WAC 220-660-270 Utility crossings in freshwater areas. (1) Description: Utility lines are cables and pipelines that transport gas, telecommunications, fiber optics, power, sewer, oil, and water lines from one side of a watercourse to the other. An HPA is not required for utility crossings attached to bridge structures.

## (2) Fish life concerns:

- (a) Utility crossings pose a risk to fish life and the habitat that supports fish life from potential substrate changes, destabilization of stream banks and channels, loss of riparian zone vegetation, and release of excessive sediment after stream flows resume. Utilities not buried below bed scour depth can require rock to protect them. This reduces habitat, inhibits channel processes, and can become fish passage barriers due to the rock or the pipeline.
- (b) Trenching through stream banks and channels alters habitat and substrate characteristics, and therefore their productivity and should be avoided. Trenching may also cause the proportion of surface and subsurface flows to shift, altering stream hydrology. The department prefers trenchless crossing methods such as high-pressure directional drilling or punch and bore crossings that cause very little disturbance to the stream bed and banks.

## (3) Utility line design:

- (a) Align the conduit as perpendicular as possible to the water-course.
- (b) Avoid crossing at meander bends, braided streams, alluvial fans, active flood plains, or any other area that is inherently unstable and may lead to eroding and scouring the stream bed.
- (c) Avoid areas of groundwater upwelling or locations within one hundred feet upstream of documented fish spawning areas.

## (4) Utility line construction:

- (a) Install the conduit well below scour depth of the watercourse to prevent natural scouring of the stream bed from exposing the pipeline or cable.
  - (b) If construction involves boring or jacking:
- (i) Isolate pits from surface water flow to prevent bore hole collapse; and
- (ii) Before discharging wastewater to state waters, route wastewater from project activities and dewatering to an area outside the watercourse to allow removal of fine sediment and other contaminants.
  - (c) If construction involves trench excavation:
- (i) Trench widths should be as narrow as feasible to accommodate the pipe/line and achieve the depth specified in the approved plan.
- (ii) Excavate trenches in the dry or isolate them from the flowing watercourse by installing a cofferdam, culvert, flume, or other approved method;
- (iii) Plowing, placement, and covering must occur in a single pass of the equipment;
- (iv) Limit disturbance of the bed and banks to the amount needed to complete the project. Before returning flow, backfill trenches with approved materials and return the bed to preproject condition.
- (v) Dispose of excess spoils upland or on a barge so they will not reenter waters of the state.
- (vi) Isolate the conduit approach trench from the watercourse until the conduit is laid across the watercourse.
  - (d) If construction involves directional drilling:
- (i) Design the drill path to an appropriate depth below the watercourse to minimize the risk of frac-out and to a depth to prevent exposure of the line from natural scouring of the stream bed; and

(ii) Locate the drill entry and exit points away from the banks of the watercourse to minimize impact on these areas.

[Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 15-02-029 (Order 14-353), § 220-660-270, filed 12/30/14, effective 7/1/15.]