



NEWS & ANNOUNCEMENTS

DREDGING RESEARCH PROGRAM BEGINS

The U.S. Army Corps of Engineers has just launched a major research and development program to address problems and needs in its dredging mission. This effort, called the Dredging Research Program (DRP), will focus on producing improved technologies applicable to various areas related to the physical aspects of dredging. The basic objective of the DRP is to effect saving in the costs of dredging preparations. Five fundamental problem areas will be investigated over a 6-year program life.

- (a). Analysis of Dredged Material Disposed in Open Water.
- (b). Material Properties Related to Navigation and Dredging.
- (c). Dredge Plant Equipment and Systems Processes.
- (d). Vessel Positioning, Survey Controls, and Dredge Monitoring Systems.
- (e). Management of Dredging Projects.

The DRP has been initiated with an FY 88 budget allotment of \$3 million and is estimated to cost approximately \$35 million over the next 6 years. Basic responsibility to conduct the program is vested in the Coastal Engineering Research Center, Hydraulic Laboratory, Geotechnical Laboratory, and Environmental Laboratory—all located at WES. In addition, important activities are being performed by the Engineer Topographical Laboratories, and the Cold Region Research and Engineering Laboratory has a potential program role in the future. The Marine Design Center, Field Operating Activities, and various research and development (R&D) contractors will provide assistance to the Corps R&D establishment in carrying out the DRP.

A DRP bulletin will be issued in the near future and will contain details of the program. In addition, a DRP brochure will be published. Technical information will also be made available through technical reports and technical notes.

To receive the DRP Bulletin, write: Commander and Director, U.S. Army Engineer Waterways Experiment Station, ATTN: Robert A. Baylot, Jr., CEWES-EV-1, P.O. Box 631, Vicksburg, MS. 39180-0631.

For technical questions, contact Lim Vallianos at (601) 634-2070, or write: Commander and Director, U.S. Army Engineer Waterways Experiment Station, ATTN: Lim Vallianos, CEWES-CP-D, P.O. Box 631, Vicksburg, MS 39180-0631.

8TH SYMPOSIUM ON COASTAL SEDIMENTOLOGY

"Coastal Sediment Mobility" will be the theme of the 8th Symposium on Coastal Sedimentology, to be held 2-4 March 1989 in Tallahassee, Fla. A cluster of papers within this theme will be devoted to a topic of great importance to any area having extensive low coasts: "Historical Shoreline Changes in Florida." This part of the program will report results from the almost-complete high-precision digitization of historical shoreline maps and shoreline changes for all coastal counties in Florida.

In addition to papers closely related to the theme, the program will be open, as in previous meetings, to other contributions. Extended abstracts (about 500 words) will be accepted up to 3 October 1988, and camera-ready manuscripts will be due 2 March 1989.

The symposium will be made up of two days of technical papers (Friday and Saturday), and an optional trip Saturday to visit a coastal strip where evidence of shoreline changes (over the last 120,000 years) can be seen. Registration is \$40 (\$25 for students), including the proceedings volume.

Sponsors are the Geology Department, Florida State University; Florida Department of Natural Resources, Division of Beaches and Shores; and Florida Department of Natural Resources, Florida Geological Survey.

Queries should be sent to Dr. W. F. Tanner, Geology Department, Florida State University, Tallahassee, Fla. 32306-3026.

NOS HYDROGRAPHIC DATA BASE— EXPANDED

Digital Bathymetric Data for Coastal Waters

The National Ocean Service Hydrographic Data Base (NOSHDB) provides the most accurate and extensive digital bathymetric data available for the coastal waters of the continental United States, Alaska, Hawaii, and Puerto Rico/Virgin Islands. Because the data base includes all depth values obtained during the surveys, more detailed bathymetric information is available than can normally be found on published nautical charts compiled from the same surveys. The dense inshore and shallow-water data are well suited for computer generation of grids to be used in hydrodynamic models of estuaries and other coastal systems. Both the inshore data and the less dense offshore and deep-water data are valuable to the compilation of bathymetric base maps for geophysical exploration, coastal engineering studies, and other research and reference purposes.

The data base has been expanded 39 percent since 1985, from 27.6 million data records to 38.4 million data records. The data base consists of depths (96.8%), navigational hazards (0.5%), and bottom characteristics (2.7%) digitized from the plots of hydrographic surveys completed between 1930 and 1965, and from survey data acquired digitally in the field since 1965.

The data are available on magnetic tape as 40-character records, with 128 records (5,120 bytes) per block and a variable number of blocks per file. Each record contains the following: source survey number, data collection date, position, depth, and cartographic code. Positions are given in degrees, minutes, and seconds (to the nearest hundredth) of latitude and longitude relative to the North American Datum of 1927. Depths obtained from fathometer readings have been corrected for transducer draft and sound velocity. All depths have been corrected for tides and are relative to the local mean-lower-low-water datum. The cartographic code indicates the type of record and defines the units for depth records. The data are not edited to reflect current conditions and *should not be used for navigation*.

The data base is organized into 681 files, each

file including all available data for a one-degree-square area. Records are sorted from southeast to northwest within a file. The files are grouped into seven regions: Atlantic, Gulf of Mexico, Pacific, Alaska, Great Lakes, Caribbean (Puerto Rico and the Virgin Islands), and Pacific islands (Hawaii). An inventory search can be made, free of charge, to determine how many files and records are available for a rectangular or polygonal area of interest defined by vertices of latitude and longitude. Searches can also be made by dates of data collection as an additional selection criteria.

Within each one-degree area, the availability of data in a specific location is most easily determined by examining the data density plot for the area, which is generated from 15-sec gridded data. Up to 20 data density plots are provided, free of charge, and are included with the search printout. On a density plot, each record is represented by a dot. A complete set of these plots, available on microfiche or as 8½ x 11" electrostatic copies, may be purchased to serve as a catalog of the entire data base.

Gridded Data Format

In cooperation with the U.S. Geological Survey (USGS), NGDC developed software to grid the data base. A 4.9-million record data base of soundings gridded into 15-sec cells is maintained and grids at other intervals such as 1 min or 5 min, can be generated upon request. The depth assigned to the center of each cell is an arithmetic mean of all depths located within the cell, computed without regard to their spatial distribution. If no depths are found within the cell, then a record is not generated. Empty cells are not filled by interpolation or extrapolation.

Gridded data are available as 40-character records, with 5,120 records per block, and a variable number of blocks per file. Each record contains the following: position of the center of the cell, average depth, maximum depth, minimum depth, standard deviation, and number of depths found in the cell. Positions are given in degrees, minutes, and seconds (to the nearest hundredth) of latitude and longitude relative to the North American Datum of 1927. Depths are given in meters to the nearest tenth unless another unit is requested.

Related Maps and Charts

Published bathymetric maps for U.S. coastal waters may be obtained from: NOS Distribution Branch, NOAA-N/G33, Riverdale, MD 20737; telephone; (301) 436-6990. Copies of the original plots of NOS hydrographic surveys may be obtained from: Charting and Geodetic Services, NOAA-N/G243, 6001 Executive Blvd., Rockville, MD 20852; telephone: (301) 443-8408.

Related Data

NGDC maintains two other extensive bathymetric data bases that include coverage of U.S. coastal waters. The digital data base ETOPO5 is a complete 5-min grid of the world's land and seafloor elevations. The Geophysical Data System (GEODAS) inventories data for worldwide marine geophysical cruise from which bathymetric data as well as magnetic, gravity, and seismic data may be selected.

For additional information contact: National Oceanic and Atmospheric Administration, National Geophysical Data Center/World Data Center A, 325 Broadway, Boulder, CO 80303-3328, USA.

INTERNATIONAL ASSOCIATION FOR HYDRAULIC RESEARCH: XXIII CONGRESS (21-25 August 1989, Ottawa, Canada)

Introduction

The International Association for Hydraulic Research (IAHR) was founded in 1935 as a worldwide independent organization for engineers and scientists with interests in the field of Hydraulic Research and its application to practice. Its purpose is to promote basic and applied research in hydraulics and to bring current science and technology to bear on solving the world's water problems. The biennial congresses focus on the work of the Association and foster international communications and collaboration.

The XXII IAHR Congress on "Hydraulics and the Environment"

The XIII Congress of the Association will be held in Ottawa, Ontario, Canada 21-25 August, 1989, at the Westin Hotel, Ottawa.

The IAHR Council at its meeting in 1985, accepted the invitation of the National Research Council through the Director of the National Hydrology Research Centre, Environment Canada and the Director of the Division of Mechanical Engineering, National Research Council of Canada to organize the XXIII Congress.

All IAHR Members and other interested persons are invited to participate in the Congress.

Objective of Congress

The aim of the XXIII Congress is:

"To communicate new knowledge of hydraulics and its uses in engineering and environmental science."

Activities at the Congress will include Technical Presentations, Seminars, Poster Sessions, Video Presentations, Special Lectures and a Special Student Session.

POAC-87 NINTH INTERNATIONAL CONFERENCE ON PORT AND OCEAN ENGINEERING UNDER ARCTIC CONDITIONS 16-21 August 1987, University of Alaska, Fairbanks, Alaska USA

Availability of Proceedings Volumes

Port and Ocean Engineering Under Arctic Conditions,

W.M. Sackinger and M.O. Jeffries (Eds.), The Geophysical Institute, University of Alaska, Fairbanks, Alaska (1988)

Vol. I, xxvii + 737 pp., ISBN 0-915360-05-5, hardbound US \$95.00 (available May 1988); Vol. II, approx. 150 pp., ISBN 0-915360-06-3, hardbound US \$24.00 (available third quarter 1988); Vol. III, approx. 600 pp., ISBN 0-915360-07-1, hardbound US \$90.00 (available third quarter 1988).

These volumes may be ordered from:

POAC-87 Conference

The Geophysical Institute

University of Alaska Fairbanks

Fairbanks, AK 99775-0800

Prices include shipping and handling. Checks

should be made payable to POAC-87 Conference.

GEOLOGICAL AND ENVIRONMENTAL ASPECTS OF COASTAL MANAGEMENT PROGRAMS

Proceedings of a Short Course Available

Proceedings of a workshop held at Queensland Institute of Technology, Brisbane (20-22 February 1985), compiled by A. V. Arakel, 1986, iv + 185 pp., \$A20 (including postage).

CONTENTS: A. V. Arakel: A review of the geological aspects and dynamicity in coastal environments and their implications to coastal zone management—A. W. Stephens: Geological aspects to beach management—A. W. Sam Smith and T. L. Piggott: In search of a coastal management data base—G. W. Hofmann: Geological hazards, impact of mining and the role of geological studies in EIS preparation—J. L. F. Hacker and M. R. Gourlay: The problems of a prograding river mouth: the Pioneer River at Mackay—W. F. Ridley: Geochemical Hazards—J. M. W. Rynn: The earthquake hazards in relation to Queensland's coastal environment—S. Cantrill: Environmental aspects of coastal management: bird strikes at Brisbane Airport—I. Johnson: Issues for urban coastal centres in Queensland—J. B. McKenzie: Coastal dune stabilization and management—W. T. Ward: Coastal evolution during the last million, the last 10,000, and the last 200 years in Southeast Queensland—D. Haughton: Computer methods in geoscience studies—J. Wilson and P. Saenger: The Australian coastal management—Notes from Discussion Session.

For ordering please contact: Applied Sedimentology & Environmental Geology Research Unit, Department of Applied Geology, Queensland Institute of Technology, GPO Box 2434, Brisbane, Queensland 4001, Australia.

BEACH TYPES-CHARACTERISTICS AND HAZARDS POSTER

This full-color poster, published by the New South Wales Beach Grading and Hazard Program, illustrates with photographs and diagrams the six types of beach that occur around the southeastern Australian coast. The illus-

trations are presented together with a brief description of beach characteristics and associated hazards to bathers.

The posters cost \$A2.50 each and can be ordered from: Coastal Studies Unit, Department of Geography, University of Sydney, Sydney, NSW 2006, Australia. (Checks should be made payable to "Coastal Studies Unit").

ASIAN FISHERIES SCIENCE

This new journal was developed as a result of a questionnaire distributed in 1983 to Asian scientists which included a question on the need for a regional journal in fisheries science, then lacking. Of over 800 responses, only one felt there was no need for such a journal. The others were all positive. Thus, the Journal is filling a gap rather than competing with other scientific periodicals. The rate of submission of manuscripts is further proof of the need for Asian Fisheries Science. Some 73 manuscripts have been received and they continue to arrive at a steady pace from the large number of countries in the Indo-Pacific faunal zone which the journal serves.

The Editorial Board is international and supplemented by many other voluntary reviewers from all parts of the world. Contents embrace both capture fisheries and aquaculture. Further details on Journal policy are provided inside the covers.

The subscription price has been kept low for third world researchers, making it a bargain elsewhere! However, we rely on attracting a large number of subscribers for the Journal to be self-supporting. Price per volume (2 issues) is US \$12 for individuals (\$9 for Asian Fisheries Society members) and \$25 for institutions. Airmail is an extra \$6 per volume in Asia and \$8 elsewhere.

The journal's publisher, the Asian Fisheries Society, is a nonprofit organization geared to the needs of third-world researchers. Hence, there are no annual dues, only a \$10 entrance fee to qualified scientists.

For further information contact: J. L. Maclean, Executive Editor, Asian Fisheries Science, c/o MC P.O. Box 1501, Makati, Metro Manila, Philippines.