



DEPARTMENT OF THE ARMY
U. S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
ATTN: REGULATORY DIVISION
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

MDSPGP-7
Activity f(2)
Living Shorelines/Beach Nourishment

The authorized Living Shorelines/Beach Nourishment activities must comply with the following applicable activity specific conditions, all general conditions of this permit, and any project-specific special conditions.

This activity authorizes discharges of fill material and associated shoreline protection structures, including but not limited to, groins, wave screens, low profile stone sills, oyster reef sills, small geo-tubes, and coir logs, in subtidal and intertidal waters and tidal wetland along tidal shorelines for the construction and maintenance of living shorelines and/or beach nourishment for the purpose of shoreline erosion control only. A living shoreline has a footprint that is made up mostly of native material. Living shorelines incorporate vegetation or other living, natural "soft" elements along or in combination with some type of harder shoreline structure (e.g., oyster or mussel reefs or rock sills) for added protection or stability. Living shorelines should maintain the natural continuity of the land-water interface and retain or enhance shoreline ecological processes. Living shorelines must have a substantial biological component, either tidal fringe wetlands or oyster or mussel reef structures. Structures used to protect living shorelines should prioritize a small impact footprint. All work authorized by this activity, including discharges, must comply with all activity-specific impact limits and requirements listed below, in addition to the general conditions of this permit (Sections 10 and/or 404; limited to all tidal waters).

Category A Impact Limits and Requirements:

- (i) Total impact is limited to 17,500 square feet of tidal waters of the United States.
- (ii) The fill and containment structures must not extend more than 500 linear feet in length and/or 35 feet channelward of mean high water.
- (iii) No impacts to SAV (documented to exist in the last five years as specified in Section III) are authorized.
- (iv) The total amount of vegetated wetlands which may be filled, graded, or excavated, in square feet, may not exceed 1 square foot per linear foot of the activity along the shoreline. All impacts to sub-tidal, inter-tidal, and/or existing wetland vegetation may require wetland planting, monitoring, adaptive management, and invasive species plans and must result in no net loss of vegetated wetlands.
- (v) This Category A activity does not authorize any discharge of dredged or fill materials for the purpose of constructing any type of compensatory mitigation, including mitigation banks, in lieu fee mitigation, and permittee-responsible mitigation.
- (vi) Projects involving breakwater structures must be reviewed as a Category B.

(vii) If stone sills are deemed appropriate for the project site, after consideration of other alternatives, their placement at the toe of constructed marsh shall be designed to facilitate ingress/egress of estuarine fauna during regular tidal cycles. The following example sill design parameters are acceptable measures to meet this condition:

- a. Low profile sills, particularly for low to moderate erosion energy shorelines.
- b. Sill windows/vents of sufficient width (at least 10-15 feet across the bottom), placed in sufficient number along the sill length, or at sill termini (e.g., one window for every 100 feet of sill); and
- c. Sill window/vent designs may include (a) sill windows left as natural substrate at the existing elevation (b) sill windows lined with cobble placed no higher than is necessary to control erosion and no higher than the MLW elevation; or (c) off-set or staggered sills.

(viii) The fill material used must be clean substrate, no more than 10% of which shall pass through a standard number 100 sieve.

Category B Impact Limits and Requirements:

(i) The single and complete project will result in no more than a total 0.5-acre loss to tidal waters of the United States, unless the Corps waives this criterion by making a written determination concluding that the activity will result in no more than minimal adverse environmental effects.

(ii) The fill and channelward toe of containment structures must not extend more than 50 feet channelward of mean high water, unless the Corps waives this criterion by making a written determination concluding that the activity will result in no more than minimal adverse environmental effects.

(iii) Activities in SAV (documented to exist in the last five years as specified in Section III) beds must be avoided and minimized. Avoidance and minimization measures, such as relocating, reconfiguring, or eliminating a structure and/or the implementation of a time-of-year restriction for work in waters, may be required to reduce impacts to the SAV habitat. Unavoidable impacts may require compensatory mitigation.

(iv) This Category B activity authorizes the discharge of both dredged and fill materials.

(v) Grain size analyses for both the dredged/fill material and placement site are required. The discharged material must be equal to or larger in grain size and character than the existing beach material or determined otherwise to be compatible with existing site conditions. The discharged material may not contain more than 10 percent silts and clays, or control measures such as breakwaters, groins or similar structures should be used to control movement. If the activity requires the beneficial reuse material, see General Condition 40.

(vi) Ecologically beneficial, existing tidal wetlands should be incorporated into the design of living shorelines. If incorporating existing tidal wetlands on-site does not provide the desired ecological uplift, existing wetlands on-site may be impacted but shall be replaced on-site with the same size and planted with similar species as the previously existing wetlands. The conversion of low marsh to high marsh is typically undesirable as these habitats perform different ecological functions and services; however, there are certain cases where conversion from low marsh to high marsh could be ecologically beneficial. Written documentation is required to justify the ecological benefits of converting low marsh to high marsh if proposed.

(vii) The permittee must complete Marsh Monitoring Reports in compliance with MDE's Marsh Maintenance Plan, including documenting areal coverage as required in condition (c)(iv) below. A copy of the monitoring reports must be provided to the Corps Baltimore District Office via email to nab-regulatory@usace.army.mil with the subject line of "NAB-20XX-XXXXX (PROJECT NAME)" no later than December 31 of any year for which monitoring is required.

(viii) If the authorized project is failing to achieve required success criteria as discovered through monitoring activities or routine site inspection, the permittee must provide the Corps with a detailed explanation of the deficiency/ies, identify the specific remedial action(s) proposed to be taken for each identified deficiency, and include a timetable for implementing work to correct the deficiency/ies. Final remedial measures, as approved by the Corps, must be completed. Additional monitoring or mitigation may be required if, after five years, the living shoreline project has not achieved the project objectives and required success criteria.

(ix) Failure to address any deficiency/ies in a timely manner may result in a non-compliance action by the Corps.

Requirements Applicable to Both Category A and Category B Activities:

(i) Application must be submitted to MDE for Corps authorization.

(ii) The living shoreline must be planted as soon as practicable, within one year, following completion of the filling operation. Native plants appropriate for current site conditions, including salinity, must be used.

(iii) The applicant must submit documentation of on-going shoreline erosion at the project site, along with their application, using recent photographs and/or supplemental shoreline retreat or change information obtained from the Maryland Geological Survey, or other expert substantial source.

(iv) Wetland components of living shoreline projects shall be maintained as a wetland, with areal coverage by native, hydrophytic, non-nuisance species of at least 85% for five (5) consecutive years.

(v) Living shoreline projects must result in no net loss of wetlands.

(vi) Free-standing wave screens should be designed with an appropriate spacing between slats and a minimum elevation of 12 inches off the bottom of the waterway. The spacing between slats and distance off the bottom of the waterway should be evaluated taking into consideration the wave energy of the project site.

(vii) No discharges of dredged or fill material may be placed in excess of the minimum needed for erosion protection. Discharges of dredged or fill material into waters of the United States, and oyster or mussel reef structures in navigable waters, must be the minimum necessary for the establishment and maintenance of the living shoreline.

(viii) The fill must be placed parallel to the uplands, other than groins and returns on stone sills.

(ix) Clearing and/or pruning of riparian trees and shrubs within the defined project area shall be minimized to the maximum extent practicable.

(x) To sustain the effectiveness of the living shoreline project and its living, biological components (e.g., marsh grasses, oysters) in managing shoreline erosion and providing ecological functions, the permittee must avoid destruction or alteration of the constructed tidal marsh (e.g., mowing, pulling, or otherwise destroying planted grasses).

(xi) Coir logs, coir mats, stone, native oyster shell, native wood debris, and other structural materials must be adequately anchored, of sufficient weight, or installed in a manner that prevents relocation in most wave action or water flow conditions, except for extremely severe storms.

(xii) The activity must be designed, constructed, and maintained so that it has no more than minimal adverse effects on water movement between the waterbody and the shore and the movement of aquatic organisms between the waterbody and the shore.

(xiii) Written documentation is required when the activity proposes additional material placed in stone sill windows in projects in low energy (e.g., max fetch <1 mile) conditions.

(xiv) The living shoreline must be properly maintained, which may require periodic repair of sills, breakwaters, or reefs, or replacing sand fills after severe storms or erosion events. Vegetation may be replanted to maintain the living shoreline. This activity authorizes those maintenance and repair activities, including any minor deviations necessary to address changing environmental conditions.