



Waterways

Coasts, Oceans, Ports, and Rivers Institute of the American Society of Civil Engineers

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Per Bruun Presented 2002 International Coastal Engineering Award

The International Coastal Engineering Award was established to provide international recognition for outstanding leadership and development in the field of coastal engineering. It is given annually to an individual who has made a significant contribution to the advancement of coastal engineering in the manner of engineering design, teaching, professional leadership, construction, research, planning, or a combination thereof.

The 2002 award was presented to Per Bruun at the 28th International Conference on Coastal Engineering in Cardiff, Wales. Dr. Bruun was given this prestigious award for his pioneering work in coastal engineering, in particular, beaches and tidal inlets, and for his efforts in building academic programs in the field. His early educational training is from the Technical University in Denmark, and he has also received two honorary doctorate degrees from the Universidad del Mar in Spain and the University of Iceland. He has authored several books, as well as over 150 scientific or engineering papers which have been published worldwide. Additionally, Dr. Bruun has worked with many international agencies including the World Bank, FAO, United Nations, Asian Development Bank, and the Norwegian and Swedish Development Agencies. In 1998, the Florida Shore and Beach Preservation Association established an annual award in his honor, The Per Bruun Distinguished Services Award. ASCE honored him with Fellow membership status in 1958, and he became a Life Member in 1989.

As noted by Dr. Robert Dean of the University of Florida, it is difficult to identify an area in coastal engineering practice which has not benefited from Dr. Bruun's interest, enthusiasm and talents. Some of his contributions include: (1) The Bruun Rule of shoreline response to sea level rise, (2) First proposing a now commonly used form of equilibrium beach profile, (3) Early contributions to inlet studies and understanding, including co-authoring (with Franz Gerritsen) the book "Stability of

Coastal Inlets", (4) Advances in port engineering including serving as Editor for at least four editions of "Port Engineering", and (5) Seminal work and publications in breakwaters. During his time spent at the University of Florida, he was responsible for the development of the first coastal engineering laboratory in the United States, including a wind/wave flume which may have been the first in the world. In studying erosion of Florida's shorelines, he developed the first equation relating shoreline response to sea level rise, a relationship which has found international application and has become formalized as the "Bruun Rule". An entire symposium has been dedicated to examining this



Dr. Per Bruun

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Note from the President: PUNCH THE BUTTON

J.E. Dailey, Fall, 2002



My son is an Aerospace Engineer working for Lockheed Martin at the NASA Johnson Space Center in support of the Astronaut Office. His job

involves operation of the simulators that train the Astronauts to fly the Space Shuttle, so he's pretty good with computers. He attributes his success in part to his willingness to punch the button when others hold back for fear of an unwanted outcome. His hope for success is reinforced by his complete confidence that he can deal with anything less.

On a similar note, COPRI Board Member Louise Wallendorf was asked to take the lead in arranging student activities for ASCE's 150th Anniversary Celebration this fall in Washington DC. She accepted the task provided that the definition of student begin at age six. Through her efforts, there will be programs for young people of all ages to engage them both in the fun of building things and in the natural wonders of the coastal environment

that sustains us. This summer, the COPRI Deepwater Infrastructure Forum in Houston co-sponsored a workshop on "Engineering Your Career" along with the Society of Petroleum Engineers and the Society of Naval Architects and Marine Engineers. It was aimed at giving new professionals in the offshore industry insights that will help them succeed in their careers. I mention these as just two ways we are serving our younger members and future members. We can and will do more, particularly I hope, in the international arena.

Early in the institute building process, I recall developing numbers that showed approximately 14% of our membership listed an overseas address. If you are part of that international community, please know that you are important to us. Further, let us know how we can serve your community better, particularly the young people. Educational products and programs come to mind immediately, but do consider them simply as examples to stimulate creative thought.

Programs to serve young people domestically and internationally are part of our broader mission to help develop the infrastructure that will enable a human population of 8.5 billion people,

most of them in the coastal regions of the world, to live and prosper in peace. If it is to work, that infrastructure must be holistic; it must be physical, it must be environmental, and it must be social. Engineers likely will do the detailed design on much of that infrastructure, but rightly there will be many others with input to the process.

As COPRI, we share a commitment to understanding the truths of all sciences, be they physical, environmental or social, and a commitment to applying those sciences to the benefit of human society. We can provide a forum, a "crucible of ideas," that is rational, fair and open, where all parties become engaged in hope to design the infrastructure of the future. I cannot predict the many ways in which that forum will come about, but I can challenge you to make it become a reality.

If we get it right on that future day, all parties will come to the table in an atmosphere of trust and common ground, as is our tradition in COPRI. We will go around the table, each will have his or her say, and a consensus will be reached on the right things to do. Then, when all the says are said, remember this: Punch the Button! ■

Deepwater Infrastructure Forum – Update

The Deepwater Infrastructure Forum (DIF) in Houston hosted two successful events this summer. Attendance at each meeting continues to increase, thus underscoring the importance of DIF's presence and mission: transferring knowledge, generating discussion, and creating an environment for networking and relationship building. On June 19, William Luyties of Shell International E&P Inc. spoke on "Whole Systems Solutions for Deepwater Developments – Na

Kika Case Study". The presentation focused on the issues surrounding whole system design for deepwater developments. A whole systems solution is the process of integrating the subsurface, the subsea system, and the surface facilities into a system that can balance the needs of high initial production to achieve project profitability, effective reservoir management to ensure total field recovery, and flexibility to adapt to present and future uncertainty. The Na Kika field, currently under development for 6340' of water in the Gulf of Mexico, was used as a case study to illustrate the concepts. Meeting attendees also had the opportunity to engage each other in discussions around technical and business drivers that must be considered in a whole system for different



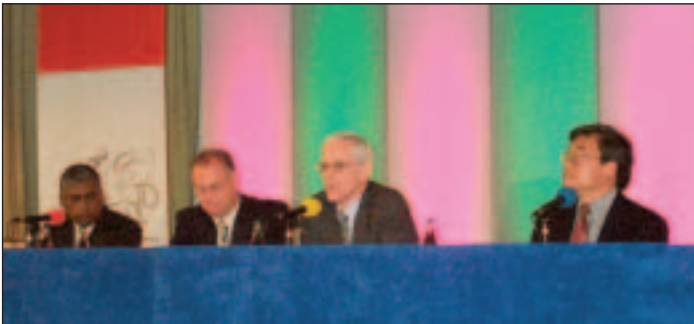
COPRI Signs Partnering Agreement with IAHR



The Coasts, Oceans, Ports, and Rivers Institute (COPRI) of ASCE and the Maritime Hydraulics Section (MHS) of the International Association of Hydraulic Engineering and Research (IAHR) share a common goal to promote multidisciplinary international activities and collaboration in sustainable development of coasts, oceans, ports, waterways, rivers, and wetlands. COPRI and MHS / IAHR wanted to formalize their past cooperation and officially create an agreement to further the ongoing cooperation of the two organizations. The signing ceremony for the Partnering Agreement took place at the 28th International Conference on Coastal Engineering held in Cardiff, Wales, in July 2002. Robert Dalrymple

represented COPRI, and Forrest Holley, Jr., Etienne Mansard, and Philip L.-F. Liu signed for IAHR.

With the partnering agreement now in place, both societies plan to seek opportunities for collaboration in the development and implementation of seminars, conferences, symposiums, and publications. Specifically, conferences and seminars that are of mutual interest and benefit to COPRI and MHS / IAHR include the Ports conference every three years, the International Conference on Coastal Engineering every two years, the Waves conferences and coastal zone management conferences every couple of years, as well as the IAHR Congress and other regional IAHR conferences. COPRI is currently helping organize next year's Long Waves Symposium which is being held in conjunction with the XXX IAHR Congress in Thessaloniki, Greece. With the formalized alliance now in place, COPRI looks forward to working with MSH / IAHR to promote our purposes and shared vision. ■



Signing ceremony at the ICCE Conference in Wales. Pictured from left to right are Etienne Mansard, Vice President of IAHR, Forrest M. Holly, President of IAHR, Robert Dalrymple, incoming COPRI President, and Philip L.F. Liu, Chair of the Maritime Hydraulics Section of IAHR.

Per Bruun *continued from page 1*

relationship. He was one of the first to direct attention to the deleterious effects, to the adjacent shorelines, of entrances constructed or "improved" for navigation.

Among his numerous projects around the world, one assignment that remains very special for Dr. Bruun, was his assistance to President Kennedy in establishing a beach at Kennedy's property just south of the Lake Worth (Palm) Beach inlet. Dr. Bruun describes the problem as two-fold: the inlet had deprived the beaches south of it of sand, and Jacqueline Kennedy had bought a new bathing suit. After what Dr. Bruun said was a very pleasant meeting with a very intelligent President, Kennedy got his beach, and Dr. Bruun received a White House rocking chair and became a life-long Democrat!

To this day, Dr. Bruun remains an important role model for many coastal engineers. At 85, he continues to write journal articles, present at conferences, consult, and serve on several boards. Therefore, it is with great honor that COPRI wishes to congratulate Per Bruun on his receipt of the prestigious International Coastal Engineering Award. ■

development scenarios.

The Society of Petroleum Engineers Gulf Coast Section and DIF hosted a workshop on August 22 entitled "Engineering Your Career". The workshop was designed for professionals interested in developing the skills to perform at the highest levels in the international petroleum industry. Professional development experts as well as industry executives shared their insights and experiences on the skills that it takes to make it to the top.

If you are interested in learning more about DIF and attending the events, please contact Tom Wilne at Shell (twilne@shell.com) or Kelly Barnes at COPRI (kbarnes@asce.org). ■

ICCE 2002 Highlights

ICCE 2002

The 28th International Conference on Coastal Engineering (ICCE 2002) was held in Cardiff, Wales, in July of 2002. Over 600 attendees from 36 countries gathered at the City Hall in Cardiff to discuss research and applications in coastal engineering. The conference included 350 oral presentations (in six parallel sessions), 30 poster presentations, and 40 exhibitors. Conference Sessions included the topics of coastal waves; nearshore currents, swash, and long waves; coastal structures; sediment transport; and coastal morphology, beach nourishment, and coastal management.

Chris Fleming, Halcrow Group and Chairman of the Local Organizing Committee, opened the conference. Opening addresses were given by the Rt. Hon. Rhodri Morgan, First Minister of the National Assembly for Wales, and Baroness Barbara Young, Chief Executive of the UK Environment Agency. Both officials emphasized the importance of coastal planning and engineering in the past and future for the UK and Wales. Per Bruun, University of Florida, retired, received the International Coastal Engineering Award for his lifelong contribution to the profession of Coastal Engineering. First Minister Morgan presented the award. Also during the opening session, COPRI and the International Association of Hydraulic Engineering and Research (IAHR) signed a partnering agreement.

Keynote presentations on the second day of the conference included a comprehensive presentation on beach

nourishment by Per Bruun, and presentations by Steve Huntington, HR Wallingford, Kevin Burgess, Halcrow, and Ian Townend, ABP Marine Environmental Research Ltd, about solving coastal conundrums in the UK. The third day of the conference provided a break from technical sessions with afternoon field trips to visit areas of coastal erosion on the southwest Welsh coast, the Severn Crossing, and the Cardiff Bay Barrage and Ports. All three excursions allowed delegates to appreciate the influence of the large tide range in Wales (up to 14 m on the Severn River).

During the conference banquet at the Celtic Manor, Robert G. Dean, University of Florida and chair of the COPRI's Coastal Engineering Research Council (CERC), announced that the 2008 conference would be held in Hamburg, Germany. He also recognized Billy L. Edge, Texas A&M University, who served as editor for the ICCE Proceedings and Secretary of the CERC for the past 26 years.

The successful ICCE series of conferences is organized by the CERC and dedicated Local Organizing Committees. Future conferences are being planned in Lisbon, Portugal (19-24 September 2004), San Diego, CA, USA (3-8 September 2006), and Hamburg, Germany (2008). Abstracts for ICCE 2004 are due 15 July 2003. Further information about CERC activities and future conferences can be found on the COPRI web site (<http://www.coprinstitute.org/committees/>). ■ *Jane McKee Smith, Secretary, CERC*



Field trip participants had a chance to visit the eroding bluffs along the coast of Wales. Photo: Lesley Ewing



Harbor at Portcawl, Wales, seen here by field trip attendees at low tide. Photo: Lesley Ewing

Long Waves Symposium – In parallel with XXX IAHR Congress

Thessaloniki, Greece • August 25-27, 2003

Long-wave oscillations or infragravity waves, having periods in the range of thirty seconds to several minutes, are generated by various processes including wave-wave interactions in shallow water. Because of possible downtime and vessel damage, long waves create significant problems in ports and harbors due to the horizontal motions induced by these waves. Tsunamis are a subset of long waves that are caused by sudden movement of the ocean bottom or by landslides. During the last decade there have been numerous tsunamis worldwide causing catastrophic loss of life and property along coasts and in port facilities. This symposium will examine the effects of long waves and tsunamis on harbors and coasts. The aim is to bring together scientists, engineers, and planners interested in long wave and tsunami research and hazard mitigation to exchange information on technical advances and identify future research needs.

The symposium will have four half-day sessions with keynote speakers. It will be held in conjunction with the *XXX IAHR Biennial Congress* to be held in Thessaloniki, August 24-29, 2003, and it will start on Monday afternoon. A proceedings volume will be published and will be available during on-site registration. For more information on the symposium, please contact Dr Michael Briggs, michael.j.briggs@erdc.usace.army.mil or Prof. Ch. Koutitas, koutitas@civil.auth.gr. You may also visit the *XXX IAHR Congress* web site for additional information on the Congress, registration, hotel, spouse programs, tours, short courses, etc. <http://www.civil.auth.gr/2003iahr/>.

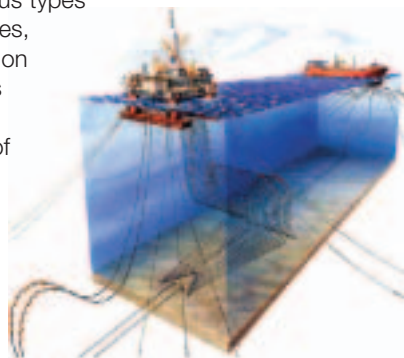
Call for Papers – Deepwater Mooring Systems

The 2003 International Symposium on Deepwater Mooring Systems: Concepts, Designs, Analysis, and Materials will be presented by the Offshore Technology Research Center in Houston, Texas, on October 2-3, 2003. Professionals and all interested persons are encouraged to participate in promoting the international exchange of information and knowledge of mooring systems. The aim of the symposium is to collect and disseminate numerical schemes, field and laboratory measurements, data analysis and designs related to deepwater mooring systems and their interactions with various types of offshore floating structures, riser systems, and foundation systems. The proceedings of this symposium will contribute to the practice of safe and cost-effective design of moored offshore floating structures.

Abstracts on the following topics are due by

October 15, 2002:

Innovative Concepts, Model Testing, Robust Numerical Modeling Schemes, Coupled Dynamic Analysis, Advanced & New Materials, Mooring Foundations, Relation with Riser System, Reliability Analysis. Please contact the Offshore Technology Research Center for more information on the Symposium and guidelines for abstract submittal (<http://otrc.tamu.edu> or 979-845-6000).



Call for Papers – APAC 2003

The 2nd International Conference on Asian and Pacific Coasts (APAC 2003) will take place at Makuhari Messe, Chiba (near Tokyo), Japan on September 7-11, 2003. Prospective authors are invited to submit an abstract in English, maximum two A4 pages, including figures, tables and references. **Abstracts should be received by November 30, 2002.**

Conference topics include 1) coastal oceanography and meteorology (waves, currents, tides, tsunami, etc.), 2) coastal sedimentary processes and their control measures, 3) design and investigation of coastal and harbor structures, 4) coastal environmental problems and marine ecology, 5) coastal fishery problems and resource management, 6) global environmental problems, 7) coastal zone management and planning, 8) remote sensing / laboratory and field measurement techniques, 8) miscellaneous coastal problems.

Further details on APAC 2003 are available at the conference web page: <http://www.wv.mei.titech.ac.jp/apac2003/>

Committee & Member Updates:

Coastal Zone Management Committee

This month the Coastal Zone Management Committee has two pieces of information that should prove interesting for COPRI membership. While the Solutions to Coastal Disasters 2002 Conference is becoming but a memory to most of us, a few brave members of the Coastal Zone Management Committee are already planning another event for 2005. Louise Wallendorf, Chris Jones and Spencer Rogers have volunteered to serve on the initial organizing committee, and they will undoubtedly add others once the conference is approved by COPRI and some of the "when and where" details are finalized. Several people have offered to help, and the group will start developing assignments and asking for assistance as the program progresses. In the meantime, please start planning abstract submittals and include Solutions to Coastal Disasters in your 2005 plans.

Also, the past chair of the Coastal Zone Management Committee, Scott L. Douglass, has completed a new book about beaches for general audiences, *Saving America's Beaches: The Causes of and Solutions to Beach Erosion*. This book describes where beach sand comes from, how waves are formed and move sand down the coast, how "works of man" have blocked this movement and caused beach erosion, and ways for saving the beaches for future generations of Americans. The author is a long-time member of ASCE and a Professor of Civil Engineering at the University of South Alabama. The publisher of the book is World Scientific Press. More information about this book, including purchasing information, can be found at <http://wspc.com/books/general/5048.html>. A book review is forthcoming in a future COPRI newsletter. ■ *Brad Pickel*

Rubble Mound Structure Committee



The Rubble Mound Structures Committee met at the 28th International Conference on Coastal Engineering in Cardiff, Wales. On July 5, 2002, committee members took a field trip to the Plymouth Breakwater. Pictured above are Billy Edge and David Werren on the seaward slope of the breakwater at low tide. Photo: Lesley Ewing

COPRI Member to Compete Internationally

Congratulations to Kevin Hall of COPRI's Coastal Engineering Practice Committee for qualifying for the World Triathlon Championships. He will participate as a member of the Canadian National Triathlon Team. The competition will be held this November in Cancun. Good luck Kevin!

Waterways Committee



Members of the Waterways Committee at their meeting in Orlando, May 9, 2002. Seated from left: Charles Calhoun, Bob Pietrowsky (Chair), Jim Blanchar, Clark McNair, Sandra Knight, B.K. Lee, and Mark Lindgren.

Voluntary Contribution Value J.E. Dailey, COPRI President

If you are an ASCE member, your dues statement for 2003 will contain a box that reads: "Voluntary contribution to COPRI: Suggested amount = \$25." I participated in the discussions that brought this box into existence, and I owe you an explanation as to why it is there.

The ASCE leadership believes unanimously that Institutes such as COPRI are the wave of the future. In the past 6 years, ASCE invested financial resources in excess of one million dollars to bring COPRI and other Institutes into existence. To the extent that COPRI's roots and those of the others are in the old ASCE Technical Divisions, an early decision was made to treat Institute membership in the same manner as long-standing Technical Division membership, i.e. free of charge. By comparison, the geographical groups, Sections and Branches, have long levied dues of their own.

On an everyday working basis, each and every one of us is asked to do more with less. ASCE and COPRI are no different. As a volunteer, I know that I have less time to serve my technical community than I once did. I know that sponsorship, both financial and in-kind, from supportive agencies and companies is tougher to find. The resource mix is bound to change if we are to serve our communities as we believe we must. Given

that the COPRI Board has continued to fund volunteer activities at levels equal to and better than they were in the old Technical Division world, the added ASCE financial commitment to COPRI has enabled us to do good things through exceptional staff support from Brian Parsons, Patty Brown and Kelly Barnes. Kelly's efforts in particular produced our *Waterways* Newsletter, of which we are all quite proud. I think it is very important that we continue to get the good word out in hard copy four times a year.

Having made the investment in Institutes, it is only reasonable that ASCE seek to measure the success of that investment. Asking you to allocate some of your hard-earned dues dollars to COPRI is a way to do that. ASCE's immediate intent is to improve COPRI's long-term financial base by infusing us with voluntary contribution funds, but do understand that today's voluntary contribution well could evolve into tomorrow's permanent dues. ASCE fully understands that this is heading towards an à la carte dues structure where members may choose to support programs they value and vice versa. COPRI's task is to deliver programs and products that merit your support, something I know we will continue to do.

I mentioned our *Waterways* Newsletter above; we've done other good things in the

past year as well. We executed Memoranda of Agreement with the International Navigation Association (PIANC) and the International Association of Hydraulic Research (IAHR) to cooperate in conference development efforts. These ties can only strengthen our Ports, Dredging, Waves, and International Conference on Coastal Engineering conference series. In February, we held the Solutions to Coastal Disasters Conference, whose success has led us to start planning for another in 2005. In this arena, we hope to strengthen our working relationship with NOAA. This year also, we started the Deepwater Infrastructure Forum (DIF) in Houston to serve the offshore community through the year in cooperation with other technical societies such as SPE and SNAME. DIF is self-supporting on a cash basis, but it's feasible only with strong headquarters support made possible in this electronic age. We have a lot going. Your financial support, and most importantly your time, applied to effect through Brian, Patty and Kelly make it all happen.

I will be COPRI's Past President by the time you receive this, and a year later I will be "promoted to civilian" in the words of Harry Truman. I will continue to serve my technical community in that capacity, and I hope I can count on you to do the same. ■

RECENTLY RELEASED PROCEEDINGS

Breakwaters '99

Proceedings of Breakwaters '99: First International Symposium on Monitoring of Breakwaters held in Madison, Wisconsin, September 8-10, 1999
Orville T. Magoon and James D. Prehn, eds. 2002
ASCE Stock #40597, ISBN #0-7844-0597-2, 168 pp.
List \$40.00; ASCE/COPRI Members \$30.00



Breakwaters '99 presents state-of-the-art methods and technologies that are used in the structural and environmental monitoring of rubble mound breakwaters. Structural monitoring concerns the structural response and the mechanical properties of the structure and its foundation. Environmental monitoring concerns the external loading on the structure and the effect the structure has on the total environment. These papers discuss actual experiences in the field of monitoring breakwaters.

Estuarine and Coastal Modeling

Proceedings of the Seventh International Conference on Estuarine and Coastal Modeling held in St. Petersburg, FL, November 5-7, 2001
Malcolm L. Spaulding, ed. 2002
ASCE Stock #40628, ISBN #0-7844-0628-6, 1096 pp.
List \$120.00; ASCE/COPRI Members \$108.00



This conference proceedings of 66 papers presents the current state of the art and state of the practice in marine environmental modeling. Papers explore the development, testing, application, calibration, validation, and visualization of predictions from estuarine and coastal modeling. The primary focus is on application of models to bays, sounds, lagoons, estuaries, embayments, bights, and coastal seas. Additionally, application of models to problems in hydrodynamics, water quality, and sediment transport are covered. Models aimed at solving engineering and environmental impact assessment problems, and understanding circulation and pollutant transport in near-shore waters are included. Model applications to address regulatory requirements for facility siting and operations are also presented.

To order the proceedings, please visit the ASCE web-site (www.pubs.asce.org) or call ASCE at 800-548-2723.

M A R K Y O U R C A L E N D A R

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- Oct 18 Committee Meeting: Ports & Harbors. Charleston, SC
- Oct 24 Committee Meeting: Ocean & Offshore Engineering. Annapolis, MD
- Oct 24 Workshop: The Coastal Zone Management Role in Managing Hazards. Carlsbad, CA
- Oct 25 Committee Meeting: Governing Board. Washington, DC
- Nov 1 Award Nominations due to ASCE (Einstein Award, International Coastal Engineering Award, Moffatt-Nichol Award)
- Nov 3-7 COPRI Events at the ASCE Annual Conference. Washington, DC
- Nov 3 Course: Introduction to the FEMA Coastal Construction Manual. Washington, DC
- Nov 3 Course: Coastal Engineering Manual. Washington, DC
- Nov 17-20 Scour of Foundations Conference. College Station, TX

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- May 5-8 Offshore Technology Conference. Houston, TX
- May 18-23 Coastal Sediments Conference. Clearwater Beach, FL
- Aug 26-29 Coastal Structures Conference. Portland, OR
- Aug 25-27 Long Waves Symposium (IAHR Congress). Thessaloniki, Greece
- Sept 7-11 Asian & Pacific Coasts Conference (APAC). Chiba, Japan
- Oct 2-3 Deepwater Mooring Systems Symposium. Houston, TX
- Nov 12-15 ASCE ANNUAL CONFERENCE, Nashville, TN

NOVEMBER						
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For a list of COPRI events, please visit <http://www.coprinstitute.org/calendar/index.html>



**The Coasts, Oceans, Ports and Rivers Institute
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