

COASTAL CONNECTIONS



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A BIMONTHLY PUBLICATION FOCUSED ON TOOLS FOR COASTAL RESOURCE MANAGERS

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COASTAL MANAGEMENT PROFILE



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Hometown: Vaoala, Samoa
Education: Bachelor's in planning from U. of Auckland, master's in urban and regional planning from U. of Hawaii
Most fulfilling aspect of your job: Partnerships with the local community
One work-related accomplishment you're proud of: *The Population Implementation Plan*, a report about population growth in the territory
One personal accomplishment you're proud of: Being a full-time working mother and striking a balance at work and home
Things you do in your spare time: Walking, playing racquetball, and spending time with my family
Family: Husband, Alii; children, Lauren, Tahlia, and Rodney

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THIS ISSUE'S FOCUS

BEACH NOURISHMENT

So your coastal community is considering beach nourishment. Where should its decision makers begin? That's a tough question since beach nourishment is often a controversial issue and requires a great deal of planning, time, and—especially—money. The following information can help. This article provides a sample of the broad range of information found on a new Web resource, *Beach Nourishment: A Guide for Local Governments*. See Page 2 for more information about the site.

Sharing the Wealth

Funding is usually the biggest obstacle for a nourishment project. One way to tackle the budget battle is to find state or federal partners who will help share the costs. The U.S. Army Corps of Engineers, for example, offers funding assistance, as well as help with the planning, engineering, and legal aspects of projects in areas that offer public access. The Corps can also help groups research alternatives to beach nourishment. For instance, when the South Carolina Department of Parks, Recreation, and Tourism (PRT) decided something needed to be done to protect a road on Hunting Island from being washed out by erosion, it went to its district Corps for help.

Hunting Island "has one of the highest erosion rates on the east coast," says Jim Whiteman, a project manager with the Charleston District Corps. According to Whiteman, the 5,000 acre island is eroding at 15 to 25 feet per year, threatening the only road to housing and a rare maritime forest. After assessing the problem, the Corps got funding for two beach nourishment projects for the area: a project to protect the road and a study to investigate protecting the forest. In a cost-share agreement with the Corps, the South Carolina PRT was then responsible only for a percentage of the costs.

Bumps in the Road

Aside from project costs, several other problems may arise while planning a beach nourishment project.

Sand source. The borrowed sand placed on an eroding beach must be compatible with the beach's natural sand. Such factors as grain size, composition, color, and durability must all match as closely as possible. See "Choosing a Sand Source" on Page 3 for more information.

Ownership. If the sand you select is not directly offshore, you may run into an ownership problem with nearby shores. About five years ago, Daufuskie Island, a small island near Hilton Head, South Carolina, wanted to use some offshore sand for a beach nourishment project, but "Hilton Head said the sand is theirs," says oceanographer Bill Eiser of South Carolina's Office of Ocean and Coastal Resource Management. As you assess possible borrow sites, Eiser says to consider "who else might claim that sand."

Environment. Where and how sand is dredged can affect coastal processes and lead to greater erosion in another area. In areas where sea turtles nest, you

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Favorite movie: *Remember the Titans* for its leadership messages

In your CD player right now: Celine Dion

Gene Brighthouse is truly a woman of the South Pacific. She grew up in Samoa (the independent country) and went to boarding school and college in New Zealand. She then traveled "up north" to earn her master's degree in Hawaii. Today, Gene combines her training and her roots as manager of the American Samoa Coastal Management Program.

This combination is essential for implementing coastal management policies in the area. One of Gene's biggest challenges is "translating the importance of coastal management within a Samoan context." To do so, Gene must use her understanding of Samoan culture to help coastal management issues make sense to the community.

One way Gene and her staff do this is through outreach projects such as the island's first Geographic Information Systems (GIS) Day on March 12, 2003. The day was "really successful," notes Gene. "Our lieutenant governor is pro-technology, so we tapped into his ability to move with the times."

When she's not spending time connecting with the Samoan community, Gene connects with her family. She and her husband spend time outside with their three children. "We go to the beach whenever we have the opportunity," says Gene. "We take advantage of being on an island." And that is *fa'a Samoa*, the Samoan way.

Beach Nourishment continued from Page 1

must also take their schedules into account. In South Carolina, nourishment work can't be done during nesting season without close cooperation from turtle volunteer groups and federal and state authorities to be sure the turtles are not affected. You must also consider if the work will disrupt any benthic communities in the borrow areas.

Dredging. Many nourishment projects use dredged sand, as it tends to be more compact than sand placed on beaches by trucks or haulers. These projects need the cooperation of a dredging company chosen through an open and competitive contracting process. This process can affect the costs and timeline of a project.

Opponents. Because nourishment is such a contentious topic, some groups may oppose the project. Chris Mack, coastal engineer with the Charleston District Corps, recommends involving these organizations in the project as much as possible. For a project at Folly Beach, South Carolina, Mack says they formed a team including representatives from state, federal, and local partners, engineering firms, and groups who opposed the project. The team provided insight into all aspects of the project so it could continue in a manner most appealing to everyone. "It was a win-win situation for everybody," says Mack. His colleague, Jim Whiteman, adds, "We try to make it feel like it's everybody's project, not just ours."

Rules and Regs

There are many federal regulations with which a nourishment project must comply, most significantly the Clean Water Act, the Coastal Zone Management Act, and the National Environmental Policy Act. The Corps of Engineers' planning process helps ensure projects abide by such rules. In addition, many state and local authorities have specific requirements. Contact your state's coastal program or department of natural resources to find out about applicable regulations.

As people continue to live and work near the beach, handling erosion is becoming increasingly necessary. And juggling competing environmental, economic, and recreational interests can be the hardest part. But, as Mack notes, "the key is finding some balance of conservation and development." By keeping all interested parties involved, you may be able to help manage your area's coastal development while protecting its coastal environment.

BEACH NOURISHMENT: A GUIDE FOR LOCAL GOVERNMENTS

www3.csc.noaa.gov/beachnourishment/

Does your coastal community need information on the pros and cons of beach nourishment? The effects of beach nourishment on the tax base? Pertinent federal regulatory considerations?

A new Web site from the NOAA Coastal Services Center is an information resource developed for this purpose. Information about all aspects of beach nourishment is consolidated into one source, and technical information is presented in nontechnical language. Some features of the Web site include

- Descriptions of coastal geological and ecological processes
- Discussions of legal and regulatory requirements
- Information on federal project cost sharing
- A professional dialogue about the pros and cons of nourishment

This on-line guide will also be available as a CD-ROM by the end of July. If you would like to order a CD, contact Jeff Adkins at (843) 740-1244 or Jeff.Adkins@noaa.gov.

CHOOSING A SAND SOURCE

THE PROS AND THE CONS

Finding sand that most closely matches the native sand of an eroded beach is one of the most important parts of the beach nourishment process. Here is a list of some of the most common borrow sources and the pros and cons of each.

Drowned Barrier Islands

Pros: Clean, well-sorted sand; not much mud

Cons: Difficult to find

Oblique Sand Ridges

Pros: Offer a lot of sand

Cons: May contain mud; may be very deep

Longshore Sand Bars

Pros: High-quality sand

Cons: Often too close to the shoreline

Tidal Deltas

Pros: Large amounts of sand

Cons: Can have mud; dredging can cause erosion hot spots

Upland Sources

Pros: May be inexpensive

Cons: Very fine sand; discolored

Troughs

Pros: Can provide large amounts of sand

Cons: Rare

DID YOU KNOW...

- All 15 states along the Atlantic and Gulf coasts have beach nourishment projects to enhance recreation or protect the shoreline from storms.
- 333 projects have been done in that region since 1922, placing 517 million cubic yards of material on shorelines.
- Federal beach nourishment projects usually have a 50-year life span including maintenance.

* Source: *Beach Nourishment: A Guide for Local Governments*

WHO'S NOURISHING BEACHES?

In March 2000, NOAA's Office of Ocean and Coastal Resource Management published a report on the beach nourishment programs around the country. Out of 33 states and territories contacted for the report,

- 21 have established beach nourishment policies
- 10 have dedicated funding for beach nourishment
- 9 provide funding on a case-by-case basis

You can get a copy of this report on-line at www.ocrm.nos.noaa.gov/czml/resource.html.

| Policy | Dedicated Funding | Case-by-Case Funding |
|--------------------------|-------------------|----------------------|
| Alabama | Connecticut | California |
| California | Delaware | Georgia |
| Connecticut | Florida | New Hampshire |
| Delaware | Hawaii | New York |
| Florida | Louisiana | North Carolina |
| Georgia | Maryland | Ohio |
| Hawaii | Massachusetts | Pennsylvania |
| Louisiana | Mississippi | South Carolina |
| Massachusetts | New Jersey | Texas |
| Mississippi | Virginia | |
| New Hampshire | | |
| New Jersey | | |
| New York | | |
| North Carolina | | |
| Northern Mariana Islands | | |
| Ohio | | |
| Pennsylvania | | |
| Rhode Island | | |
| South Carolina | | |
| Texas | | |
| Virginia | | |

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



Coastal Zone 03 Conference

The 13th gathering of this biennial symposium for ocean and coastal management professionals will be held July 13 to 17, 2003, in Baltimore, Maryland. This year's conference will feature plenaries, workshops, and roundtable discussions based on the conference theme, Coastal Management Through Time. For more information, visit www.csc.noaa.gov/cz2003/.

Estuaries on the Edge

The 17th biennial conference of the Estuarine Research Federation will be held September 14 to 18, 2003, in Seattle, Washington. The conference will explore the convergence of ocean, land, and culture. For more information, visit <http://fish.washington.edu/news/erf/>.

Coastal Zone Management List Server

The coastal zone management mailing list is an e-mail discussion group sponsored by the NOAA Office of Ocean and Coastal Resource Management. Coastal management professionals can use the list to share information. To subscribe, send a message to requests@onms.nos.noaa.gov. The body of the message must say only "subscribe CZM".

Transitions

Bob Bailey is the new acting manager of the Oregon Coastal Management Program, replacing **Nan Evans**... **William Jeffress** is now the manager of the Alaska Coastal Management Program, replacing **Sara Hunt**... **Laurie Rounds** has left the Indiana Lake Michigan Coastal Program and is now at the NOAA Office of Ocean and Coastal Resource Management. No replacement had been named at the time of printing... **Jeff Gray** is the new manager of Thunder Bay National Marine Sanctuary.

Accolades

At the March program managers' meeting, **David Keeley**, director of the Maine State Planning Office, was awarded a 2003 Walter B. Jones award as Coastal Steward of the Year. **Woodard W. Miley II**, recently retired director of the Apalachicola National Estuarine Research Reserve, won the 2003 NOAA Award for Excellence in Ocean and Coastal Resource Management.

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