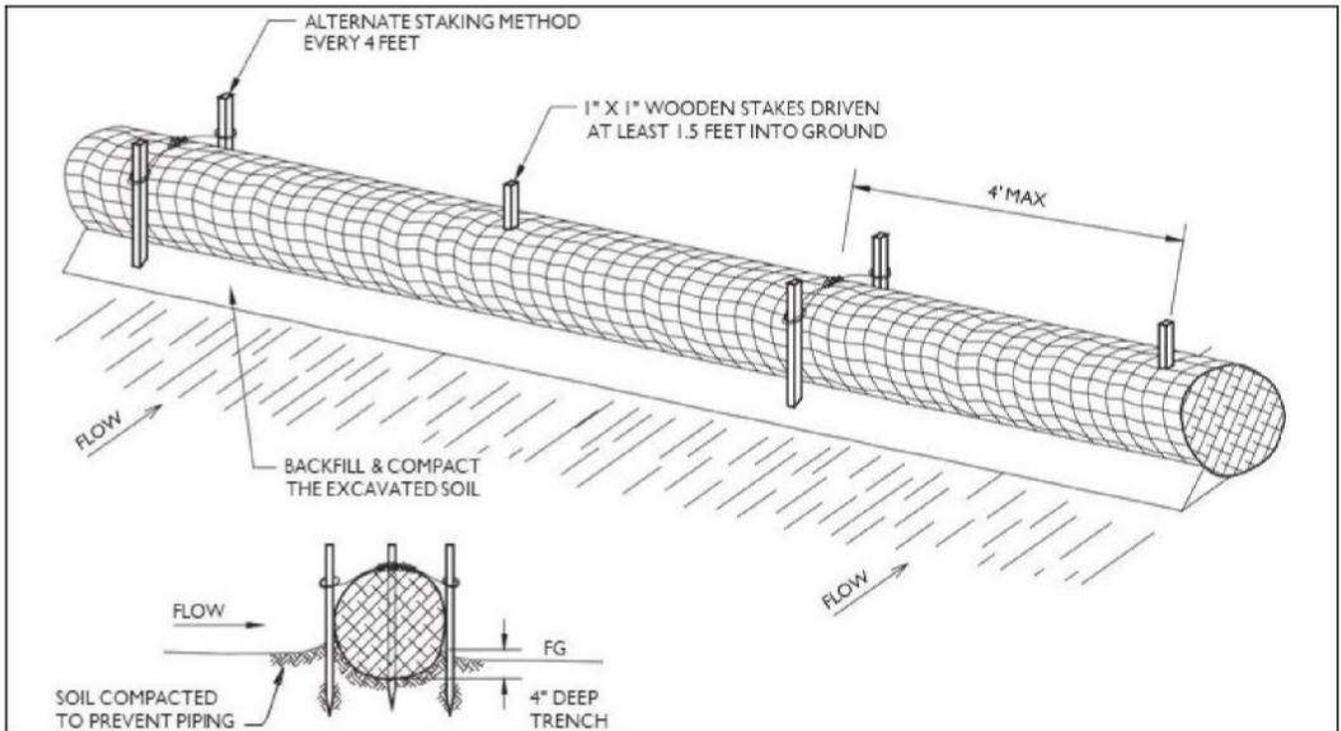


# Typical Fiber Roll/Wattle Sediment Barrier



## Introduction to Wattles:

- If installed correctly, straw wattles or fiber rolls can detain water on the uphill side, allowing fine sediment to settle and water to pass through the wattle. **If they are installed incorrectly, wattles can cause erosion.**
- **Wattles must be installed level**, on contour, perpendicular to the flow of water. If they are not installed level, they can act as a channel for water, concentrating it and causing erosion.
- Wattles must be inspected after each rain event to ensure they are functioning as intended. Any sediment captured behind the wattle must be removed prior to the next rain.
- Wattles are used to capture sediment that has already eroded. They should be used in conjunction with erosion control methods, such as rice straw or wood chips spread out to protect the soil from erosion.
- Wattles should be installed approximately every five vertical feet and only on short, gentle slopes.

## Wattle Installation:

1. Smooth out the slope before installing the wattles. Shallow gullies or rills should be filled.
2. Use a laser level or a hand-held sight level with marking paint or pin flags to lay out the wattle location on contour.
3. Dig a small trench 4 inches deep across the slope on contour to place rolls in.
4. Lay the roll along the trenches fitting it snugly against the soil. Make sure no gaps exist between the soil and the wattle.
5. Secure the wattle in the trench using wood stakes in the manner shown above, or use steel wattle pins with large washers.
6. Install stakes or pins at 4 feet max intervals.
7. Place and compact the soil from the trench uphill of the wattle to seal the wattle bottom and prevent water from washing underneath the wattle.
8. When more than one wattle is placed in a row, the rolls should overlap, one in front of the other, by at least 1 foot and staked securely to prevent piping. Seal the joint with soil to keep water behind the wattle. The last 18 inches of a line of wattles should be turned uphill to hold the water in place.
9. Apply 3 to 4 inches of rice straw, wood chips, or compost to protect the soil in the area from erosion.

Developed by Napa County Resource Conservation District, revised by  
Sonoma Resource Conservation District

The methods described herein are exemplary only. Consult with a professional prior to making any changes in topography or installing or removing any structures. Serious harm to persons, property or the environment can occur. SRCD assumes no liability for actions taken based on the information provided herein.