

## Education & Public Outreach at IMCS

Faculty and staff at IMCS are committed to communicating their research to a variety of audiences including K-12 educators and students, and legislators. Our goal is to use the scientific assets of IMCS to improve public understanding of the ocean.

### For K-12 Educators

Elementary/Middle School Ocean Science Programs: IMCS serves as an East Coast training facility for the Marine Activities Resources & Education (MARE) program. IMCS offers professional development training for K-8 educators and support for schools in implementing the MARE program.

The Jacques Cousteau National Estuarine Research Reserve (JC NERR) is one of the 27 national estuarine reserves created to promote the responsible use and management of the nation's estuaries through a program combining scientific research, education, and stewardship.

### Curriculum Resources

COOL Classroom is an online learning environment for middle and high school students to use real time data in scientific problem based lesson units. Our new COOLClassroom 2.0 beta site is at <http://new.coolclassroom.org>

### For Scientists and Educators

Centers for Ocean Science Education Excellence Networked Ocean World (COSEE NOW) - is one of 12 National Science Foundation funded Centers designed to improve collaborations among ocean scientists and both formal and informal educators for the purpose of improving ocean science literacy. COSEE NOW is a multi institutional partnership including Woods Hole Oceanographic, Liberty Science Center, the Beacon Institute, Virginia Institute of Marine Sciences and Monterey Peninsula Colleges MATE program.

### For Students

Communicating Ocean Science for Informal Audiences (COSIA): IMCS and the Liberty Science Center jointly offer this course for undergraduate and graduate students as an introduction to the importance of K-12 education, public outreach and for students to gain practical experience at the Liberty Science Center in Jersey City, NJ in established communication techniques and pedagogy.

## High School Student Ocean Science Bowl Competition.

The Shore Bowl is a regional academic competition for high school students, that focuses on ocean-related topics, including biology, chemistry, physics, geology, navigation, geography, and related history and literature.

## For the Community

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## For Coastal Managers

Jacques Cousteau National Estuarine Research Reserve - The JC NERR supports science-based management of the nation's coastal and estuarine systems as an element of a national network of 27 estuarine research reserves. Established in 1997 to improve management of New Jersey coastal environments, the research, coastal training, education, and stewardship programs at the JC NERR focus on three key management issues facing New Jersey and the nation:

- Nutrient inputs into coastal waters
- Human alteration of habitat and water quality
- Effects of climate change on coastal and estuarine systems

Programs are tailored to meet the regional, state and local information needs of a diverse community of coastal stakeholders including local elected officials, resource managers, planners, educators and students. The JC NERR:

- Delivers science-based information to local, state, and national decision-makers to foster science-based management of coastal and estuarine resources and communities,
- Serves as a sentinel site for the stewardship of coastal and estuarine resources and best management practices,
- Supports research and monitoring relevant to local, regional and national needs,
- Provides effective mechanisms to assess the research, technology and information needs of coastal communities at local and regional scales, and
- Increases awareness of coastal and estuarine environments through education programs for educators, students, adult learners and the public.