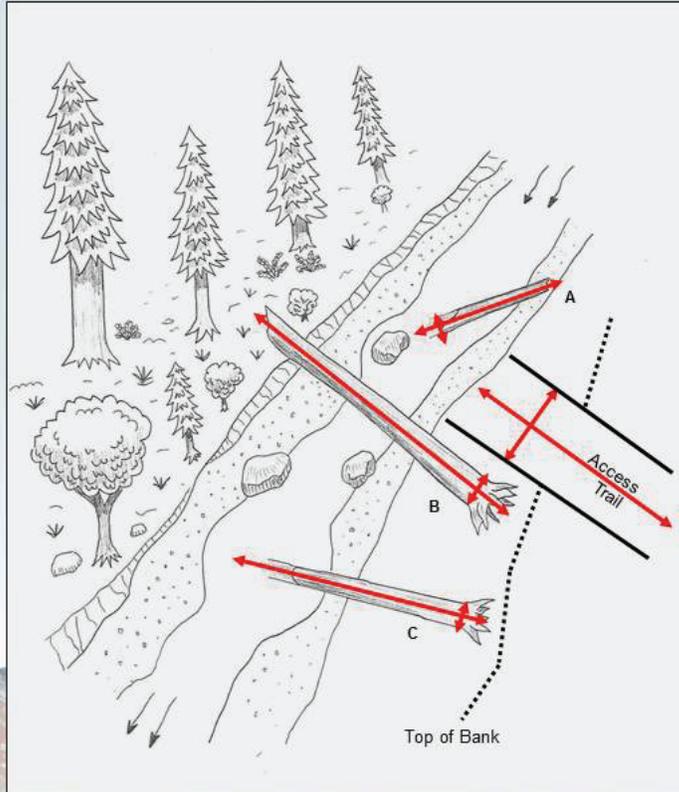


Project Size Calculations: Area



Project size shall not exceed:
a) **Five Acres, or;**
b) 500 linear feet of stream bank.

Large Woody Material Area Calculation:

- A) $25' \times 2' = 50 \text{ ft}^2$
- B) $50' \times 3' = 150 \text{ ft}^2$
- C) $35' \times 2' = 70 \text{ ft}^2$

Canopy Removal Area Calculation:
 660 ft^2 (0.015 acre) per felled tree

$A + B + C = 1,980 \text{ ft}^2$ (0.05 acres)

Access Trail Area Calculation:
 $150' \times 10' = 1,500 \text{ ft}^2$ (0.03 acres)

TOTAL Area = $3,480 \text{ ft}^2$ or 0.08 acres



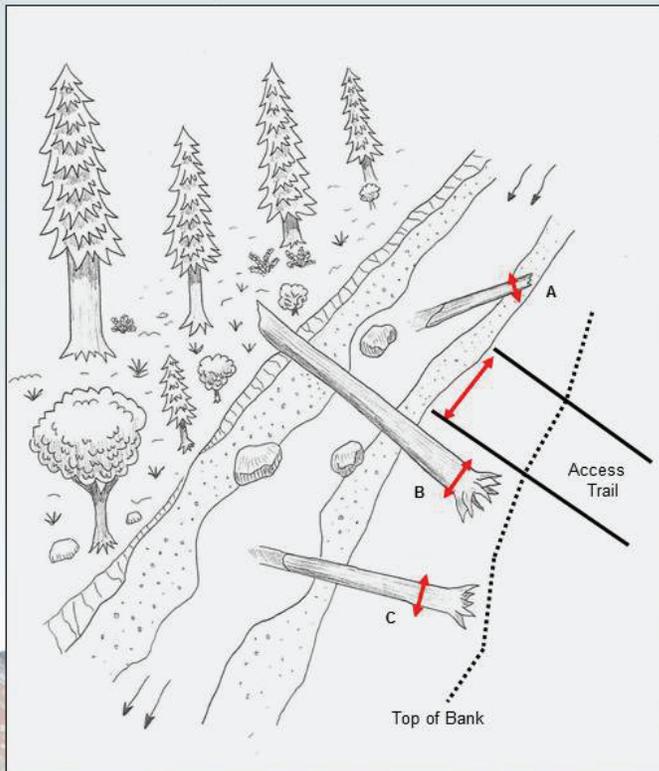
Instructions for calculating large woody material (LWM) project area:

1. Large Woody Material - Area Calculation: Estimate the total area of temporary impact (in square feet and acres) for all LWM that will be introduced into state jurisdictional waters. The area of disturbance for an individual piece of wood is calculated by multiplying the total estimated length times the large-end diameter along the trunk.
2. Canopy Removal - Area Calculation: Estimate the total area affected as a result of canopy removal using an assigned value of 660 ft^2 , or 0.015 acres, per tree that is felled (regardless of location across landscape). Multiply the total number of trees felled by this factor to estimate the total area of disturbance (e.g. 20 trees \times 0.015 acres = 0.3 acres)¹.
3. Access Trail - Area Calculation: Estimate the total area of temporary impact (in square feet and acres) from heavy equipment use associated with the project.

Note: The total area of temporary impact (in square feet and acres) must be equal to, or less than, 5 acres (217,800 sq. feet) to be consistent with the Categorical Exemption 15333 for Small Habitat Restoration Projects.

¹ Estimated canopy removal disturbance based on removal of one 36" diameter breast height coniferous tree per *Largest Crown Width Prediction Models for 53 Species in the Western United States* (W.Bechtold, USDA, 2004).

Project Size Calculations: Length



Project size shall not exceed:

- a) Five Acres, or;
- b) 500 linear feet of stream bank.**

Large Wood Linear Affect:

- A) 2 feet diameter
- B) 3 feet diameter
- C) 2.5 feet diameter

Access Trail Linear Affect:

30 linear feet

TOTAL: 37.5 linear feet impact



Project Size Calculations: Length

1. Access Trails: Estimate the total length of temporary impact (in linear feet) from heavy equipment use within jurisdictional state waters. Linear stream bank impacts shall be estimated parallel to the direction of flow. State jurisdictional waters exist anywhere below "top of bank" above which there is not an expectation that waters will reach even during high flood events (e.g. first abandoned floodplain terrace).
2. Large Woody Material: Estimate the total length of temporary project impact (in linear feet) as required by the General 401 Certification, the sum total of the large end diameters of each large wood piece are used to estimate linear stream bank impacts.
3. Include the total sum (in linear feet) of temporary impacts onto the Notice of Intent for use of the General 401 Certification for Small Habitat Restoration Projects.

Note: The total area of temporary impact must be equal to, or less than, 500 linear feet of stream impact to be qualify for coverage under the State Water Resources Control Board's General 401 Certification for Small Habitat Restoration Projects.