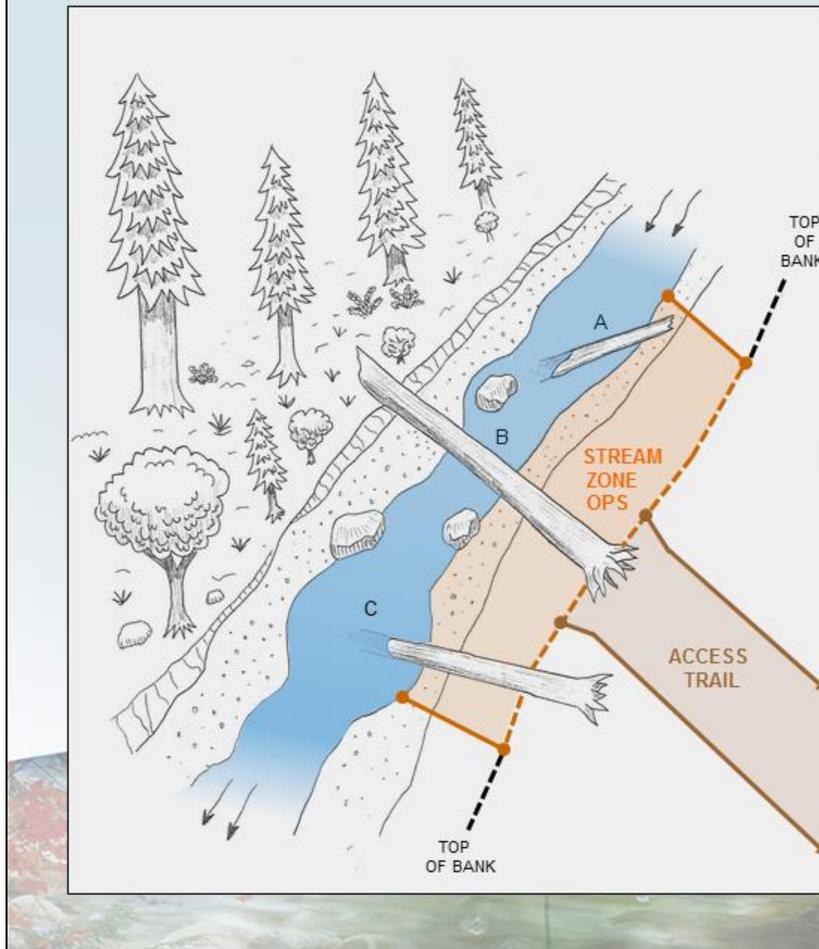


# Calculating Project Size: Large Woody Material



**Project Size:** Project shall not exceed:  
a) Five acres, and;  
b) 500 linear feet of stream bank or coastline.

**Project Area Calculations:**  
**Large Woody Material (LWM) Area Calculations:**  
A) 25' length X 2' width = 50 ft<sup>2</sup>  
B) 50' length X 3' width = 150 ft<sup>2</sup>  
C) 40' length X 2' width = 80 ft<sup>2</sup>  
LWM Area Calculation (A + B + C) = 280 ft<sup>2</sup>  
Canopy Removal<sup>1</sup> (660 ft<sup>2</sup> X 3) = 1,980 ft<sup>2</sup>  
Access Trail (200' X 15') = 3,000 ft<sup>2</sup>  
Stream Zone Operations (70' X 25') = 1,750 ft<sup>2</sup>  
**TOTAL PROJECT AREA = 7,010 ft<sup>2</sup> (0.16 acres)**

**Project Linear Feet Calculations:**  
LWM Large End Diameters (A+B+C) = 7 feet  
Stream Zone Operations = 70 feet  
**TOTAL PROJECT LINEAR FEET = 77 feet**



Instructions for estimating large woody material (LWM) project area (in acres) and project length (in linear feet):

1. **LWM – Area and Length Calculations:** Calculate the area in square feet (ft<sup>2</sup>) for each individual piece of wood by multiplying the length by the large-end-diameter width along the trunk. The LWM project area is the summed total of individual LWM pieces. The large-end-diameter width is used to estimate project length in linear feet.
2. **Canopy Removal<sup>1</sup> - Area Calculation:** For felled trees, include the area to be affected as a result of canopy removal by multiplying the number of trees by an assigned value of 660 ft<sup>2</sup> (or 0.015 acres).
3. **Access Trail – Area Calculation:** Calculate the area of each access trail (in ft<sup>2</sup>) located outside of the stream zone by multiplying length by width for each trail. The access trail project area is the sum of these values.
4. **Stream Zone<sup>2</sup> Operations – Area and Length Calculations:** Calculate the area of proposed stream zone operations in ft<sup>2</sup> by multiplying the length (measured parallel to stream flow) by the width of the operational area at each site. The length of the operational area is the same value used to estimate project length in linear feet.
5. **Total Project Area:** Add together all project area calculations (LWM + canopy removal + access trails + stream zone operations) and divide the value by 43,560 to convert project size from ft<sup>2</sup> to acres (1 acre = 43,560 ft<sup>2</sup>).
6. **Total Project Length:** Add together the totals of all project length calculations (Stream zone operations + LWM).

**Note:** The total project size must not exceed 5 acres and 500 linear feet of streambank to conform to the size limits of the: (1) CEQA Categorical Exemption 15333, and (2) the SWRCB General 401 for Small Habitat Restoration Projects.

<sup>1</sup> Canopy removal disturbance value based upon the average canopy cover for a 36" diameter breast height coniferous tree (660 ft<sup>2</sup>, or 0.015 acres) as presented in *Largest Crown Width Prediction Models for 53 Species in the Western U.S.* (W. Bechtold, USDA, 2004),

<sup>2</sup> Stream zone operations are defined here as any heavy equipment operations within state jurisdictional waters below "top of bank". These include the areas on either side of a waterbody which may become inundated by surface waters during high flood events.