

# Temporary Erosion Control

## A Homeowner's Guide



## Don't Forget to Plan for Erosion Control ALL YEAR ROUND.

Controlling runoff during the spring and summer is just as important as preventing erosion in the winter. A major source of dry season pollution to creeks is runoff from landscape watering. This water carries oil and gas residue from roadways, fertilizers, pesticides, and other undesirable material as it flows away from homes and drains directly into our creeks.

### IMPORTANT POINTS:

1. If it is in the street, it goes to the creek. All outside drains lead to the creek without treatment.
2. Property owners are responsible for ensuring erosion control measures.
3. Soil needs to be protected not only from rain, but from wind, vehicle tracking, and any water that runs onto your property.
4. Maintenance is needed to make sure everything is working well.

### BMPs: EROSION & SEDIMENT CONTROL



## DO

- ✓ Prevent mud and sediment from leaving your property.
- ✓ Place protective measures around your property to prevent erosion.
- ✓ Protect all drains located on your property with BMPs.
- ✓ Frequently check and maintain installed BMPs; replace and repair as needed.
- ✓ Protect sidewalk planter strips. Property owners are responsible for maintenance of this area.
- ✓ Minimize the amount of exposed soil.
- ✓ Keep clean water clean. Remember, only rain down the storm drain.

## DON'T

- ✗ Leave disturbed soil unprotected.
- ✗ Wait until weather events (rain or wind) arrive to make a plan.
- ✗ Underestimate the minimal amount of rain needed to generate runoff.
- ✗ Walk or drive across BMPs.
- ✗ Allow standing water for more than 72 hours.
- ✗ Direct flow to neighbor's property.

For more information or assistance:

707-933-2229 or  
[www.sonomacity.org/stormwater-pollution-prevention-program/](http://www.sonomacity.org/stormwater-pollution-prevention-program/)





The City of Sonoma has two separate drainage systems—the sanitary sewer system and the storm drain system. The storm drain system was designed to prevent flooding by carrying excess rain water away from city streets out to local creeks, San Pablo Bay, and then the Pacific Ocean. This rain water flows untreated into our local creeks and river. This is why property owners and contractors are required to implement Best Management Practices (BMPs) to prevent storm water pollution.

BMPs are used to keep pollution away from sidewalks, streets, and gutters because they connect to the storm drain and our creeks. Implementing and maintaining BMPs are critical to protecting our local creeks and wildlife. Proper design, installation, and periodic inspection and maintenance are essential to keeping storm water clean.

## PROPERTY OWNER RESPONSIBILITY

Measures to control soil and debris are required and must be installed and maintained by the property owner and/or contractor(s) performing work. The materials needed are readily available, inexpensive, and can be installed with normal household tools.

The description, installation, and operation of these BMPs are adapted from the **Caltrans Stormwater Quality Handbooks: Construction Site Best Management Practices (BMPs) Manual**. It is important that any person implementing BMPs have an understanding of how to properly install and maintain them.

## GEOTEXTILES

Geotextiles are permeable fabrics which, when used over soil, have the ability to separate and filter out mud and reinforce and protect soil. Geotextiles can improve soil strength and allow planting on steep slopes, further securing the slope.

## STRAW WATTLES / FIBER ROLLS



**Purpose:** Wattles slow and spread the flow of runoff by filtering water and leaving sediment behind.

**Application:** Wattles are placed in shallow trenches and staked along the contour of disturbed or newly constructed slopes and along property lines.

*Note: Properly installed fiber rolls are generally more effective at trapping sediment than straw bales.*

## GRAVEL BAGS V.S. SAND BAGS

**Purpose:** Gravel bags are used to filter sediment out of water by allowing slight ponding and filtering.

**Application:** Gravel bags should be installed end-to-end to form a barrier across a slope to intercept flow. Turn ends of bag row up slope to prevent flow around the ends. For upper rows of bags, overlap lower row joints.

*Note: Sandbags are used for flood control and are designed to intercept and divert flow away from property and infrastructure. They don't provide filtering.*



## HYDRO MULCH / SEEDING (NATIVE MIX)



**Purpose:** Seeding is intended to reduce erosion by stabilizing exposed soils. A well-established vegetative cover is one of the most effective methods of reducing erosion by protecting exposed soil surfaces from rain impact, runoff, and wind.

**Application:** Hydroseeding typically consists of applying a mixture of seed (preferably native), wood fiber, fertilizer, and stabilizing emulsion with hydro-mulch equipment.

## EROSION CONTROL BLANKET

**Purpose:** A protective blanket of fibers, straw or other plant fiber designed to protect soil from the impact of rain and overland flow, and establish vegetation. They are often used in combination with seeds or vegetation to help stabilize the larger or sloped areas.

**Application:** Erosion control blankets are typically installed on seeded areas for temporary use.



## SEDIMENT BARRIERS



**Purpose:** Sediment barriers such as silt fence can be used to slow runoff velocity. The barriers are used to filter sediment out of runoff.

**Application:** Install along the contour of the land, hammering stakes at least 1 foot down into the sediment. Use continuous fabric piece for the silt fence. If unavailable, overlap the fabric at least the width of one stake spacing (3-5 feet).

## MULCHING

**Purpose:** Mulching helps to protect and keep soil in place, absorb rain water, keep soil cool, and increase organic content.

**Application:** A mulch consisting of two inches of non-floatable wood chips, oak leaves, and pine needles should be spread across barren areas of soil.

**Alternative:** Apply 2-3 inches of rice straw (approximately 2 tons per acre). The fibers can be held in place by "punching" them into the ground with a spade.

