

Truro Conservation Commission
Regulations - Chapter 3
Coastal Management Plan - Erosion Control Projects

Preamble: These regulations are enacted pursuant to the authority granted under the Truro Conservation By-Law and are expressly intended to provide greater protection than that provided under the state Wetlands Protection Act, and the DEP Regulations promulgated thereunder in order to protect Truro's beaches, a natural resource of great economic and environmental value to the Town.

The Truro Conservation Commission is of the opinion that coir tube installations, and similar structures, are "coastal engineering structures" within the meaning of the DEP Regulations 310 C.M.R. 10.30 (3), and that, as such, installation of coir tubes and similar projects are prohibited for the protection of buildings constructed after 1978. However, by letter dated February 18, 2011, and incorporated herein by this reference, the Truro Conservation Commission was informed by DEP that the Department views this type of structure as a "soft solution" to stabilize eroding banks, which is a permitted structure under the cited regulation. In the event that DEP reconsiders its interpretation of 310 C.M.R. 10.30 (3) the Truro Conservation Commission reserves the right to rescind these regulations and to prohibit installation and maintenance of coir tube projects and similar structures within the Town of Truro.

Coastal banks along the bay side of Truro are experiencing accelerated rates of erosion, at times from a single storm event. It is the policy of the Commission to allow an "erosion control" project only as an *interim* measure, and in all cases to require the property owner to submit plans to move or remove threatened structures as a condition of allowing such projects. Because the coastal banks along the bay side are important to provide sediment to the littoral system, in addition to their critical function to prevent storm damages and flooding, it is the policy of the Commission to require ongoing nourishment of any approved project. Further, as a well vegetated bank provides significant resistance to storm damage, it is the policy of the Commission to require extensive planting of the coastal bank in any erosion control project, including re-planting as on-going maintenance in all projects. Finally, it is the policy of the Commission to require that the property owner deposit with the Town of Truro an escrow amount pursuant to an agreement that allows the Conservation Commission to remove any project as to which the owner fails to perform ongoing maintenance as required by the Commission.

3.01 Performance Standards: The performance standards set forth in Chapter 2 of these Regulations, §2.01 are incorporated by this reference as if fully set forth herein.

The coastal banks along the bay side of Truro are significant to storm damage prevention or flood control because they supply sediment to coastal beaches, coastal dunes, or barrier beaches, and such banks are also a vertical buffer to storm waters. In the case of an “erosion control” project permitted under these regulations, these standards must be met by a showing, by substantial evidence, that a sufficient quantity of beach nourishment and “sacrificial” sand will be provided as part of the project to ensure that the movement of sediment will not be adversely effected by the project.

3.02 Rule: No erosion control measures, such as a coir tube project, nor any coastal engineering structures, of any kind, shall be erected or maintained in a coastal resource area within the Town of Truro without the prior approval of the Truro Conservation Commission. Projects which are proposed to fully comply with the “sample order of conditions for coir tube projects” may be permitted on the bay side of Truro as set forth below. In no event shall a “coir tube” project be permitted on the Ocean side of Truro.

In all “coir tube” projects, only one row of Drift (serpentine) fencing may be installed or utilized at the property. Layered Drift fencing shall only be permitted under special circumstances and in limited areas, and shall be sought by application for a waiver. Hardened fencing, seawalls, revetments, bulkheads and other “coastal engineering structures”¹, shall not be allowed, except as specifically provided in 310C.M.R. 10.30 (3) to protect structures constructed prior to 1978. In addition to the requirements on such projects imposed by 310 C.M.R. 10.30(3), no such project shall be permitted on the Bay Side of Truro unless a “coir tube” project has been previously approved and installed and has failed, where such failure is not solely attributed to failure to maintain sand cover and vegetation. Maintenance or repair of existing bulkheads and revetments shall only be by prior approval of the Truro Conservation Commission.

3.03 Definitions:

- a) Coir tube: a rounded structure of coir material approximately 12 feet in circumference, installed along the length of a section of coastal bank at the

¹ Coastal engineering structure means, but is not limited to, any breakwater, bulkhead, groin, jetty, revetment, seawall, weir, riprap or any other structure that is designed to alter wave, tidal or sediment transport processes in order to protect inland or upland structures from the effects of such processes. See: 310 C.M.R 10.23.

toe of the bank. Tubes may be constructed with no more than two layers of coir material, as approved by the commission, and may be lined with no more than one layer of jute material.

- b) Serpentine fencing (also called "Drift" Fencing): Timber posts dug no more than six feet into the beach, connected by 6 to 10 foot spans of fencing comprised of 2"x4" spans and 2"x3" slats. Space between slats is a minimum of 3". Fence posts are installed alternating 2' on either side of a center line so that a "zig zag" or "serpentine" structure results.
- c) Serpentine Fencing with Coir Tube Project. A single installation of Serpentine fencing may be incorporated in a coir tube project. No additional serpentine fencing shall be permitted except on clear and convincing proof of extraordinary circumstances.

3.04 Project requirements:

- a) A model order of conditions is attached to these regulations and incorporated herein. No waivers from these required orders shall be allowed except upon clear and convincing scientific proof that the proposed waiver will improve the ability of the coastal bank to provide storm damage protection, prevent flooding and contribute sediment to the littoral system.
- b) Escrow agreement: Every erosion control project shall include a requirement that the property owner establish an escrow account with the Town of Truro in accordance with the requirements of the Model Escrow Agreement attached to these regulations and incorporated herein. No variance or waiver of this requirement shall be granted by the Commission. Remaining escrow funds, if any, may be returned to the property owner when the erosion control project is removed.

3.05 Procedure:

- a) Notice of Intent (NOI) - A Notice of Intent is required for initial installation of any Erosion Control project.
- b) Ongoing Maintenance: The model order of conditions requires ongoing maintenance of coir tube erosion control projects, and sets forth conditions for performance of this ongoing maintenance. These conditions shall be continuing conditions which shall survive the issuance of a certificate of compliance.
- c) Amended Order of Conditions - A request for an Amended Order may be filed in the event that changes occur in the configuration of the bank which

causes substantial change in a project which has not received a Certificate of Compliance.

3.06 General Regulations applicable to all projects.

- a) All projects shall specify dates for commencement and completion. All projects may only begin after Columbus Day and must be completed prior to April 15, provided however that the project area is clear of nesting shorebirds as confirmed by the conservation agent or her designee. Planting of native material may continue after April 15, provided all materials and access to the site are over the owner's property and not by beach transport.
- b) All construction equipment shall only access the site from the beach, and only travel along the beach below the mean high tide line. Absent a showing by clear and convincing evidence that access to the coastal bank across the applicant's property is impossible, no sand shall be trucked or transported to the site down the beach. All sand shall be brought to the site from the top of the bank at the applicant's property.
- c) Beach construction and restoration work shall not be performed on weekends or holidays, nor before 8:00 a.m. or after 6:00 p.m. on weekdays.
- d) Properties between the public access point for the project and the project locus shall be considered abutters and shall be notified of any erosion control projects in the same manner and at the same time as other abutters.
- e) Construction debris shall be removed at the end of each day and the access route shall be left backbladed to a normal grade.
- f) It is the responsibility of the project proponent to obtain consent to traverse private property as may be required by property owners.