



Waterways

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

volume 2, issue 1

spring 2002

Highlights from the Solutions to Coastal Disasters

COPRI is pleased to announce that the Solutions to Coastal Disasters Conference, a new conference for COPRI, was extremely successful. The conference was held February 24-27, 2002, in San Diego, California, and had a wide range of attendees including coastal engineers, researchers, scientists, planners and managers. The papers presented at the conference covered the broad field of coastal disasters, with sessions on climate change, shoreline change, coastal storms, tsunamis, wind and coastal zone management. There were a number of exciting luncheon and plenary sessions speakers, including Margaret Davidson (NOAA/National Ocean Services), Leonard Pietrafesa (North Carolina State University), and Ed Bernard (NOAA/Pacific Marine Environmental Laboratory), who spoke at the opening plenary session. There was even local news media coverage of the conference when one San Diego station



Conference participants had a chance to view eroding see cliffs with active landslides on the Bluffs and Seawalls field trip organized by Walter Crampton of Terracosta Consulting Group, Inc. Various types of seawalls and retaining structures are in place to prevent cliff erosion. The one pictured here is being constructed by JC Baldwin Construction Company, one of the conference exhibitors.

did a story and live broadcast from the conference location!

Three short courses were offered on the Sunday before the conference, and were very well attended. The Coastal Engineering Practices Committee of ASCE/COPRI presented an 8-hour course on the new Coastal Engineering Manual; staff from NOAA's Coastal Services Center and Holub and Associates gave a 4-hour course on Coastal Management for Practitioners, and the training team of Jones and Coulbourn offered a 4-hour course on the FEMA Coastal Construction Manual. The field trips were one of the highlights of the conference. Participants chose between trips to see the Tijuana National Estuarine Research Reserve, or eroding coastal bluffs, bluff stabilization efforts and beach nourishment projects on the North County Bluffs and Seawalls field trip.

see SOLUTIONS TO COASTAL DISASTERS on page 4

COPRI Governing Board

Michael J. Briggs, Secretary
briggsm@wes.army.mil

Robert A. Dalrymple, Vice President
rad@udel.edu

Charles C. Calhoun, Jr.
ccalhoun@canufly.net

William M. Hall, Treasurer
bill.hall1@halliburton.com

Daniel T. Cox, Communications
dtc@tamu.edu

E. Douglas Sethness, Past President
dsethnes@ch2m.com

James E. Dailey, President
jim.e.dailey@us.akermar.com

Louise Wallendorf
lou@usna.edu

Highlights

Note from the President	2
Coastal Zone Management Awards	3
Dredging 2002	5
Committee Updates	6
PIANC Awards	7

Note from the President: THIS ISN'T YOUR FATHER'S ASCE

J.E. Dalley, Spring, 2002



I came out of school for the first time in 1964, and was one of the early wave of computer-literate engineers. We knew then that computers would allow us

to do our work better, faster and more comprehensively than ever before and that major impacts would fall on the engineering profession itself. Such predictions did come to pass, but it took time for it all to happen. Slowly, our systems evolved from pencils, paper (e.g. columnar pads) and slide rules (maybe even electric calculators) into today's computer-based equivalent, the spreadsheet. In present terms, we as engineers were human piece-parts in a massive parallel-processing machine. The plain, blunt fact is that all of that has been replaced.

In those early days, I perceived ASCE to be an organization run by a bunch of old men who themselves ran large engineering organizations. Now I am one of those old men, but no longer do we need large organizations to do our work. Today, my mission is to make

COPRI the engine of change that will define the role and contributions of engineers working within the larger community of technical professionals in the coming years of the 21st century. We must re-think the ways we do our business, because the old paradigms either have been or will be replaced.

My friend, colleague and fellow COPRI member, Gordon Sterling, is working on an ASCE Board Committee to have a fundamental look at how we do conferences and conventions. Presently, the committee is interviewing leaders of the engineering profession across a broad front to understand prevailing thought on the role of professional societies. According to Gordon, while lip service to the traditional paradigms and virtues is expressed, harsh realities in the modern everyday workplace will drive fundamental changes in the way that we as professional societies serve our constituent communities.

Peter Hoadley, who teaches at Vanderbilt University, recently said to me that his institution views a civil engineering education as the "liberal arts degree of the 21st century." This is a way of saying that some level of technical understanding is essential to sustain the economic, social and environmental infrastructure that will be needed if a

global human population of 8.5 billion plus is to live in peace, within your lifetime and quite possibly mine. The unthinkable alternative became reality on September 11, 2001. Events of that day were an attack on civilization as we know it, driven by intolerance and frustration, supported by poverty and ignorance, and expressed through religious zealotry. We now have an imperative to counter those forces of darkness.

As a boy, I grew up in the communist scare of the 1950's when a man named Bob Garst hosted Nikita Khrushchev in a pigpen on his farm in Iowa. When asked how he could reach out to a man who later boasted that he would bury us, Bob Garst responded with his belief that a man with a full stomach would not be an enemy. Given that the bulk of the future human population will live in the coastal regions of the world, our mission as COPRI is to help make sure that those people have full stomachs and fulfilling lives.

Knowing the independent, entrepreneurial COPRI culture, I am most confident that together we will find new ways to respond to the challenges before us and serve our constituent communities ever better. So stay tuned, get involved, and help it all unfold. ■

COPRI Participates in the "Critical Water Infrastructure Dialogue"



On September 11, 2001 the U.S. Army Corps of Engineers (USACE) proposed the establishment of an "association of associations," a partnership to collaborate on issues related to the security of the nation's built environment following the events of September 11, 2001. The name of this organization is The Infrastructure Security Partnership (TISP). TISP will act as a national asset facilitating dialogue on domestic infrastructure security and offering sources of technical support and comment on public policy related to the security of the nation's built environment.

Coastal Zone Management Awards

The Coastal Zone Management (CZM) Awards Sub-Committee has sought nominees from the coastal community who, through their work and activities, best exemplify the purpose of the Committee. On behalf of the Awards Sub-Committee and the full Coastal Zone Management Committee, it is my great privilege to announce the following awards.

2002 COPRI/ASCE CZM Committee Professional Practice Award:
 Spencer Rogers, Jr., M. ASCE;
 Coastal Engineering Specialist with the North Carolina Sea Grant Program

2002 COPRI/ASCE CZM Committee Service Award:
 Louise Wallendorf, M. ASCE;
 Ocean Engineer with the US Naval Academy

These Awards were bestowed at the 2002 Awards Dinner at the Solutions to Coastal Disasters Conference in San Diego, CA, February 27, 2002. This is the first year that either Coastal Zone Management Award has been given. The Committee will continue to present these awards every year that there are deserving recipients who equal the high standards set by these first awardees. Both Awardees have, through professional actions and volunteerism, worked to support and advance the purpose of the CZM Committee. The CZM Committee hopes you will join us in congratulating Louise Wallendorf and Spencer Rogers, Jr. and thank them for their exemplary contribution to Coastal Zone Management and COPRI. ■ *Lesley Ewing*



On February 1st, at the ASCE Reston, VA headquarters, the Environmental and Water Resources Institute of ASCE in association with TISP, hosted a "Critical Water Infrastructure Dialogue." COPRI members and staff attended the one-day summit, where the intent of the dialogue was to further explore opportunities for collaboration and coordination. The goals of the meeting included: highlighting the status of initiatives currently under development, coordinating these efforts to avoid duplication, determining how the user community may be best assisted, identifying areas of potential collaboration,

and charting the course for future policy. The primary outcomes involve plans for a joint conference focusing on national water infrastructure issues; an outline of the role of associations and other organizations in developing standards and guidelines to address the long-term issues concerning water security for all infrastructure categories, and a forum for continuing discussions of future policy initiatives.

For more information on TISP, please visit the website at www.tisp.org. ■

Solutions to Coastal Disasters

from page 1

The conference organizers, Lesley Ewing, Louise Wallendorf, and Chris Jones, are looking forward to doing this conference again in the future and had a few interesting comments...

What was the high point of the conference for you?

Chris: *The positive reaction from the attendees!*

Lesley: *Having one of the speakers tell me that before his talk, he was certain we had put him in the wrong session. But as the session was going on, he began to see the cross-overs that were being developed and thought we'd put his paper exactly where it belonged. We wanted to get some exchange between groups that often do not talk, and from that comment, I think we succeeded.*

What was the best comment you got about the conference?

Louise: *One interesting speaker comment I had was: "I had to think about what I was going to say, as this wasn't my usual audience." To which I replied, "Good, that's what we were aiming for. Did you enjoy it and would you do it again?" He said, "Yes."*

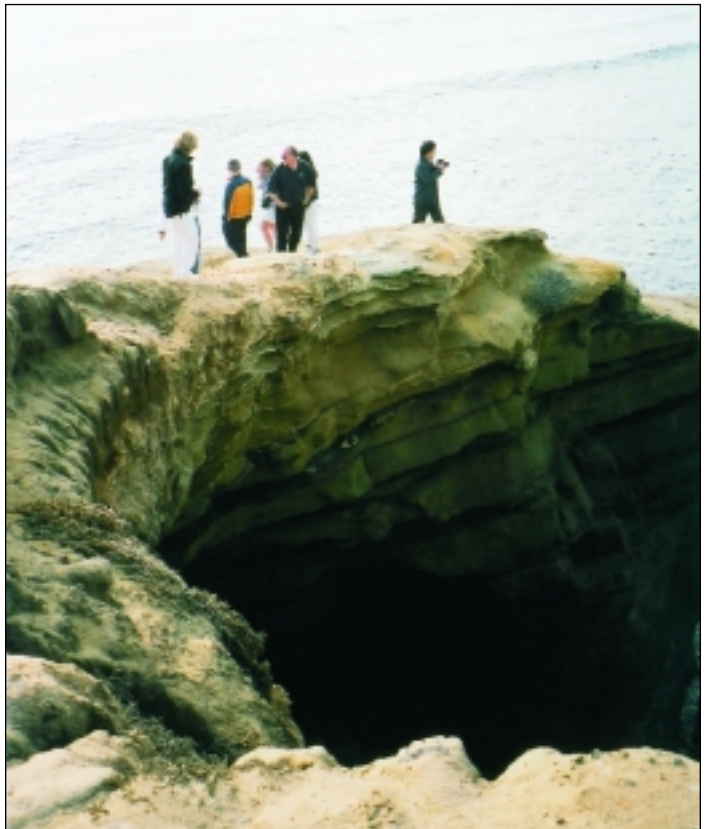
When do we find out about the next Solutions to Coastal Disasters Conference?

Lesley: *The Coastal Zone Management Committee is going to put together another Solutions to Coastal Disasters committee and we'll get announcements in the COPRI newsletter as soon as a location and date are set. It probably will be in 2005, unless someone with a lot of energy and free time wants to volunteer to put us on an accelerated schedule.*

The proceedings from the conference are available for purchase through ASCE if you did not attend the conference. Thank you to everyone who helped make this conference a success! ■



(left to right) Orville and Karen Magoon, Louise Wallendorf, and Lesley Ewing enjoying themselves at the conference closing awards dinner.



Field trip attendees had a chance to visit the 50 million year old sea cliffs along the City of Encinitas' shoreline. The significant faulting in this area has contributed to landslides and the formation of sea caves.



Conference attendee Bob Battalio of Philip Williams & Associates took advantage of the beautiful San Diego weather and waves after presenting his paper on "Coastal Flood Studies in Puget Sound, Washington."

COPRI Invites you to Dredging '02!

May 5-8, 2002

Rosen Plaza Hotel, Orlando, Florida

COPRI invites you to come to Orlando in the beautiful days of late spring to take part in the Third Specialty Conference on Dredging and Dredged Material Disposal. This conference will offer an array of timely topics covering the diverse interests of the dredging and dredged material process. You will have the opportunity to discuss and share new ideas, important recent experiences, economic viewpoints, and national and international perspectives on dredging issues, activities, research, programs, and policies. This conference is of primary interest to everyone in the Dredging Community, especially Port Authorities, Government Agencies, Regulators, Dredge Operators, Engineering and Environmental Consultants, Educators, and anyone dealing with contaminated sediment liabilities.



National coverage runs from New England and New York to the Pacific Northwest, from the Everglades and Houston to the Great Lakes, with insightful case studies of rivers, harbors, lakes, creeks, and waterways in between. Internationally, you will hear papers from Egypt, India, Brazil, and several countries in Europe.

The Second Specialty Conference on Dredging and Dredged Material Disposal, Dredging '94, was a landmark event that brought then-emerging hot topics, particularly the environmental aspects of dredging for remediation purposes, to the floor. Since 1994, the issues surrounding dredging – including its usefulness as a method of clean up, debates over dredged material disposal options, and the urgency to deepen existing channels to keep ports competitive in a global trade economy – have grown.

Dredging plays a critical role in our use of waterways and harbors, and the time is upon us to update and expand our vistas and gain more knowledge about our field. Don't miss Dredging '02!

For more information and convenient online registration, please visit:
www.asce.org/conferences/dredging02

Proceeding Available for Solutions to Coastal Disasters 2002

Lesley Ewing and Louise Wallendorf, Editor 2002,
 1040pp., Stock #40605
 List \$108 / Member \$81

This proceedings of 83 papers presented at last month's Solutions to Coastal Disasters '02 Conference, present state-of-the-art information on coastal storms, seismic events, impacts of climate change, and shoreline change.

Topics include:

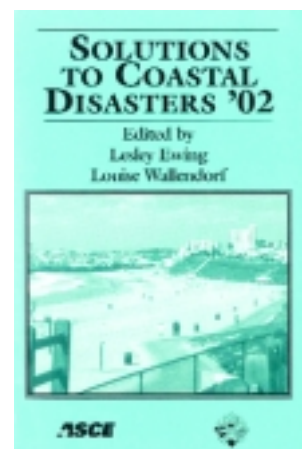
Causes: research and study of forces and processes that cause or contribute to coastal disasters.

Response Mitigation Strategies: development of methods and strategies to prevent or decrease the adverse effects of coastal disasters.

Design and Engineering: detailed examination of engineering approaches to coastal hazards and mitigation, and the consequences of these approaches.

Coastal Management: the policies, planning, and management efforts to minimize or avert coastal disasters.

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



Committee & Member Updates:

Ports and Harbors Committee

The COPRI Ports and Harbors Committee met on Nov 10, 2002, in Oakland, California. A number of task committees reported on their activities, including: timber protection, pavements, corrosion, infrastructure, GIS, composites, mooring analysis, and future waterborne craft dimensions. If anyone is interested in participating on one or more of these committees, please check out our new web site.

The committee has also formed a task group to appoint the selection committee for the Moffatt-Nichol Award. There will be a representative from Academia, Practicing, and Construction areas. If you are interested or want to nominate someone, please send a copy of your resume and the area to be represented to:

Raymond Rawe
c/o Port of Seattle
PO Box 1209
Seattle, WA 98111
rawe.r@portseattle.org
(206) 728-3188 fax
(206) 728-3105 phone

The next Ports and Harbors Committee meeting will be Friday, April 26, 2002, in Houston, Texas. ■

COPRI Members Organize Program for Hawaiian Surveyors on Sustainable Beaches and Shores

Hawaiian Surveyor Kendall Hee and COPRI member Orville Magoon, along with Professor Billy L Edge, Lesley Ewing, and others, presented a one day conference on Sustainable beaches and shores. The keynote speaker was Professor Robert Wiegel, Honorary member ASCE, who spoke on "The History of Waikiki Beach from a Coastal Engineering Perspective". The session was presented on February 7, 2002, as part of the Hawaiian Surveyors' annual meeting at the Raddison Prince Kuhio Hotel in Honolulu, Hawaii. ■
Orville Magoon

Waterways Committee: Preserving the Corps Manuals

The planning, design, construction and maintenance of the United States Navigation Waterways has been dominated by the U.S. Army Corps of Engineers for 100 years. This system includes over 300 coastal and Great Lakes ports for deep draft ships and 25,000 miles of inland waterways and 300 locks for barge traffic. Even though the U.S. Navigation System represents a significant investment and a critical element to the economy of the country, technical literature and design manuals on this subject were mostly internal to the Corps of Engineers. Unfortunately the Corps, as well as other government publications, are subject to elimination whenever an administration decides to reduce the number of government regulations. Noting the lack of permanent information of this system, the Waterways Committee undertook a mission to preserve the Corps experience in operation of this massive system.

This effort, which started in the late 1980's, has produced two ASCE manuals on engineering practice. ASCE Manual No. 80, "Report on Ship Channel Design", 1993, presents information on: vessel characteristics, channel depths and width, dredging, ice effects, model studies, economic optimization and three case studies. ASCE Manual No. 94, "Inland Navigation: Locks, Dams, and Channels", 1998, presents information on: waterway traffic, channel size and alignment, open-river navigation, river training works, lock and dam design, harbors and mooring areas, winter navigation, environmental considerations, cost analysis, model studies, construction, operation, dredging and disposal, repair and replacement and six case histories.

These two manuals are intended to act as a cornerstone for developing two manual series. One on "Inland Navigation" and the other on "Ship Channels." Each series would include additional manuals on the subjects of: Economic Analysis, Environmental Design, Construction, Operation, Maintenance and Rehabilitation, and Dredging. When completed, these navigation manuals may provide a basis for ASCE sponsored training courses or seminars and could provide a body of literature for university courses.

Developing these additional manuals is the ambitious goal of the Waterways Committee. ■ *Bruce McCartney*

PIANC Award Announcements:



The International Navigation Association (PIANC) is a worldwide technical, engineering organization of individuals, corporations, and national governments. Founded in 1885 in Brussels, Belgium, PIANC is concerned with maritime ports and inland waterways and promotes the gathering and exchange of technical information in these areas. The international headquarters is located in Brussels, and the U.S. headquarters is in the Washington, DC area.

Jack Nichol Award for Outstanding Marina Design

The Recreation Navigation Commission (RecCom) of the International Navigation Association (PIANC) is proud to announce the creation of the John M. 'Jack' Nichol Marina Design Award for outstanding marina design, in memory of the late Jack Nichol, honorary member of PIANC and well known marina designer. The purpose of the Award is to recognize excellence in the design of modern recreational boating facilities around the

world. Anyone may submit an application to be considered for the Jack Nichol Award. To be eligible for consideration a facility must: provide berthing for recreational boaters; have been constructed within the last 40 years; have operated successfully for the last 5 years; be accessible to the boating public. The Recreational Navigation Commission of PIANC will evaluate the applications and make a decision based on the following criteria: Functionality, Aesthetics, and Environmental Sustainability.

Applications should be submitted before the first of August of any year. For more information on the Award criteria, submittal deadline or procedure, please contact:

Mr. J.U. Brolsma
Secretary of the Recreational
Navigation Commission
P.O. Box 1031, 3000 BA Rotterdam
The Netherlands
email: pianc@avv.rws.minvenw.nl

Gustave Willems Award Competition

Every year there is a competition for the International Gustave Willems Award, which was established as a memorial to Professor Willems, President of PIANC from 1956-1982. The award is given for the most outstanding technical paper prepared on design, construction, improvement, maintenance, or operation of inland and maritime waterways (rivers, estuaries, canals, port approaches), inland and maritime ports, environmental subjects and coastal areas. This competition is open to anyone 35 years of age or under, and the deadline to submit abstracts is May 1, 2002.

For details contact:

U.S. Section, PIANC
7701 Telegraph Road
Alexandria, VA 22315-3868
Tel: 703-428-7072
Fax: 703-428-8171
Thomas.M.Ballentine@usace.army.mil

ORVILLE MAGOON, GUENOC WINEGROWER, HONORED BY CONGRESS

On Friday, March 15, Lake County's own Orville Magoon was honored with the Certificate of Special Congressional Recognition by the Honorable Congressman Mike Thompson, as well as Citizen of the Year and the Elks Distinguished Citizenship Award for Outstanding and Meritorious Service to Humanity. Brad Onorato, representing Congressman Mike Thompson, presented the Congressional Award at the Clearlake's Elks Lodge #2299. Frank Camarata, distinguished past president of the Clearlake Chamber of Commerce, congratulated Mr. Magoon for his years of service to the community. The honorary proceedings were recorded in the Congressional Record of Thursday, March 14, 2002, to be read at the event.



Orville Magoon, Winegrower of Guenoc and Langtry Estate Vineyards and Winery, is a Supreme Grand Knight of the Brotherhood of the Knights of the Vine, a member of Les Amis du Vin, the Lake County Grape Growers Association and the Order of Military Wine Tasters as well as past president of the Meritage Association, an association devoted to creating fine blended wines from traditional Bordeaux varietals. In addition to his achievements in viticulture, Mr. Magoon is a renowned coastal engineer, President of the Coastal Zone Foundation, devoted to protecting and maintaining our precious coastal resources. Orville Magoon has dedicated much of his life working on the development of the Lake County community and the protection of Lake County's character, beauty and resources.

2002 Conference Calendar

Dredging '02

May 5-8, Orlando, FL

Offshore Technology Conference

May 6-9, Houston, TX

ICCE '02

July 7-12, Cardiff, Wales

Scour of Foundations

November 17-20, College Station, TX

We Need Newsletter Submissions!

COPRI is looking for volunteers to submit short articles that would be of interest to COPRI members. In upcoming newsletters, we would like to incorporate book reviews, meeting / workshop announcements, items of technical interest, and more committee reports. Please participate! Contact Kelly Barnes at copri@asce.org.



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

1015 15th Street NW, Suite 600
Washington, DC 20005-2200

Postmaster: Return Postage Guaranteed ADDRESS SERVICE REQUESTED