CECW-EH

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

EM 1110-2-1100
Change 1

Manual
No. 1110-2-1100

31 July 2003

Engineering and Design
COASTAL ENGINEERING MANUAL

1. Purpose. The purpose of the *Coastal Engineering Manual* (CEM) is to provide a comprehensive technical coastal engineering document. It includes the basic principles of coastal processes, methods for computing coastal planning and design parameters, and guidance on how to formulate coastal flood studies, shore protection, and navigation projects. This Change 1 to EM 1110-2-1100, 30 April 2003, includes the following changes and updates:

a. Part I-4. Incorporates new chapter titles.
b. Part II-1. Formulas corrected.
c. Part II-2. Numerous changes to formulas, coefficients, and figures.
d. Part II-4. New findings on the subject matter have been added.
e. Part III-1. Table and figure improved.
f. Part III-2. References corrected.
g. Appendix A. Additional terms added and some definitions modified.

2. Applicability. This manual applies to all HQUSACE elements and all USACE commands having Civil Works and military design responsibilities.

3. Discussion. The CEM is divided into six parts in two major subdivisions: science-based and engineering-based. The first four parts of the CEM and an appendix were issued in 30 April 2002. These included:

Part I, "Introduction"
Part II, "Coastal Hydrodynamics"
Part III, "Coastal Sediment Processes"
Part IV, "Coastal Geology"
Appendix A, "Glossary"

The engineering-based subdivision is oriented toward a project-type approach and is divided into two parts. Part V, "Coastal Project Planning and Design," is published separately with the same date as this change. The text and figures provide information on the design process and selection of appropriate types of solution to various coastal problems. Part VI, "Design of Coastal Project Elements," which provides engineering guidance on materials, fundamentals of design, and reliability, is in preparation.

4. Distribution Statement. Approved for public release, distribution unlimited.

5. Substitute the following pages:

Chapter	Remove Page	Insert Page
I-4	I-4-2 and I-4-3	I-4-2 and I-4-3
II-1	II-1-89	II-1-89
II-2	II-2-i thru II-2-72	II-2-i thru II-2-72
II-4	II-4-i thru II-4-38	II-4-i thru II-4-40
III-1	III-1-8 and III-1-22	III-1-8 and III-1-22
III-2	III-2-103	III-2-103
Appendix A	A-1 thru A-94	A-1 thru A-94

FOR THE COMMANDER:

Barbara B. Caspell

for MICHAEL J. WALSH
Colonel, Corps of Engineers
Chief of Staff