

Wattles

What are Wattles?

Wattles are rolls of fibers wrapped in degradable netting that deflect and direct flow while trapping sediment. Wattles offer great flexibility to match contours on slopes (Photo 1). It is highly recommended that biodegradable wattles made with cotton, jute matting rolled into a tube, or jute with tree/willow branches rolled into a tube (Photo 2) be used in sensitive ecological areas like riparian forests. When those biodegradable options are not available, long tubes of plastic netting packed with excelsior fibers, straw, or other material can be used. If plastic netting is used, care should be taken to remove them as soon as it is reasonable and not leave the plastic on site. Use caution in sensitive ecological areas, as straw-filled wattles can bring non-native seed in their filling.

Wattles are relatively inexpensive and effective at reducing sediment runoff when installed correctly (**Figure 1**).

Where should they be used?

Wattles can be used in areas of moderate to high burn severity where most of the native plant or ground coverage is gone. They should be used in areas with low surface flows. Wattles should not be used in stream channels or areas with concentrated surface flow.



Photo 1. Straw wattles placed on a slope



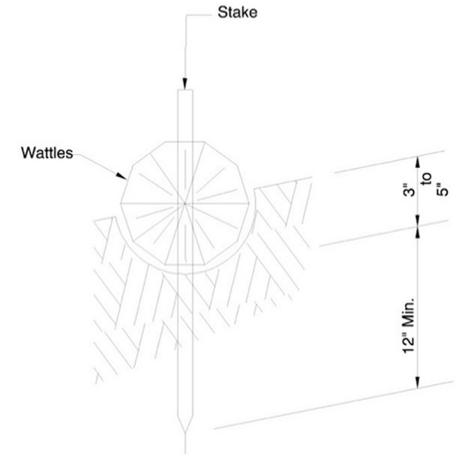
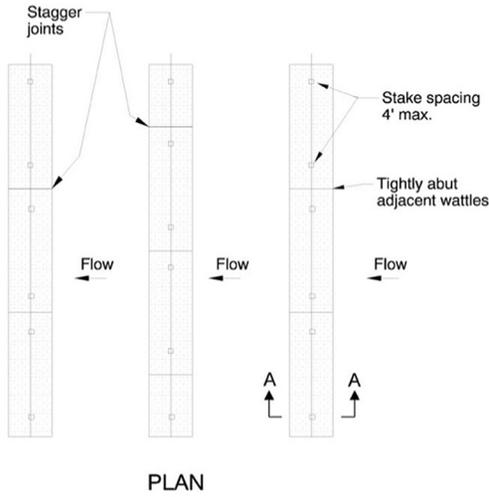
Photo 2. Constructing wattles

Resources

The Pure Water Partners (PWP) program is working to construct and place wattles as part of an integrated approach to erosion management on private properties impacted by the Holiday Farm Fire. If you are interested in assistance with erosion control and riparian restoration, please sign up for a PWP site assessment by visiting www.purewaterpartners.org

Pre-made wattles may be available through local suppliers, though materials and services may be severely limited due to unprecedented demand associated with the 2020 wildfires in Oregon.

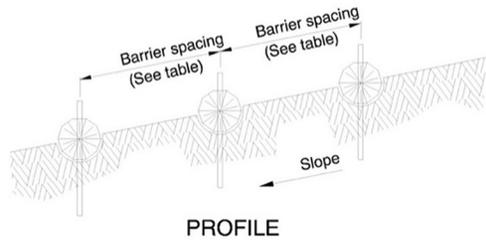
Figure 1. Wattle installation specs



SECTION A-A

BARRIER SPACING
FOR GENERAL APPLICATION
INSTALL PARALLEL ALONG
CONTOURS AS FOLLOWS

% SLOPE	% SLOPE	MAXIMUM SPACING ON SLOPE
10% Flatter	1:10 or Flatter	300'
10 - % ≤ 15	10 - X ≤ 7.5	150'
15 - % ≤ 20	7.5 - X ≤ 5	100'
20 - % ≤ 30	5 - X ≤ 3	50'
Steeper than 30%	Steeper than 1:3	25'



Place wattles along slope contours.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

SEDIMENT BARRIER
(TYPE 3)

2002

REVISIONS	
DATE	DESCRIPTION
12-02	REVISE NOTE

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

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