



OCEAN AND COASTAL



CONSULTANTS

a COWI company



## Complete Coastal Engineering Services



**Ocean and Coastal Consultants (OCC)** is an engineering consulting firm that specializes in Coastal and Port Engineering. OCC possesses unique expertise in solving complex problems in coastal and offshore environments. Our range of experience with traditional construction materials such as timber, stone and concrete allows us to innovate with geosynthetics. Our extensive understanding of the coastal environment permits us to design projects that work in tandem with nature - not against it. The results are sustainable and cost-effective designs having less downdrift impacts and better long term performance.

# Innovation through Discipline

Most people say they are innovative, just as many companies say they provide coastal engineering. OCC has a proven track record of providing solutions to complex problems at the coast. Innovation can occur through experience and discipline adherence to the science and engineering of the coastal environment.

*in\*no\*vate \ 'i-ne,vat\ verb: To accomplish a task in a new way. It may refer to incremental and emergent, or radical and revolutionary changes in thinking, products to processes.*

## SERVICES

### Permitting and Regulatory Services

- State and federal
- LOMRs
- Coastal GIS and mapping
- Environmental assessment and EFH

### Beaches and Dunes

- Quartz, rocky and carbonate beaches
- Beachfill design
- Beach profile survey

### Numerical Modeling

- USACE models
- FEMA models
- DHI models

### Structural Design

- Floating wave attenuators
- Timber wave breaks
- Seawalls and revetments
- Rock, concrete and timber structures
- Jetties, groins, breakwaters
- Sand-filled geotextile tubes and bags

### Environmental Restoration

- Coastal marshes

### Coastal Planning

- Data collection and analysis
- Storm damage assessment

### Expert Witness

### Training



## COASTAL CHALLENGES

*The engineering and permitting activities necessary for undertaking a coastal project have become progressively more complicated. Each state has different permitting rules. Our impressive list of projects along the Atlantic, Pacific and Gulf Coasts, testifies to OCC's ability to work within the regulatory framework to get the project designed, permitted and built. Our coastal experts have worked as resource agency managers, as coastal planners, as contractors and as consulting engineers whereby they understand both the regulations, and the advances in the field of coastal engineering.*

OCC offers a wide range of Coastal Engineering services. These include coastal planning, data collection and analysis, numerical hydrodynamic modeling, permitting, independent technical review, design of beachfills and structures, as well as post-project monitoring. Our engineers have experience with coastal construction, making our cost estimates realistic and our designs buildable. This experience leads to innovation.

OCC supplies complete project permitting services for the preparation of federal, state and local regulatory submittals related to dredging and coastal construction. We draw on the extensive marine construction experience of the staff in preparing constructible project plans and specifications and in the development of realistic opinions of probable costs. We typically have approximately 10 active projects with construction values ranging from \$10,000 to more than \$80,000,000.

[www.ocean-coastal.com](http://www.ocean-coastal.com)

## OFFICE LOCATIONS

[www.COWI.com](http://www.COWI.com)

### Connecticut

35 Corporate Drive  
Suite 1200  
Trumbull, CT 06611  
PH 203-268-5007

### Massachusetts

475 School Street  
Unit 9  
Marshfield, MA 02050  
PH 508-830-1110

### New Jersey

20 E. Clementon Rd  
Suite 201N  
Gibbsboro, NJ 08026  
PH 856-248-1200

### New York

19 West 21st Street  
Suite 703  
New York, NY 10010  
PH 646-545-2125

### South Carolina

1036 eWall Street  
Unit 1A  
Mt. Pleasant, SC 29464  
PH 843-375-2005