

## **WSDOT Riparian Zone Delineation Guidance for the Purposes of Programmatic ESA Consultation**

Riparian habitat or area is defined as the geographic area containing an aquatic ecosystem and adjacent upland areas that directly affect it including the floodplain, woodland, and all areas with a horizontal distance based in part on the site potential tree height (SPTH) from ordinary high water or the shoreline of a standing body of water. Riparian zone means terrestrial areas where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial or intermittent water, associated high water tables, soils that exhibit some wetness characteristics, and distinctly different vegetation than adjacent areas, or vegetation that is similar to adjacent areas but more vigorous or robust.

Riparian functions include woody material recruitment, surface runoff sediment and nutrient biofiltration, streambank stability, stream energy dissipation, stream shading, allochthonous material source (coarse, fine, and dissolved particulate organic matter), source of terrestrial invertebrate prey for aquatic species, wildlife habitat, and wildlife corridors<sup>1</sup>.

The ESO Fish and Wildlife Program has adopted and slightly revised the following riparian habitat delineation guidance which was developed and implemented by Olympic Region. It is recommended that biologists use this guidance when evaluating impacts for projects seeking coverage under the USFWS and NMFS programmatic consultations. This method may also apply to individual consultations.

### **To calculate the area quantities in the USFWS and NMFS Programmatic Consultations:**

- Determine the SPTH using the [WDFW PHS Riparian Ecosystems and the Online SPTH Map Tool](#). Use this initial horizontal distance from the outer edge of the ordinary high water delineation (either side of stream).
- Increase or decrease the distance based on site specific conditions to determine the cut/fill and vegetation removal quantity areas.

Some reasons to increase or decrease the riparian area include:

#### **Increase the distance when:**

- The stream reach is bounded by valley walls that terminate upslope beyond 200 feet into more gentle topography. Extend to the top of the slope.
- The 100-year floodplain is wider than 200 feet on either or both sides of the stream. Extend to the landward edge of the floodplain.
- An associated wetland is wider than 200 feet on either or both sides of the stream. Extend to the landward edge of the wetland.

#### **Decrease the distance when:**

- The riparian area extends over impervious surface such as roads, parking lots, or structures. Do not consider the developed area as riparian area. Vegetated road prisms can provide some riparian functions but for the purpose of Programmatic consultations on fish passage projects that replace a culvert with a bridge, the existing road prism is not calculated in the riparian vegetation removal quantity. This is very project/site specific, so discuss with liaisons.

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<sup>1</sup> Knutson, K. L., and V. L. Naef. 1997. Management recommendations for Washington's priority habitats: riparian. Wash. Dept. Fish and Wildl., Olympia. 181pp.

- In disturbed areas, base the riparian limit on the functional extent of the habitat. This will help with sites that are covered with invasives that provide little function to the stream in urban and agricultural areas.
- Do not include vegetation associated with abandoned channels.
- The area extends over lakes or ocean waters. Reduce to the extent of vegetation.

There may be other reasons to increase or decrease a riparian area based on site specific conditions. Document in the PNF or in an attachment the where, what, and why it's appropriate. Include your proposed variance as part of your early coordination with the Services.