BRIDGE MAINTENANCE AND REPLACEMENT

Introduction

In fish bearing waters, bridges are preferred as water crossing structures in order to ensure free and unimpeded fish passage and to preserve spawning and rearing habitat. Other structures which may be approved, in descending order of preference, include: temporary culverts, bottomless arch culverts, arch culverts, and round culverts. Professional engineering assistance should be used for bridges over natural watercourses and modified natural watercourses. Multiple landowners should consider constructing a single shared bridge rather than individual crossings.

Approval Requirements

Maintaining or replacing bridge structures requires Hydraulic Project Approval (HPA) from the Washington State Department of Fish & Wildlife (WDFW) with review by Whatcom County Critical Areas and Flood Division. Drainage Improvement Districts (DIDs) can permit, maintain and replace bridges on modified watercourses using their Drainage Management Plan (DMP) and using the Best Management Practices (BMPs) listed below.

Work on bridges over Constructed watercourses requires only Whatcom County Planning and Development Services notification if located within a critical area. The written notification must be sent to the Technical Administrator at least 10 business days prior to beginning and should include:

- Bridge design drawings and specifications.
- Type of equipment to be used.
- Manner in which the equipment will be used.
- Best Management Practices to be used.

Bridge construction may also require a permit from the Army Corps of Engineers.

Bridge Replacement BMPs

1. Timing Limitations: When water is present in the channel, the bridge work below the waterline shall occur only from August 1 through September 30 of any year for the protection of migrating juvenile and adult salmon.
2. Damaged bridge elements shall be removed from within the banks of the watercourse and deposited upland so that they cannot re-enter the watercourse.
3. New bridge footings or foundations shall be constructed landward of the channel high waterline at the project site.
4. Excavation for the bridge footings or foundations shall only occur landward of the high waterline of the watercourse.
5. The bridge shall be constructed to pass the 100-year peak flow with consideration for debris likely to be encountered.
6. Fill associated with the bridge or water crossing structure installation shall be protected from erosion to the 100-year peak flow.
7. Armoring of the channel banks to protect the bridge footings or foundations with rock materials shall be limited to the bank area immediately under the footprint of the bridge.
8. Approach material for the bridge shall be structurally stable and be composed of material that, if eroded into the watercourse, shall not be detrimental to fish life.
9. Alteration or disturbance of bank vegetation must be limited to that necessary to construct the project.
**Bridge Maintenance BMPs**

1. Vegetative and other debris should be removed by hand (if possible) at any time before it builds up and threatens the structure.
2. Measures shall be implemented to ensure that any waste materials from sandblasting and painting do not enter the watercourse.
3. Limit pruning of native trees and shrubs to the minimum needed to provide bridge access.

Livestock crossing made of retired rail flatcar