



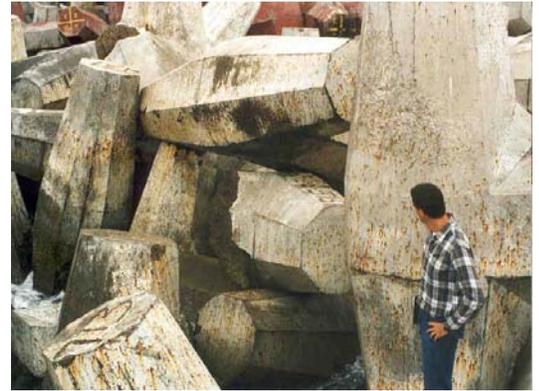
**US Army Corps
of Engineers®**

Engineer Research and
Development Center

Monitoring Completed Navigation Projects (MCNP) Periodic Inspections

Problem

The Corps manages over 1000 coastal structures. Many of these structures have exceeded their design life and most have been repaired multiple times. Many of these structures have deteriorated but are still functioning adequately. Many of these structures contain innovative components, such as concrete armoring, porous caps, steep slopes, marine mattresses or berms. There exists no long term detailed standardized monitoring of this infrastructure and no formalized program for capturing and disseminating lessons learned. With recent drastic reductions in monitoring and repair funding, it is crucial that long-term performance of coastal structure infrastructure be documented and disseminated in a standardized manner.



Research Approach

The approach is to gather, analyze and archive detailed structural condition, performance and response data on a relatively small number of structures that are characteristic of a larger class of structures, or that have some unique or innovative characteristics. The data include lidar or photogrammetric surveys, hydro surveys, walking surveys, and damage surveys that are more comprehensive than a typical field inspections. The data are compared to historical data and to standard design methods in order to improve designs.

Data are stored in GIS layers and delivered to the field through reports, archived data sets, and GIS and Google Earth applications.

Labs/others involved

CHL is the lead lab and each survey is supported by Corps Districts. Lidar surveys are coordinated with Corps and national mapping initiatives.

Final Products

Products include field survey reports, technical reports, and GIS applications.

Point of Contact

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