

## **Section 4**

### **Guidelines for Clearing Slash and Debris from Type Np and Ns Water**

In cases such as those described in WAC 222-24-030(5), channel clearance, slash and debris that may reasonably be expected to plug new culverts on Type Np or Ns Waters must be cleared from the channel for an upstream distance of 50 feet. Debris removed from the channel in these circumstances must be placed downstream from the culvert and outside the 100-year flood level, or as otherwise required in an approved FPA for a forest practices hydraulic project (FPHP). Slash and debris that are excluded from these cases include logs that are embedded along their length or at least substantially at one end, and slash buried under stable deposits of soil, rocks or woody debris. Do not limb, buck, notch, or remove trees and logs that are to be left in the stream channel or are firmly embedded.

Large accumulations of slash may contribute to the initiation or exacerbation of mass wasting events (e.g., debris slides and debris torrents); however, these events are expected to be rare because current forest practice rules prohibit the machine piling of slash and debris within 30 feet of unbuffered stream banks. Likewise, limbing and bucking within the bankfull channel of Type S, F, Np waters, RMZ core zones, sensitive sites, or open water areas of Type A wetlands is prohibited (WAC 222-30-050(2)). In the event that slash or debris must be removed from the channel within a Type S, F or Np Water, an approved FPA for a FPHP is required. For technical guidance, see Board Manual Section 5, Guidelines for Forest Practices Hydraulic Project.

The benefits of retaining slash are tied to soil, fish and wildlife, and other public resources. Small woody debris (<4 inches diameter) provides cover for a variety of riparian-dependent amphibians and small mammals. Green branches left over exposed soils may reduce erosion. Small woody debris in the water can provide important habitat for small fish (fry) and aquatic amphibians, and may trap leaf litter and other detritus. Debris left on flood plains trap leaf litter and other detritus, which subsequently decomposes and enriches the soil. Evidence also suggests that small accumulations of woody debris may moderate fine sediment transport to downstream reaches. Large woody debris (>4 inches diameter and >1.5 times bankfull width in length) may provide important structural components to stream channels, trapping beds of gravel that are used by fish for spawning, and as habitat for aquatic invertebrates. Floodwater flowing around large woody debris scours pools, which become habitat for more abundant and larger fish. While Type Np and Ns Waters are not fish bearing by definition, woody debris in these waters are important for helping to abate excessive erosion during peak flows and for providing recruitment of debris which if eventually moved down stream may become beneficial structures for fish habitat in Type F and S Waters.