Living Shoreline Implementation across USACE Districts[1]

Reference SON: *2017-F-25 Implementation of Living Shoreline Techniques and Guidance in USACE Projects*[1]

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Research Need

Living shorelines (also called green or soft shorelines) are coastal edges that have been stabilized through the installation of natural materials like rock, sand, and native plants. Living shorelines can provide habitat and contribute to carbon cycling processes in nearshore environments, and often cost less to maintain than artificial (also called hard) shorelines. Currently, there is limited guidance available on design, development, construction, maintenance, and implementation of living shoreline projects across USACE Districts nationwide. To better inform implementation of living shoreline projects, this effort assessed the current state of knowledge with respect to Living Shorelines and the utility of available guidance to USACE applications.

Project Purpose & Objectives

In order to identify knowledge gaps pertaining to the implementation of living shoreline restoration projects, a review assessing the literature, guidance materials, tools, applications, and engineering guidance on living shorelines projects currently available and accessible to USACE Districts was conducted. Once the existing knowledge base was identified, a technical report was synthesized to summarize current guidance.

Value of Research and Development (Payoff)

This project provided summary guidance to USACE districts on implementation of Living Shorelines projects to restore coastal ecosystems. It also elucidated areas where current information or guidance for these projects is deficient. In the future, research and development projects focusing on living shorelines will be able to target these areas and continue to innovate how USACE restores and manages shorelines.

Products

Technical Reports (TRs)

Gaskin, T.A., Balazik, M., Thomas, C., Davis, J., Durham, B., Davis, B., and Ihametz, I. (*2025*). Living Shoreline in USACE Projects: A Review, ERDC/EL TR-25-6. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi. https://dx.doi.org/10.21079/11681/49678