

STABILIZING SHORELINES WITH COIR FIBER

by

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Abstract. High winds and wave action-both natural and man-made-are the most common cause of shoreline degradation. The results of wind and water on shorelines and steambanks is the destruction native vegetation and the vital root systems that help soil in place. Once erosion of shorelines has begun, the inevitable results are reduces water quality, disruption and potential destruction of aquatic species and aquatic vegetation, and land loss. Coir fiber, made from the husks of coconuts, has proven to be very reliable and very successful material to use in protecting and restoring shorelines and steambanks. These high tensile fibers are used in many configurations, the most popular being "logs", 20' long tubes of coir fiber netting filled with compressed coir fiber, and "mats", needlepunched blankets of 2" thick coir fiber in 5SY rolls. Coir fiber logs and mats have been used to restore marsh shorelines in Louisiana, steambanks in the Northeast, beachfronts on the Carolina coastlines, and to revegetate lakes in Canada and Wisconsin in order to stimulate fish spawning. The long life expectancy of the coir fiber as well as its ability to retain moisture, moderate soil temperatures, and provide high tensile strength for soil retention and protection of shorelines and steambanks. (Case studies of the projects mentioned will follow.)

Additional key words: wetlands, heavy metals, toxic wastes, plant species, volunteers, minelands

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