

Section 300.2.

Filling, Removing, or Grading of Shoreline Features

A. Definitions

1. Filling is the deposition of materials of upland origin onto shoreline features or their contiguous areas (see Section 300.9 for inland disposal of dredged materials).

2. Removing is the process of taking away, including excavation, blasting, or mining, any portion of a shoreline or its contiguous area.

3. Grading is the process whereby fill or the soils of a shoreline or its contiguous area are redistributed or leveled.

Established agricultural practices in areas contiguous to shoreline features are excluded from this section.

4. Erosion and Sediment Control Plan: An erosion and sediment control plan is a description of the proposed best management practices, detailed site plans, and written narrative that, when implemented, provides protection and restoration of coastal resources by reducing erosion and controlling sediment onsite as well as minimizing other negative impacts associated with land development activities.

B. Policies

1. All filling, removing or grading activities shall be done in accordance with the policies and standards of this section and the standards and specifications set forth in the most recent edition of the *Rhode Island Soil Erosion and Sediment Control Handbook*.

2. All new activities subject to Section 300.3 (residential, commercial, and industrial structures), Section 300.13, Section 320, or those activities which disturb more than 5,000 square feet of land on a site shall prepare and implement an erosion and sediment control plan approved by the Council which references all necessary practices for erosion and sediment control. All erosion and sediment control plans shall be consistent with applicable policies and standards contained in the Rhode Island Coastal Resources Management Program and the standards and specifications set forth in the

most recent edition of the *Rhode Island Soil Erosion and Sediment Control Handbook*. All erosion and sediment control plans shall be strictly adhered to.

3. The Council recognizes the most recent version of the *Rhode Island Soil Erosion and Sediment Control Handbook*, and its amendments, published jointly by the Rhode Island Department of Environmental Management and the United States Department of Agriculture (USDA), *Natural Resources conservation Service (NRCS)*, as containing appropriate "Best Management Practices" (BMP) for use within the CRMC's jurisdiction. All erosion and sediment control plans shall be consistent with this manual. Applicants are also encouraged to consult the most recent version of the *Rhode Island Stormwater Design and Installation Standards Manual* during the preparation of their erosion and sediment control plan in order to ensure consistency with the Council's stormwater management requirements (Section 300.6).

4. Routine filling, removing, or grading of bulk materials (e.g. coal, salt, etc.) that occurs as part of the normal operations of an existing bulk transfer facility (e.g., the Port of Providence) which is adjacent to type 6 waters is excluded from the provisions of this section provided that all filling, removing or grading activities are done in accordance with applicable guidance manuals which specify the appropriate best management practices for Rhode Island. Any filling, removing or grading that will result in a modification of an existing bulk transfer facility's infrastructure shall be subject to the policies and standards in this section.

5. Filling, removing, or grading activities shall be reviewed at the Category B level when (a) the filling or removing involves more than 10,000 cubic yards of material, (b) the affected area is greater than two acres, or (c) the affected area is a designated historic area or archaeologically sensitive site.

C. Prohibitions

1. Filling, removing, or grading is prohibited on beaches, dunes, undeveloped barrier beaches, coastal wetlands, cliffs and banks, and rocky shores adjacent to Type 1 and 2 waters unless the primary purpose of the alteration is to preserve or enhance the feature as a conservation area or natural buffer against storms.

2. Filling, removing, or grading on coastal wetlands is prohibited adjacent to Type 1 and 2 waters, and in coastal wetlands designated for preservation adjacent to Type 3, 4, 5 and 6 waters, unless a consequence of an approved mosquito-control ditching project (Section 300.12).

3. On-site beach materials (cobbles, sand, etc.) may not be used as construction material.

4. Mining is prohibited on coastal features.

D. Standards

1. The following standards apply in all cases where filling, removal, or grading is undertaken:

(a) Fill slopes shall have a maximum grade of 30 percent.

(b) All excess excavated materials, excess fill, excess construction materials, and debris shall be removed from the site and shall not be disposed in tidal waters or on a coastal feature.

(c) Disturbed uplands adjacent to a construction site shall be graded and re-vegetated or otherwise stabilized to prevent erosion during or immediately after construction. Nutrients shall be applied at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters.

(d) Removal or placement of sediments along jetties or groins may be permitted only as part of an approved dredging or beach nourishment project (see Section 300.9).

(e) All fill shall be clean and free of materials which may cause pollution of tidal waters.

(f) Cutting into rather than filling out over a coastal bank is the preferred method of changing upland slopes.

(g) Limit the application, generation, and migration of toxic substances and ensure that toxic substances are properly stored and disposed of onsite in accordance with all applicable federal, state, and local requirements.

2. The following upland and shoreline earthwork standards shall be required in those cases where the

Council determines that additional measures are warranted in order to protect the environment of the coastal region. Such requirements shall be listed on Assents as stipulations.

(a) For Earthwork on shoreline features:

(1) Prior to initiation of construction, the contractor may be required to meet on-site with the CRMC staff to discuss and clarify the conditions of the permit.

(2) A re-vegetation plan shall be submitted for review and approval when construction is undertaken on a barrier beach. This plan shall describe plant material, methods of planting, time of planting, soil amendments, and maintenance.

(3) Construction materials and excavated soils shall not be placed or stored on any shoreline feature excepting developed barrier beaches and manmade shorelines.

(4) All disturbed soils shall be graded smooth to a maximum 3:1 slope and re-vegetated immediately after construction, or temporarily stabilized with mulch, jute matting, or similar means until seasonal conditions permit such re-vegetation.

(5) In sensitive areas, work shall be carried out from areas above slope from coastal features. Machinery and construction equipment shall normally not be allowed to operate on a coastal wetland. For unavoidable work on a coastal wetland, a protective cover shall be deployed to minimize disturbance.

(6) In instances where the CRMC permits temporary disturbance of a coastal feature, shoreline slope, buffer zone, or area of beach grass, the disturbed area shall be completely restored by the owner under the guidance of CRMC staff.

(7) Concrete structures which will come in contact with salt water shall be constructed with concrete which utilizes a Type II or Type V air-entraining Portland cement or an equivalent that is resistant to sulfate attacks of seawater.

(b) For upland earthwork, measures shall be taken to minimize erosion:

- (1) A line of staked hay bales or other erosion-preventing devices (including diversion ditches, check dams, holding ponds, filter barrier fabric, jute or straw mulch) shall be placed at the downslope perimeter of the proposed area of construction prior to any grading, filling, construction, or other earthwork. Hay bales shall be toed in to a depth of 3 to 4 inches, and maintained by replacing bales where necessary until permanent re-vegetation of the site is completed. No soils or other materials are authorized to pass beyond the bale line.
 - (2) All slopes shall be returned to the original grade unless otherwise specified.
 - (3) Where natural or manmade slopes are or have become susceptible to erosion, the slopes shall be graded to a suitable slope and re-vegetated with a thick rooting brush vegetation. Mulch shall be applied as necessary to provide protection against erosion until the vegetation is established.
 - (4) Construction shall be timed to accommodate stream and/or runoff flow and not allow flows over exposed, unstabilized soils, or into or through the excavation. Flows shall not be restricted in such a manner that flooding or inhibition or normal flushing occurs.
 - (5) Any pumping of groundwater which may be necessary for de-watering shall be discharged into sediment traps consisting of a minimum of staked hay bale rings enclosing crushed stone or trap rock of a size sufficient to disperse inflow velocity. Hay bales shall be recessed 4 to 6 inches into the soil and maintained.
 - (6) There shall be no discharge of sediment-laden waters into storm drains. Storm drains shall be surrounded by staked hay bales to intercept sediment.
- (c) For any disturbance of steep slopes (over 15 percent):
- (1) Where such construction is allowed, the following shall be observed: (1) no fill shall be allowed on the slope; (2) excavation shall be kept to an absolute minimum; and (3) vegetative cover on the slope shall be permanently maintained to the maximum extent physically possible.
 - (2) Where the potential for damage to a slope exists from runoff, staked hay bales, berms, or similar diversions shall be placed at the top and toe of the slope. Collected water shall be suitably discharged through properly constructed drains or swales. Wherever possible, drainage swales shall be constructed along and adjacent to property lines so as to avoid drainage onto adjacent properties. Swales shall be capable of handling runoff from a 10-year-rainfall occurrence.
 - (3) For excavations on slopes or directly adjacent to coastal features, the excavated materials shall be cast upslope of the trench or excavation so as to minimize downslope runoff of sediment.
 - (4) Pedestrian access over steep shoreline slopes and banks shall be in the form of field stone or similar stabilized paths or elevated stairs. Access over bluffs shall be with elevated stairs only.