

WAC 222-24-042 *Water crossing structures in Type Np and Ns Waters. *(1) **Bridges over Type Np and Ns Waters.** In addition to the applicable general provisions in WAC 222-24-040, the installation, maintenance, and removal of permanent bridges in or across Type Np and Ns Waters are subject to the following:

(a) Permanent bridges must not constrict clearly defined channels and must be designed and installed to pass the 100-year flood. The bridge and its associated embankments and fills must provide sufficient erosion protection to withstand a 100-year flood event.

(b) Excavation for and placement of the bridge foundation and superstructure must be located and conducted from outside the outer edge of the bankfull width. This requirement may be waived by the department if it can be demonstrated that these activities may be conducted in such a manner to prevent damage to public resources.

(c) Earthen embankments constructed for use as bridge approaches must be provided with sufficient erosion protection to withstand a 100-year flood event.

*(2) **Culvert installation for Type Np and Ns Waters.** In addition to applicable general provisions in WAC 222-24-040, the installation, maintenance and removal of permanent culverts in or across Type Np and Ns Waters are subject to the following provisions:

(a) All permanent culverts must be designed to pass the 100-year flood event with consideration for the passage of debris likely to be encountered.

(b) The culvert and its associated embankments and fills must have sufficient erosion protection to withstand the 100-year flood event. Erosion protection may include armored overflows or the use of clean coarse fill material.

(c) If the department determines that because of unstable slopes the culvert size shown in board manual section 5, "Determining Culvert Size, Method A" would be inadequate to protect public resources, it may require a larger culvert designed using generally accepted engineering principles that meet the standards in (a) and (b) of this subsection.

(d) No permanent culverts shall be installed that are smaller than:

(i) Twenty-four inches for Type Np Waters;

(ii) Eighteen inches for Type Ns Waters in western Washington;

and

(iii) Fifteen inches for Type Ns Waters in eastern Washington.

(e) The alignment and slope of the culvert shall parallel the natural flow of the stream whenever possible.

(f) Culverts must be designed and installed so they will not cause scouring of the stream bed and erosion of the banks in the vicinity of the project.

(g) When the department determines that installing a culvert in a flowing stream will result in excessive siltation and turbidity, and siltation and turbidity would be reduced if stream flow were diverted, the department shall require the stream flow be diverted using a bypass flume or culvert, or by pumping the stream flow around the work area. This may include culvert installations that are within 0.25 miles of a Type S or F Water or within two miles of a hatchery intake in consultation with the department of fish and wildlife.

(h) Fill associated with culvert installation must have sufficient erosion protection to withstand the 100-year flood event.

(i) Stream beds shall be cleared for a distance of fifty feet upstream from the culvert inlet of such slash or debris that reasonably may be expected to plug the culvert.

(j) The entrance of all culverts shall have adequate headwalls constructed to minimize the possibility of erosion or fill failure.

* (3) **Temporary water crossings in Type Np and Ns Waters.** In addition to the applicable general provisions above, installation, maintenance and removal of temporary bridges or other structures in or across Type Np and Ns Waters are subject to the following:

(a) A temporary water crossing is intended for use during the life of an approved application/notification.

(b) It must be constructed to facilitate abandonment when the intended use is complete or upon seasonal shutdown, whichever is sooner.

(c) Temporary water crossings must be identified on the forest practices application or notification, along with an abandonment date.

(d) Temporary water crossings may be used:

(i) In western Washington if installed after June 1st and removed by September 30th of the same year.

(ii) In eastern Washington if installed after the spring runoff and removed prior to October 15th.

(iii) At other times, when the department and applicant can agree to specific dates of installation and removal and the extended dates result in equivalent levels of resource protection.

(e) Temporary water crossings must be designed to pass the highest peak flow event expected to occur during the length of its intended use.

(f) When the department determines that installing a culvert in a flowing stream will result in excessive siltation and turbidity, and siltation and turbidity would be reduced if stream flow were diverted, the department shall require the stream flow be diverted using a bypass flume or culvert, or by pumping the stream flow around the work area. This may include culvert installations that are within 0.25 miles of a Type S or F Water or within two miles of a hatchery intake.

(g) Temporary water crossings shall be promptly removed and abandoned to the specifications approved by the department upon completion of use or by the date specified in the approved forest practices application, whichever is earlier. Approaches to the crossing shall be water barred and stabilized at the time of the crossing removal. The department may waive removal of the water crossing if the applicant secures an amended forest practices application, and the structure and its approaches meet all of the requirements of a permanent water crossing structure.

(h) Temporary wetland crossings shall be abandoned and restored based on a written plan approved by the department prior to construction.

(i) Temporary water crossings must be designed to provide the same level of protection for public resources as provided by rules during the length of its use.

[Statutory Authority: RCW 76.09.040(3). WSR 13-21-032, § 222-24-042, filed 10/8/13, effective 12/30/13.]