help diversify the tourism economy now so if there are environmental changes, communities are not scrambling because they’ve lost their tax base.”

Diversifying Resources

One of the many examples of sustainable tourism that Huntley points to on an eight-page list of program successes is the partnership’s creation of a regional approach to promote birding.

Huntley notes that a particular Lake Erie marsh is considered one of the top birding destinations in North America. The partners are creating a website and map identifying 60 birding hot spots along Lake Erie and coordinated a meeting of birding experts and resource

managers to enhance the promotion of birding along the shoreline.

“We are able to spread the impact so the effect on that one spot isn’t as much,” Huntley says. “People visiting multiple destinations create a much more manageable situation.”

Businesses traditionally focused on current precipitation levels, such as winter ski resorts, are being encouraged to provide resources for birders. Amenities, such as boardwalks, have also been built in some areas to help minimize damage to resources.

“When you work together, you can accomplish multiple goals,” Huntley says.

Building Leadership

In addition, Huntley has been working with four other Ohio coastal resource programs to develop a comprehensive strategic plan for outreach, and has worked with partners to develop a leadership academy for tourism officials to help educate and encourage them to become more involved in environmental organizations.

Huntley says, “I firmly believe that people protect what they value, and they value what they know and have had experience with. Getting people out to the resources encourages that bond that will help them justify protecting the resources in the future.” ❖

For more information on the Ohio Sea Grant Extension Tourism Program, go to www.coastalohio.com. For more information, contact Melinda Huntley at (419) 609-0399, or huntley@coastalohio.com, or Jeff Reutter at (614) 292-8949, or reutter.1@osu.edu.

Providing GIS Services to Conserve Lands in Maine



Local land use and conservation decision makers in southern Maine have turned to the Wells National Estuarine Research Reserve over the last decade for support with geographic information system (GIS) mapping and other technical needs. Today, the reserve is one of four GIS centers in the state, and has produced hundreds of maps at the request of resource managers, conservation groups, scientists, citizens, and students.

“We see our role as a clearinghouse for getting state and federal and regional information and passing it down to local organizations, as well as gathering data from local organizations and passing it up to the state, regional, and federal levels. We are the go-between,” says Susan Bickford, the Wells Reserve’s GIS specialist.

In addition to producing maps, the Wells Reserve GIS Center collects and shares digital

parcel maps, aerial photographs, satellite images, maps of conserved lands, and rare wildlife and plant occurrence data. The center also offers conservation organizations direct technical assistance and training for GIS and the Global Positioning System (GPS).

“So much of land conservation is done visually,” notes Tin Smith, the reserve’s stewardship coordinator. “Taking an aerial photograph and putting a parcel map over it can create awe or amazement at a meeting.”

On the Path

The reserve’s path to becoming a GIS center began in 1998.

“We held a regional meeting where we brought 19 area conservation organizations together and asked them what barriers they had to conserving more land,” explains Smith. “At the top was access to GIS technology and resource information. They didn’t know what lands were being protected, or how they were being protected.”

Bickford notes that at that time, land use and conservation decision makers were basing all their decisions on hard-copy maps that would not even show the next town.

Out of that initial meeting came “our interest in increasing the quality and quantity of conservation going on in the area,” Smith says.

They began looking for the money and equipment they would need to provide the necessary technical support.

“We suddenly became very relevant to the whole conservation effort.”

*Susan Bickford,
Wells National Estuarine
Research Reserve*

Federal Assistance

About a year later, the National Oceanic and Atmospheric Administration’s (NOAA) Coastal Services Center introduced its Protected Areas GIS (PAGIS) project, which provided the support the Wells staff members had been looking for.

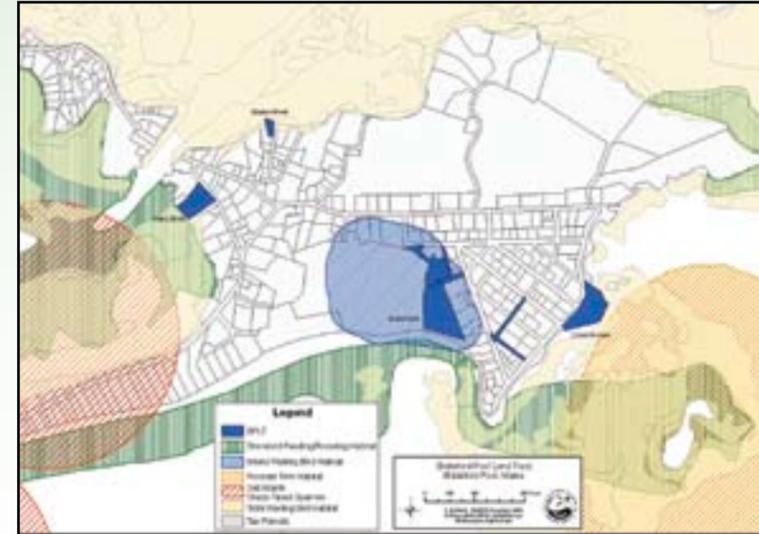
The PAGIS project brought compatible GIS and geographic data management capabilities to each of the nation’s 25 estuarine research reserves and 13 marine sanctuaries to help build the capacity of the nation’s coastal resource managers.

Through PAGIS, the reserves and sanctuaries also developed advanced data sets, underwent extensive training, and found innovative ways to make the most effective use of their new data and technological capabilities.

“With the PAGIS program, we were able to put the technology and training together to meet our local organizations’ needs,” Smith says.

Number One Question

The Wells Reserve’s first effort was to create data layers that easily showed where area conservation lands were located.



“That took two years,” notes Bickford. “It took an incredible amount of effort to get going.”

Once complete, however, “people suddenly realized that natural resource assets were being lost,” she says. “We suddenly became very relevant to the whole conservation effort.”

One of Four

In 2006, the reserve was named by the Maine Coast Protection Initiative (MCPI) as one of four GIS centers on the coast of Maine.

MCPI is a coalition of more than 70 public and private conservation agencies and organizations working to leverage funding, technical assistance, and other resources to help build local capacity for conserving important areas along Maine’s coastal zone. The partnership was founded by the Maine Coast Heritage Trust, Maine State Planning Office, Land Trust Alliance, and NOAA Coastal Services Center.

In addition to providing operational funding, an MCPI

grant enabled the four service centers to meet three times a year to share lessons learned and exchange technology.

“We were all doing GIS, but now we’re a little bit more coordinated and we have worked to get a standardized database format and uniform standards so that we can share information,” creating a coast-wide database of conservation lands, Smith says.

Although the MCPI grant has run out, Bickford notes that the four centers are continuing to meet on their own to continue data-sharing efforts.

Expanding Efforts

Today, the Wells Reserve GIS Center is providing data and support to 34 communities and conservation organizations. The center also works through the reserve’s Coastal Training Program to offer GIS, GPS, and other software training to enable local conservation organizations to create their own maps.

The support is provided on an as-needed basis and is free.

“Many people come to us not understanding anything about GIS,” says Bickford. “We offer training that enables them to visualize the kinds of assistance we can offer their organizations. We customize our services and training to each individual land trust.”

Documenting Success

While the amount of lands conserved in Southern Maine has increased greatly over the past decade, Smith says it is impossible to tell how much of a role the reserve’s GIS center has played.

Bickford estimates that over the years she and Smith have produced hundreds of maps for a variety of organizations, helped facilitate many large-scale collaborations, and enabled region-wide planning.

Projects have included supporting the Mt. Agamenticus to the Sea Conservation Initiative, a broad-scale effort to conserve a mosaic of 48,000 acres in a six-town area, as well as the Eastern Trail Alliance, a scenic walking and biking trail that will traverse coastal sections of Maine and New Hampshire.

“We have such a broad geographic mission to protect estuaries, but we can’t be in every community to protect every estuary,” Smith says. “Our goal is to help the people in those communities do their jobs better.” ❖

For more information on the Wells Reserve GIS Center, visit <http://wellsreserve.org>. You may also contact Tin Smith at (207) 646-1555, ext. 119, or tsmith@wellsnerr.org, or Susan Bickford at (207) 646-1555, ext. 120, or suebickford@wellsnerr.org.



Giving the “Dolphin SMART” Seal of Approval in the Florida Keys

For many Florida Keys visitors, the idea of

swimming with wild dolphins may seem like the ultimate vacation experience. It may also disturb dolphins’ natural behavior, which is against the law, but that wasn’t stopping some charter boat operators from encouraging the practice.

To help reduce the potential impact on wild dolphins, Florida coastal resource managers developed a recognition program for charter businesses that meet criteria for promoting responsible viewing and preventing harassment of dolphins.

“I liken it to the ‘Good Housekeeping Seal of Approval’ or ‘dolphin safe tuna,’” explains Karrie Carnes, communications coordinator for the Florida Keys National Marine Sanctuary. “It shows that these businesses are adhering to and exceeding best practices related to the Marine Mammal Protection Act.”

The Dolphin SMART program offers participating commercial tour operators recognition, education and training, and other incentives.

The program requires participants to educate their clientele and to minimize dolphin harassment, which may result from swimming with, feeding, or touching dolphins. These activities can disturb natural dolphin behaviors, such as migration, breathing, nursing, breeding, feeding, and sheltering.

Other program criteria include advertising guidelines, evaluation for initial participation, and annual renewal evaluations.

“The idea is to give operators the incentive to do the right thing by

“I liken it to the ‘Good Housekeeping Seal of Approval.’”

Karrie Carnes, Florida Keys National Marine Sanctuary

providing them with the tools to be stewards of the environment and to aid us in dolphin conservation,” says Laura Engleby, marine mammal branch chief for the Southeast Regional Office of the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service.

Engleby notes that Dolphin SMART also encourages regional scientists to research tourism’s impact on wild dolphins and shares dolphin research with participating tour operators.

“We joined the Dolphin SMART program to ensure that our boat is properly viewing the local Key West dolphins and to learn as much as we can through the research that has been done,” notes Lisa Sue Reedy, the certified Dolphin SMART captain of the *Dolphin Cat*.

The Florida Keys National Marine Sanctuary, NOAA Fisheries Service, Whale and Dolphin Conservation Society, Dolphin Ecology Project, and local businesses developed the Dolphin SMART program after tour operators approached the sanctuary advisory council with concerns that an increasing number of charter boats could potentially harass dolphins because the animals’ habitat within the sanctuary was so small.

“At the time,” explains Engleby, “we had approximately 40 tour operators taking people out to see

or swim with dolphins in a small area that we call the dolphin triangle, potentially causing unnecessary stress to the local population by disturbing their natural behaviors.”

The federal and nonprofit conservation agencies worked with charter operators for three years to develop the Dolphin SMART program.

Dolphin SMART tour operators receive vessel flags, decals, and permission to use the program’s logo in their advertising. A program website hosted by the Office of National Marine Sanctuaries also helps promote participating businesses, and program materials are distributed through the chamber of commerce, concierges and booking agents, hotels, and other tourist locales.

Since the program was launched in 2007, three of the thirteen charter boat operators now working in Key West have been certified as Dolphin SMART, and the program has been expanded to coastal Alabama.

“We’ve heightened the awareness of all tour operators in Key West, whether they are involved in the program or not,”

notes Megan Harber, Dolphin SMART coordinator for the Florida Keys sanctuary.

“I see this type of program as the future of managing resources in a manner that is compatible with continued recreation,” says Dave Score, sanctuary superintendent. “This provides the incentive for people to do it right, and allows market-driven solutions to work.”

Score adds, “This will never replace strong regulations underpinned by good science and enforcement, but it is definitely a strategy worth using.” ❖

For more information on Dolphin SMART, go to www.dolphinSMART.org. You may also contact Laura Engleby at (727) 551-5791, or Laura.Engleby@noaa.gov, Karrie Carnes at (305) 809-4700, or Karrie.Carnes@noaa.gov, or Megan Harber at Megan.Harber@noaa.gov.

How to be Dolphin SMART

- S**tay at least 50 yards from dolphins
- M**ove away cautiously if dolphins show signs of disturbance
- A**lways put your engine in neutral when dolphins are near
- R**efrain from swimming with, touching, or feeding wild dolphins
- T**each others to be Dolphin SMART

TECHNOLOGY HELP CLINIC

You can do it. We can help.

OPEN DAILY

Bring your technology questions to the GeoTools conference and get one-on-one assistance with issues related to remote sensing, GIS, GPS, software, and more.

March 2 to 5, 2008

Conference registration closes January 31.



www.csc.noaa.gov/GeoTools/

TOPOGRAPHY AND BATHYMETRY

Providing data to elevate your coastal management projects.

Coastal topographic and bathymetric lidar data available for most of the nation’s coastline.

www.csc.noaa.gov/lidar/



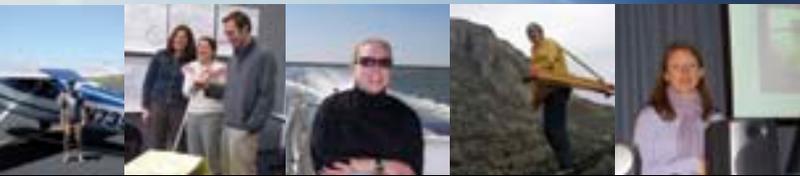


Looking for a Few Good Candidates . . .

Application packages from fellowship candidates are due to local Sea Grant offices by January 26. Sea Grant nomination packages are due February 23.



Coastal Management Fellowship Program
www.csc.noaa.gov/fellowship/



NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405-2413

For the New Year, I pledge to

1. Lose weight
2. Exercise more
3. Increase my professional skills
4. Do my job better

Coastal Connections

www.csc.noaa.gov/newsletter/

Training

www.csc.noaa.gov/training/



The NOAA Coastal Services Center can help with at least two things on the list. Take a training course that helps you do a better job. Subscribe to the *Coastal Connections* newsletter and learn about new coastal management techniques.
Happy New Year!

PRST STD
Postage & Fees Paid
NOAA Coastal
Services Center
Permit No. G-19



10% total recovered fiber/all post-consumer fiber.
This recycled paper meets EPA and FTC
guidelines for recycled coated paper.