

DREDGING AND FILLING

STATE GUIDELINES

WAC 173-26-231

(c) **Fill.** Fills shall be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.

Fills waterward of the ordinary high-water mark shall be allowed only when necessary to support: Water-dependent use, public access, cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan, disposal of dredged material considered suitable under, and conducted in accordance with the dredged material management program of the department of natural resources, expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible, mitigation action, environmental restoration, beach nourishment or enhancement project. Fills waterward of the ordinary high-water mark for any use except ecological restoration should require a conditional use permit.

(f) **Dredging and dredge material disposal.** Dredging and dredge material disposal shall be done in a manner which avoids or minimizes significant ecological impacts and impacts which cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.

New development should be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging. Dredging for the purpose of establishing, expanding, or relocating or reconfiguring navigation channels and basins should be allowed where necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

Dredging waterward of the ordinary high-water mark for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for the restoration of ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the ordinary high-water mark. The project must be either associated with a MTCA or CERCLA habitat restoration project or, if approved through a shoreline conditional use permit, any other significant habitat enhancement project. Master programs should include provisions for uses of suitable dredge material that benefit shoreline resources. Where applicable, master programs should provide for the implementation of adopted regional interagency dredge material management plans or watershed management planning.

Disposal of dredge material on shorelands or wetlands within a river's channel migration zone shall be discouraged. In the limited instances where it is allowed, such disposal shall require a conditional use permit. This provision is not intended to address discharge of dredge material into the flowing current of the river or in deep water within the channel where it does not substantially affect the geohydrologic character of the channel migration zone.

EXISTING REGULATIONS

Dredging and filling is regulated through 1) Shoreline Environment section which establish where dredging and filling is allowed and for what reasons and 2) Development Standards section which establish development standards for dredging and filling where it is allowed. The requirements of the Shoreline Environment section are summarized in Document 3A. The three subsections of the Development Standards section relating to dredging and filling are below.

SMC 23.60.152 General development.

K. Land clearing, grading, filling and alteration of natural drainage features and landforms shall be limited to the minimum necessary for development. Surfaces cleared of vegetation and not to be developed shall be replanted. Surface drainage systems or substantial earth modifications shall be professionally designed to prevent maintenance problems or adverse impacts on shoreline features.

L. All shoreline development shall be located, constructed and operated so as not to be a hazard to public health and safety.

M. All development activities shall be located and designed to minimize or prevent the need for shoreline defense and stabilization measures and flood protection works such as bulkheads, other bank stabilization, landfills, levees, dikes, groins, jetties or substantial site regrades.

23.60.182 Dredging standards.

A. Dredging and dredged material disposal shall be designed to include reasonable mitigating measures to protect aquatic habitats and to minimize adverse impacts such as turbidity, release of nutrients, heavy metals, sulfides, organic materials or toxic substances, dissolved oxygen depletion, disruption of food chains, loss of benthic productivity and disturbance of fish runs and important biological communities.

B. Dredging shall be timed so that it does not interfere with migrating aquatic life, as prescribed by state and federal requirements.

C. Open-water disposal of dredged material shall be permitted only at designated disposal sites.

D. Stockpiling of dredged material in or under water is prohibited.

E. Dredging of material that does not meet the Environmental Protection Agency and Department of Ecology criteria for open-water disposal shall be permitted only if:

1. The dredging would not cause long-term adverse impacts to water sediment quality, aquatic life or human health in adjacent areas; and

2. A dry land or contained submerged disposal site has been approved by the Environmental Protection Agency (EPA) and the Director of the Seattle/King County Department of Public Health, or any successor agency.
- F. Dredging for the purpose of obtaining fill or construction material, or otherwise mining submerged land is prohibited except where the applicant can show that:
1. The existing benthos is sterile or largely degraded and shows no sign of regeneration; and
 2. The dredging will have only mitigatable impact on water quality and aquatic life.
- G. Incidental dredged material resulting from the installation of a utility line or intake or outfall may remain under water if:
1. It can be placed without long-term adverse impacts to water quality, sediment quality, aquatic life or human health; and
 2. The environmental impacts of removing the material and relocating it to an open-water disposal site are greater than the impacts of leaving the material at the original site.

23.60.184 Standards for landfill and creation of dry land.

- A. Solid waste, refuse, and debris shall not be placed in the shoreline.
- B. Shoreline fills or cuts shall be designed and located so that:
 1. No significant damage to ecological values or natural resources shall occur; and
 2. No alteration of local currents nor littoral drift creating a hazard to adjacent life, property or natural resources systems shall occur.
- C. All perimeters of fills shall be provided with vegetation, retaining walls, or other mechanisms for erosion prevention.
- D. Fill materials shall be of a quality that will not cause problems of water quality.
- E. Shoreline fills shall not be considered for sanitary landfills or the disposal of solid waste except for the disposal of dredged material permitted in subsection I below.
- F. In evaluating fill projects and in designating areas appropriate for fill, such factors as total water surface reduction, navigation restriction, impediment to water flow and circulation, reduction of water quality and destruction of habitat shall be considered.
- G. Deposit of fill material including dredged material shall not be permitted on lands which contain unique, fragile or ecologically valuable resources.
- H. The final location and slope of fill material on submerged lands shall meet the criteria of the State Fisheries and Game Hydraulic Code.
- I. Dredged material not meeting the Environmental Protection Agency and Department of Ecology criteria for open-water disposal may be used for landfill in the shoreline only if:
 1. The landfill is designed to be used for future water-dependent or water-related development;
 2. The landfill meets the criteria for landfill in the environment in which it is located;
 3. Either the area in which the material is placed has similar levels of the same contaminants or the material is placed in a manner that it will not be a source of contaminants in an area cleaner than the proposed fill material;
 4. The landfill can be placed in the water or on the land without long-term adverse impacts to water quality, sediment quality, aquatic life, or human health; and

5. If classified as problem waste, any required EPA or DOE approval is obtained.
- J. Incidental landfill which does not create dry land and is necessary for the installation of a utility line intake or outfall may be placed on submerged land if it will not have long-term adverse impacts to water quality, sediment quality, aquatic life or human health.
- K. Landfill which creates dry land which is necessary to repair pocket erosion between adjacent revetments shall meet the following standards in addition to those in subsections A through J above:
 1. The erosion pocket does not exceed one hundred feet (100') in width as measured between adjacent revetments;
 2. The erosion pocket is in an area characterized by continuous revetments abutting and extending in both directions along the shoreline away from the erosion pocket;
 3. The fill will not appreciably increase interference with a system of beach accretion and erosion; and
 4. The fill does not extend beyond a line subtended between the adjacent revetments.

Other Regulatory Authorities

Typical dredging projects require the following permits in addition to a Shoreline Substantial Development Permit or Exemption Letter from the City:

- U.S. Army Corps of Engineers Permit (through Dredged Material Management Program, DMMP)
- Washington Department of Ecology Water Quality Certification
- Washington Department of Fish and Wildlife Hydraulic Project Approval

Additionally, a disposal site use authorization (SUA) must be obtained from Washington State Department of Natural Resources (DNR) prior to disposal of dredged material in any Puget Sound disposal site.

Each agency has a separate and limited regulatory authority, but overall they are directed to look primarily at navigation, water quality, sediment quality, and endangered species impacts. Review under the Shoreline Master Program is intended to look comprehensively at the project to ensure no net loss of environmental function.

PROPOSALS FOR SMP UPDATE

Proposed Goals & Policies

Below are the proposed comprehensive plan goals and policies relating to dredging and filling:

Dredging should only be permitted where necessary for access to water-dependent or water-related uses, environmental mitigation or enhancement, clean-up of contaminated materials, and installation of utilities and bridges. Projects should be designed to minimize impacts to ecological function and should incorporate mitigation for dredging impacts to ensure no net loss of ecological function. Dredging and disposal of dredge

materials shall be conducted in a manner that minimizes short and long-term environmental damage. (LU249)

Landfill on submerged land that does not create dry land should only be permitted where necessary for the operation of a water-dependent or water-related use, transportation projects of state-wide significance, installation of a bridge or utility line, disposal of dredged material in accordance with the Dredged Material Management Program, beach nourishment or environmental mitigation or enhancement. Landfill that creates dry land should only be permitted where necessary for transportation projects of statewide significance, repair of pocket erosion, beach nourishment, or environmental mitigation or enhancement. Projects should be designed to minimize impacts to ecological function and should incorporate mitigation for dredging impacts to ensure no net loss of ecological function. Fills shall be constructed in a manner that minimizes short and long-term environmental damage. (LU250)

Proposed Regulatory Changes

We are currently considering the following changes to the locational standards in the Shoreline Environment section for dredging and filling:

- Prohibit dredging accessory to residential docks and piers in Conservancy Recreation and Urban Residential
- Limit landfill which creates dry land to minor projects that re-establish a previously existing ordinary high water mark or that provide environmental mitigation or enhancement
- Clarify that dredging for environmental mitigation or enhancement including beach nourishment is allowed in all environments

Overall, we are proposing to maintain the current general development standards for filling and dredging with the exception of the following changes that are intended clarify or make minor edits to existing regulations:

- Clarify that best management practices must be employed to deal with the following issues: dredged material containment, turbidity generation, dewatering of dredge materials, identification of contaminated materials. (These best management practices are generally required already through general development standards, but additional clarity is needed).
- Clarify potential impacts of dredging and fill as well as options for mitigation
- Clarify provision relating to landfill on dry land
- Limit allowance for landfill related to the repair of pocket erosion to repairs that are necessary for continued operation of a water-dependent or water-related use or where the erosion pocket does not exceed a specified width (likely twenty feet) as measured between adjacent revetments;