

# Western Washington Natural Disaster - **Blow Down**

## **General Description:**

A catastrophic weather event has blown down a large percentage of the riparian area, with the majority of trees uprooted or broken off below the canopy. Underbrush and saplings (if present) are mostly intact. There is little over story riparian function remaining and the goal is to capture economic value and restore long term riparian function as rapidly as possible. Protecting bank stability and limiting damage to young saplings are critical criteria to consider. Down wood recruitment is generally not an issue.

**Set the riparian stand on a significantly better trajectory towards achieving the following riparian functions:**

### **Riparian Core Zone**

**Protect the riparian core zone.** This means:

For Western Washington, the 50 foot buffer of a Type S or F Water, measured horizontally from the outer edge of the bankfull width or the outer edge of the channel migration zone, whichever is greater.

For Eastern Washington, the 30 foot buffer of a Type S or F Water, measured horizontally from the outer edge of the bankfull width or the outer edge of the channel migration zone, whichever is greater.

### **Sediment Filtering**

**Riparian vegetation helps to filter sediment, reduce the likelihood of landslide events, and regulate the natural erosion process in the riparian area.**

Mulch, hay, or strategic water control structures may be necessary due to the lack of understory vegetation.

Live and downed dead trees left in the RMZ will continue to provide some slowing of runoff and filtering of sediment. Leave tops and branches scattered within RMZ if possible.

Measures may be considered to reduce erosion and increase sediment filtration where slopes are greater than 35%: placing of tree tops and slash, grass seeding or mulching, water barring, and limiting disturbance.

### **Stream Bank Stability**

**Maintaining stable stream banks will allow channel structures to develop naturally.**

**Maintaining stream bank vegetation is vital to maintaining stable stream banks.**

All live trees directly providing bank stability by their root structure must remain.

Dead trees might be taken provided no additional bank instability is created by their cutting or removal.

### Leaf Litter Fall / Nutrients

**Organic input from riparian vegetation influences water quality and provides an important food source for aquatic organisms.**

This function is best provided where live trees remain near the stream channel. Post-harvest trees will continue to expand their canopy, ultimately increasing long term leaf litter contribution.

### Shade

**Shade from the canopy of the adjacent riparian area vegetation is the most significant influence on stream temperature. Shade provides cool stream temperatures which is a vital riparian function for fish and amphibians.**

Short and long term shade from the overstory should continue to supply adequate temperature control.

### Wildlife Habitat

#### Plan for wildlife trees

Dead, dying and live defective trees are an important part of a healthy forest. Trees can actually provide more habitat for wildlife dead than when they are alive. Standing dead and dying trees, called “snags” or “wildlife trees,” are important for wildlife occurring as a result of disease, lightning, fire, animal damage, too much shade, drought, root competition, as well as old age.

Birds, small mammals, and other wildlife use snags for nests, nurseries, storage areas, foraging, roosting, and perching. Live trees with snag-like features, such as hollow trunks, excavated cavities, and dead branches can provide similar wildlife value. Snags occurring along streams and shorelines eventually may fall into the water, adding important woody debris to aquatic habitat. Dead branches are often used as perches; snags that lack limbs are often more decayed and, may have more and larger cavities for shelter and nesting.

Snags attract wildlife species that may not otherwise be found there.

All trees of all sizes are potential snags. Unfortunately, many wildlife trees are cut down without much thought to their wildlife value or of the potential management options that can safely prolong the existence of the tree. Wildlife trees offer a one-stop, natural habitat feature.

### Slash

**Conduct good slash management practices to decrease or limit the risk of insects, disease, or fire to neighboring stands.**

Large accumulations of slash may contribute to 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 practices rules prohibit the machine piling of slash and debris within 30 feet of unbuffered streams. Likewise, limbing and bucking within the bankfull channel of Type S, F and Np waters RMZ cores, sensitive sites, or open water areas of Type A wetlands is prohibited.

### Equipment Limitation Zone

Maintain a 30-foot wide Equipment Limitation Zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water. This applies to all perennial and seasonal non-fish bearing streams.

Where the risk of erosion is very high, additional width should be considered.

### Stocking

**Ensure proper stocking and diversity of site appropriate tree species (resistant to ongoing insect and disease mortality within the area).** Consider reducing the number of stems and percentage of Grand fir composition, as this species is more prone to insects and disease. Utilize harvest methods that will restore natural forest structure and diversity.

Contact your region Stewardship Forester for additional guidance.

[Link to region contacts](#)