



Redmond Shoreline Master Program Update

Dredging Regulations

May 2004

20D.45 Dredging (SMP)

20D.45.10 Purpose

The purpose of this chapter is to implement policies contained in RCDG Title 20B, Goals, Policies and Plans, for the protection of the natural and aquatic environments of shorelines, wetlands and streams.

20D.45.20 General Provisions.

20D.45.20-010 Permitted Dredging.

Dredging may be permitted for the following purposes only:

- (1) To construct or maintain marinas, public boat launches, or public swimming areas, where such uses are allowed; or
- (2) To maintain the navigability of Lake Sammamish or the Sammamish River; or
- (3) To maintain the flood conveyance capacity of a water body, where authorized under an approved flood hazard reduction plan or watershed plan; or
- (4) To mitigate conditions which could endanger public health or safety; or
- (5) To improve water quality or restore fish or wildlife habitat as part of an approved habitat restoration plan or watershed plan.

20D.45.20-020 Prohibited Dredging.

The following dredging activities are prohibited:

- (1) Dredging that would cause the spread of milfoil, have long term adverse impacts on shoreline vegetation, fish or wildlife, or create new channels; (Formerly 20D.150.20.080)
- (2) Dredging in shallow water habitat used by salmon and steelhead for migration corridors, rearing, feeding and refuge, or in freshwater shellfish beds, unless no feasible alternative exists;
- (3) Dredging for the purpose of obtaining fill or construction materials;
- (4) Dredging in identified or potential archaeological sites, except where allowed under a City- or State Archaeologist-approved cultural resource protection and monitoring plan;

- (5) Dredging for uses prohibited under 20D.140.10-170, Alteration of Sensitive Areas; and
- (6) Dredging for purposes other than those specified in 20D.50.20-010.

20D.45.20-030 Identification and Analysis of Dredging Impacts.

Applications for dredging and dredge material disposal shall provide the following types of information:

- (1) Physical, chemical and biological assessment of the proposed dredged material applicable to the particular dredging site, including:
 - (a) Summary of the existing biological communities and resources within and adjacent to the dredge site;
 - (b) Assessment of the possibility of significant sediment contamination;
 - (c) Description and evaluation of the proposed dredge spoil disposal site;
 - (d) Specific data on the physical and chemical composition and structure of the dredge material, including:
 - (i) grain size, clay, silt, sand or gravel content, as determined by sieve analysis;
 - (ii) chemical analysis, including metals and organics; and
 - (e) Bioassays useful in determining the suitability of dredged material for a selected disposal option.
- (2) Dredging volumes, methods, schedule, frequency, hours of operation and procedures, and dewatering process, including adjacent dewatering and handling procedures.
- (3) Method of disposal, including the location, size, capacity and physical characteristics of the disposal site, transportation method and routes, hours of operation and schedule.
- (4) Stability of bedlands adjacent to the proposed dredging area.
- (5) Hydraulic analyses, including current flows, direction and projected impacts. Hydraulic modeling studies that identify existing geohydraulic-hydraulic patterns and probable effects of dredging shall be submitted for large scale, extensive dredging projects, and for projects located within salmon and steelhead spawning, feeding, breeding or rearing habitats.
- (6) Assessment of water quality impacts.
- (7) A biological assessment of fish and aquatic habitat impacts, including migratory, seasonal and spawning use areas.
- (8) A recommendation for any long-term monitoring needs and, if appropriate, a monitoring plan, to ensure compliance with permit conditions, and the long-term protection of water quality and aquatic habitat.

20D.45.20-040 Minimum Design and Construction Standards.

- (1) Protection of Habitat and Water Quality Required. Proposals for dredging activities shall include all feasible measures to protect fish, aquatic and critical wildlife habitat, and to minimize adverse impacts such as turbidity, release of nutrients, heavy metals, sulfides, organic material or toxic substances, dissolved oxygen depletion, disruption of food chains, loss of benthic productivity and

disturbance of fish runs, freshwater shellfish beds, or the biological productivity of other aquatic plant and animal communities. Dredging activities, including initial dredging, subsequent maintenance dredging, and dredge spoil disposal shall be permitted only where it is demonstrated that the activity will not:

- (a) Result in significant and/or ongoing damage to water quality, fish, shellfish and other aquatic organisms essential to the biological functions of the water body; or
 - (b) Adversely alter natural drainage and circulation patterns, water currents or flows, shoreline wave action or currents, or significantly reduce flood water capacities.
- (2) Proposals for dredging activities shall include all feasible measures to mitigate significant impacts to fish, aquatic and critical wildlife habitat. Mitigation measures shall include, at a minimum, those measures contained in 20D.140.10, Sensitive Areas, including, but not limited to, the replacement of shallow-water habitat, revegetation of disturbed uplands, and the introduction of in-water habitat features.
 - (3) Proposed dredging shall be the minimum necessary to accomplish the proposed use.
 - (4) Dredging activities shall be timed to minimize interference with and impacts to fish runs, critical wildlife breeding or nesting seasons, and other critical life stages for fish, aquatic organisms or critical wildlife.
 - (5) Dredging activities shall utilize techniques that cause minimum dispersal and broadcast of bottom material. Dredging shall not result in significant erosion above or below the ordinary high water.
 - (6) Impacts to Shoreline Uses. Dredging activities shall be planned and conducted to minimize interference with navigation, and to minimize adverse impacts to other shoreline uses, public access, shoreline views, and shoreline properties and values.
 - (7) Vegetation Restoration. Vegetation disturbed by dredging activities shall be restored to its original condition, equal alternative or an improved condition. All replacement vegetation used shall be indigenous plants.

20D.45.20-050 Dredge Spoil Disposal.

In addition to complying with the minimum design standards in 20D.45.20-040, all dredge spoil disposal shall meet the following requirements.

- (1) Dredge spoils shall be disposed of on land but not within the floodplain, except that:
 - (a) Dredge spoil disposal may be allowed in open water or the floodplain for the purposes of fish or wildlife habitat enhancement where such

- enhancement is authorized under an approved habitat enhancement or watershed plan.
- (b) Clean, uncontaminated dredge spoils may be recycled at the dredge site for a purpose specified in 20D.50.20-010.
 - (2) In-Water Disposal. In-water disposal shall be prohibited unless identified as part of an approved mitigation plan.
 - (3) On-Land Processing and Disposal. Disposal of dredge material on land shall meet the following requirements:
 - (a) Dredge spoil interim processing (during construction) disposal sites shall be enclosed by a system of dikes, settling basins and biofiltration swales and other facilities (temporary and/or permanent) of sufficient capacity to provide adequate water quality of entrapped water before it leaves the diked area or enters adjacent waters. Permanent landscaping with trees, shrubs and groundcover shall be required and, where disposal sites are visible from public ways, landscape buffers may be required. Disposal or interim processing sites which have been completely filled shall be drained, graded to a maximum slope of 3:1 and visually incorporated into an approved landscape plan., (Formerly 20D.150.20.030)
 - (b) The proper management (routing, detention if warranted, and water quality facilities) of surface discharge and runoff shall be provided to maintain the integrity of existing streams, wetlands, natural drainages, underground springs and aquifers in accordance with an approved stormwater management plan.
 - (c) Critical wildlife habitat, significant trees and riparian vegetation shall not be significantly adversely affected.
 - (d) Disposal shall occur on the smallest possible land area necessary to accommodate the proposed volume of material and meet the above standards, unless dispersed disposal is specifically designed and approved.
 - (e) The selection of disposal sites shall meet all requirements and criteria of applicable regulatory agencies.
 - (f) Dredge material disposal on land is also subject to the landfill regulations in 20D.70, and sensitive areas regulations in 20D.40.
 - (4) Dredge disposal operations shall comply with the permit requirements and standards of all applicable regulatory agencies.
 - (5) Yearly status reports may be required to be submitted to the City by the dredge disposal permittee. Where required, status reports shall state the quantity of disposed material, characterize the quality of the material, and review any factors necessary to verify continued compliance with the Shoreline Permit, including continued compliance with water quality and habitat protection measures or conditions.

20D.45.20-060 Dredging Permits.

- (1) All dredging requires a Clearing, Grading and Storm Water Permit pursuant to 20E.90.10-050, Clearing, Grading and Storm Water. (Formerly 20D.150.20-090)

- (2) Dredging within Bear Creek, Evans Creek, Sammamish River or Lake Sammamish may require a Shoreline Substantial Development Permit pursuant to RCDG 20F.30.