WAC 222-24-046 \*Bank protection. Bioengineering is the preferred method of bank protection where practical. Bank protection projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat. The following shall apply to bank protection projects:

(1) Bank protection work shall be restricted to work necessary to protect eroding banks.

(2) Bank protection material placement waterward of the ordinary high water line shall be restricted to the minimum amount necessary to protect the toe of the bank, or for installation of mitigation features approved by the department.

(3) The toe shall be designed to protect the integrity of bank protection material.

(4) Bank sloping shall be accomplished in a manner that avoids release of overburden material into the water. Overburden material resulting from the project shall be deposited so as not to reenter the water.

(5) Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to construct the project. All disturbed areas shall be protected from erosion within seven days of completion of the project using vegetation or other means. The banks, including riprap areas, shall be revegetated with native or other approved woody species, or stabilized with other approved erosion control techniques, and maintained to ensure survival. See board manual section 5 for technical guidance.

(6) Fish habitat components such as logs, stumps, and/or large boulders may be required as part of the bank protection project to mitigate project impacts. These fish habitat components shall be installed according to an approved design to withstand 100-year peak flows.

(7) When rock or other hard materials are approved for bank protection, the following provisions shall apply:

(a) Bank protection material shall be angular rock. The project shall be designed and the rock installed to withstand 100-year peak flows. River gravels shall not be used as exterior armor, except as specifically approved by the department.

(b) Bank protection and filter blanket material shall be placed from the bank or a barge. Dumping onto the bank face shall be permitted only if the toe is established and the material can be confined to the bank face.

[Statutory Authority: RCW 76.09.040(3). WSR 13-21-032, § 222-24-046, filed 10/8/13, effective 12/30/13.]