

# COASTAL CONNECTIONS



VOLUME 2, ISSUE 6

A BIMONTHLY PUBLICATION FOCUSED ON TOOLS FOR COASTAL RESOURCE MANAGERS

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## COASTAL MANAGEMENT PROFILE



### Wendy Allen

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**Hometown:** Moorestown, New Jersey

**Education:** BS in biology, Lehigh University; MEd in community and occupational programs in education, University of South Carolina

**Most fulfilling aspect of your job:** Working with teams of very dedicated people to conserve estuaries.

**Most challenging aspect of your job:** Addressing the small, day-to-day tasks as efficiently as possible so there's time to focus on the bigger, more rewarding projects.

**Things you do in your spare time:** Volunteering for a sea turtle protection group, bird watching, kayaking, fishing, and photography.

**Family:** Husband, Dennis, and yellow lab, Calli (short for *Callinectes sapidus*, "beautiful swimmer")

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## THIS ISSUE'S FOCUS

### MANAGING VISITOR USE

People. They can be inspiring stewards of our natural resources, as well as the source of their deterioration. While part of the mission of coastal resource organizations is to provide opportunities for people to enjoy such resources, another is to protect them for future generations. How do we balance these seemingly competing duties?

#### Steps in the Right Direction

In the last several decades, researchers with the U.S. Department of Agriculture (USDA) Forest Service (the pioneer in this field) and other organizations have been studying the various impacts of people on natural resources and the experiences of those who visit them. Because marine protected areas, sanctuaries, estuarine reserves, and other coastal establishments are often less experienced in this arena, they must rely on the lessons learned from these studies. Based on the studies and processes that organizations like the Forest Service have developed, the following general steps can help managers identify problems caused by visitors and strategies to address them.

**1. Recognize that there's a problem.** First, acknowledge that visitor use is causing unacceptable impacts that can't be ignored. Sometimes it takes some outside influences to get managers to start thinking about these impacts. For instance, several years ago a power plant expanded near the mouth of the Elkhorn Slough National Estuarine Research Reserve in California, and the reserve was granted mitigation funds. This opportunity inspired reserve managers and the California Coastal Commission to address problems they had noticed related to visitor use, especially public access.

**2. Identify the problem.** Pinpoint the specific impacts of the problem, making sure not to frame it in terms of a solution. For instance, saying "too many boats are in the bay" implies that fewer boats is the solution—which may not be true. Instead, phrase the problem as "boats are scarring submerged aquatic vegetation." To help identify its specific problems, the Elkhorn Slough reserve has developed an inventory of visitor facilities and their influences on the resources there. The inventory includes geographic information system (GIS) layers of visitor facilities, including parking lots, restrooms, and boat access points, coupled with layers of biological information, such as endangered species, rare habitats, and vegetative communities. This GIS map helps clearly categorize problem areas and possible causes.

**3. Identify the cause of the problem.** This can be easier said than done, for one problem often leads to others. Grey Hayes, coastal training coordinator at Elkhorn Slough, notes that while investigating adding access

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**Favorite movie:** *Casablanca*, the lobster scene in *Annie Hall*, and the opening rolling-boulder scene in the first *Indiana Jones*.

**In your CD player right now:** *Harvest Home* by Jay Unger and Molly Mason

Wendy Allen developed a love for the coast growing up visiting the Jersey shore. But she clearly found her niche when she coupled her passion for the coast with her interests in education. While serving as the director of continuing education at the University of South Carolina's Baruch Marine Field Laboratory, Wendy helped form the South Carolina Marine Educators Association, a group of scientists and educators who promote ocean and coastal education opportunities.

Wendy's enthusiasm for learning extends into her current role as manager of the North Inlet-Winyah Bay reserve. She and her staff have most recently been expanding the reserve's coastal training program. The program, according to Wendy, has evolved from periodic workshops on coastal issues to a "very strategic training program addressing the needs of local decision makers." They are now focusing on training in watershed planning and stormwater education.

Wendy enjoys learning outside of work as well. About 12 years ago, she took an interest in fly-fishing after a trip to Alaska, where flies were required in many fishing areas. She resolved to learn what fly-fishing was all about and has since declared it her "preferred way to fish."

Wendy, her husband, and their dog live in Georgetown, South Carolina.

points to the slough, they discovered that trail access is having some negative effects. "Research indicated pretty strongly that weed invasions into the slough's habitat were caused by trail access," he notes. This was not exactly a cause they were expecting, but the knowledge is helping them better identify management techniques that will resolve problems without causing others.

**4. Identify indicators and standards of quality.** This means deciding what conditions are acceptable and how you will determine when conditions are becoming unacceptable. Involving visitors and stakeholders in this process is a good idea since the standard of quality includes how satisfied visitors are with their experiences with the resource. The reserve has partnered with a kayaking center on the slough to help determine what visitors expect from their experiences. Hayes and his staff plan to use the results of the kayak store's survey to help identify standards for both visitor experiences and reserve health.

**5. Create a strategy for managing the problem.** Management approaches can include modifying the resource, setting regulations, increasing or reducing recreational opportunities, or increasing visitor education. The major factors to consider are how management tactics will affect visitors, their reactions to changes, if these actions will cause new problems, costs, and how a strategy fits with the site's management objectives. As a complement to its GIS map, Elkhorn Slough has developed a database of the costs associated with adding, deleting, and maintaining visitor sites to help them shape their strategy.

**6. Put your strategy into practice.** Develop a plan for

implementing the tactics you've chosen, set a schedule, and note the resources needed. Be sure to continue monitoring the indicators chosen in step 4 and the effectiveness of current efforts.

Elkhorn Slough is still working on developing and implementing a strategy for handling visitor use, employing the GIS and cost database as key resources. According to Hayes, these resources have become strong tools for making this information accessible. "We're not just bringing existing information to managers, but leveraging their ability to educate and raise the money we need to inform decision makers."

## Visitor Use: Strategies and Tactics

When you expect company at home, you clean, prepare the house for them, and clean up again after they leave. The same groundwork should be done to prepare for and clean up after visitors to a natural resource area. While there are several ways to handle visitor use, the following tactics can serve as guidelines for making visitors comfortable, while still protecting your "home."

### Site Management

- Provide facilities such as trails, campsites, swimming areas, and boat launches
- Use vegetation to discourage wandering or to separate areas
- Use barriers (rope, fences, walls, etc.) to keep people on designated trails and protect habitat
- Strengthen high-traffic areas by using soil cement, steps, bridges, boardwalks, etc.

### Rationing and Allocation

- Limit the number of visitors allowed at one time

- Establish hours of use
- Charge fees
- Require reservations

### Regulation

- Restrict access to threatened areas
- Prohibit certain activities in areas where they negatively affect the resource or other visitors

### Enforcement

- Post signs listing regulations
- Provide law enforcement personnel to monitor and enforce them

### Education

- Create brochures, posters, exhibits, and other materials to communicate to visitors what areas of the resource are threatened and what they can do to protect them
- Establish a visitor center with knowledgeable staff members

\*These strategies are further detailed in *Maintaining the Quality of Park Resources and Visitor Experiences* and in the Center's visitor use management training. See "Resources" below for publication information.

## The People Factor: Resources to Help

Although there is not yet a huge body of literature about managing visitor use in coastal areas and marine protected areas, research by several organizations is under way. In the meantime, the following existing resources can help you get started.

### *Maintaining the Quality of Park Resources and Visitor Experiences: A Handbook for Managers*

1998, Dorothy H. Anderson, David W. Lime, and Theresa L. Wang, University of Minnesota

This handbook helps managers identify strategies to address the impacts of visitor use and decide on the best tactics to manage these impacts. [www.cnr.umn.edu/CPSP/Research/revtactics\\_handbook.PDF](http://www.cnr.umn.edu/CPSP/Research/revtactics_handbook.PDF)

### *The Visitor Experience and Resource Protection (VERP) Framework: A Handbook for Planners and Managers*

1997, National Park Service  
The VERP handbook was developed to help park managers handle visitors and their impacts on park resources and other visitors' experiences. It defines the elements of the VERP framework and how to implement it. <http://planning.nps.gov/document/verphandbook.pdf>

### National Visitor Use Monitoring Program

U.S. Department of Agriculture (USDA) Forest Service  
This Web site includes a number of Forest Service reports on the impacts of visitor use, including a 2002 report on national and regional visitor use monitoring projects. The site also explains the agency's visitor use monitoring methodology and provides more resources for managers. [www.fs.fed.us/recreation/programs/nvum/](http://www.fs.fed.us/recreation/programs/nvum/)

### Recreation, Wilderness, Urban Forest, and Demographic Trends Research

USDA Forest Service  
This Web site features research on national trends in outdoor recreation, including how demographic shifts affect the resources. The site provides updated recreation statistics, reports, presentations, and the National Survey on Recreation and the Environment. [www.srs.fs.usda.gov/trends/](http://www.srs.fs.usda.gov/trends/)

### The Visitor Services Project

National Park Service  
The Visitor Services Project conducts research to provide park superintendents with usable knowledge about visitors. This Web site provides access to studies and reports conducted for this project, including in-depth studies related to visitor use at particular national parks and customer satisfaction surveys conducted annually at all national parks. [www.psu.uidaho.edu/vsp.htm](http://www.psu.uidaho.edu/vsp.htm)

## NOAA Coastal Services Center Training Course:

### MANAGING VISITOR USE IN COASTAL AREAS

Need help organizing a plan for managing visitor use in your coastal area? Then this course is for you. This two- to three-day course provides managers with a step-by-step, easy-to-use process for identifying unacceptable impacts to biological and cultural resources and to visitor experiences in coastal areas and marine protected areas. Participants in the course learn how to

- Apply recreation and visitor use management-planning frameworks
- Identify visitor use issues
- Craft a clear problem statement
- Identify measurable indicators and standards of quality for resources and visitor experiences
- Select suitable management tactics to address visitor use
- Implement monitoring and management actions

Past recipients of this training include staff members from National Estuarine Research Reserves, aquatic preserves, and other local and federal agencies, as well as academics. If your organization could use some help managing visitor use, visit the Center's training Web site at [www.csc.noaa.gov/cms/cls/visitor\\_mpa.html](http://www.csc.noaa.gov/cms/cls/visitor_mpa.html).

*Coastal Connections* is a publication of the National Oceanic and Atmospheric Administration Coastal Services Center, produced for the coastal resource management community. Each issue of this free bimonthly newsletter focuses on a tool, information resource, or methodology of interest to the nation's coastal resource managers.

Please send us your questions and suggestions for future editions. To subscribe or contribute to the newsletter, contact our editors at

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# NEWS AND NOTES

## **Harmful Algal Bloom Forecasting System**

NOAA's newly operational Harmful Algal Bloom (HAB) Forecasting System uses ocean and coastal observation data to monitor and forecast blooms in the Gulf of Mexico. The system also posts current conditions and bulletins warning managers of impending blooms. Access this new tool at [www.csc.noaa.gov/crs/habf/](http://www.csc.noaa.gov/crs/habf/).

## **New Invasive Species Assessment**

A new report by NatureServe and the Nature Conservancy provides a method for determining which non-native species might pose the biggest threat to an area. The report and example assessments can be found at [www.natureserve.org/getData/plantData.jsp](http://www.natureserve.org/getData/plantData.jsp).

## **Smart Growth Conference**

The fourth annual New Partners for Smart Growth conference will be held January 27 to 29, 2005, in Miami Beach. This year's event will focus on new smart growth issues, research, tools, projects, and policies. Find out more at [www.outreach.psu.edu/C&I/SmartGrowth/](http://www.outreach.psu.edu/C&I/SmartGrowth/).

## **Transitions**

**Ted Diers** is now the permanent manager of the New Hampshire Coastal Program... **Laurie Rounds** is now the Gulf of Mexico representative for NOAA's Office of Ocean and Coastal Resource Management... **Judy Haner** is the new manager for Kachemak Bay reserve... **Jamie Hawkins** has retired as deputy assistant administrator for NOAA's National Ocean Service. **Alan Neuschatz** is now acting... **Robert Smith** has retired as coordinator of the Northwestern Hawaiian Island Coral Reef Ecosystem Reserve. **Aulani Wilhelm** is acting... **Paul Scholz** now works in the Director's Office at the NOAA Coastal Services Center. **Ginger Hinchcliff** takes over as acting manager of the Coastal Management Services branch.

## **Accolades**

The **South Carolina Department of Natural Resources** recently won two prestigious awards for its South Carolina Oyster Restoration and Enhancement (SCORE) program: a 2004 Coastal America Partnership Award and the Theodore M. Sperry Award given by the Society for Ecological Restoration.

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