

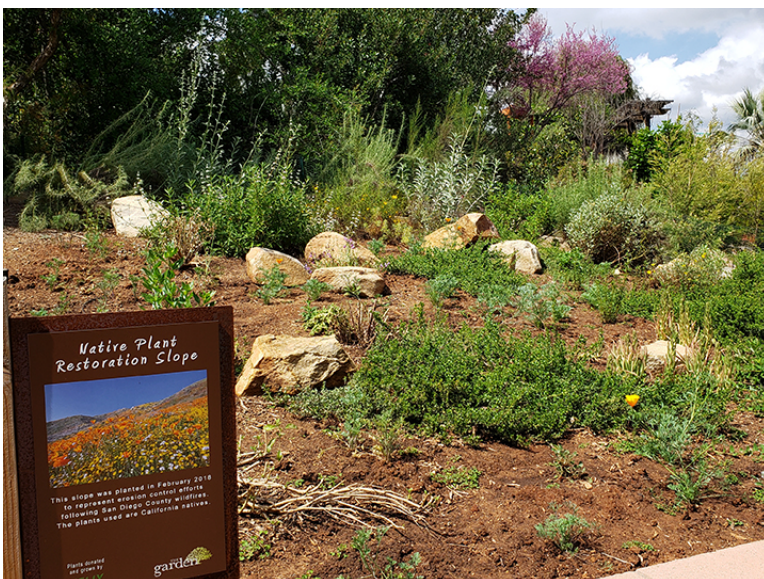
# EROSION CONTROL EXHIBIT



The Erosion Control Exhibit provides a side-by-side comparison of the effect erosion can have on a typical slope in San Diego County, and how easily and attractively it can be controlled. The choice becomes obvious when you realize how truly simple it can be, and how effective it is. We don't typically think about erosion or controlling it since very little rain falls in our area. The fact is, the types of soils native to the area combined with our typical regional climate, make erosion a huge problem. A good soaking rain requires more than a drizzle of precipitation. Unfortunately, when it rains heavier than drizzle here, it doesn't soak in—it runs off. Then, wind and heat destroy any plants that try to take hold between rainy seasons, and the cycle repeats and worsens. What should be nutrient-rich top soil runs off with the rain, and the remaining soil dries and hardens further. Continued cycles cause ruts and gullies, and result in flooding on some properties.

One of the best solutions is to cover slopes with plants and materials that withstand the heat, grow deeply rooted enough to resist wind and heat, and will capture and reuse rain water. Read on to find out about typical plants and materials that can make that happen for you.

## No More Slippery Slope!



**Plants:** California native plants root and grow better in local soils and on slopes, require less effort and water, limit rain water and silt runoff into drainage systems, and provide habitats for native animal and insect life. How about that? You can create an small eco-system right in your yard!

**Materials:** There are several materials that help protect the surface while the plants are rooting and taking hold. Others are used long term to control water flow from irrigation, rain fall and over-night condensation.

## EROSION CONTROL EXHIBIT (continued) Plants



### Shrub: California Poppy

This plant is native to grassy and open areas from sea level to 6,500 ft in the western United States from southern Washington to Mexico in Sonora and northwest Baja California. It was officially confirmed as the state flower in 1903 by the state legislature. Its blooms are a fitting symbol for the Golden State and flowers from February to September. This poppy is tough, fast growing, self-seeding, drought-tolerant, and easy to grow. Best grown in full sun, it tolerates part shade. It prefers well draining, poor soils, so slopes are a great location for this showy plant.



### Shrub: California Brittle Bush

Part of the daisy family, it is native to coastal southern California and Baja California, and also found on inland foothills. It is drought tolerant and needs full sun, but is not frost tolerant. A bushy, sprawling shrub, it grows to about 2-4 feet high and blooms from February to June. The blooms attract bees, butterflies, and other insects. It is fast growing and easy to care for. It tends to look weedy or dead in summer months and can be invasive, so it is frequently replaced with longer lasting plants once the slope begins to fill in.



### Grasses: Deergrass

One of the easiest to grow of California bunch grasses and arguably most beautiful, Deergrass grows to its mature size in 1-2 years. It does well in almost any type of soil as long as it is well-draining-. So, this is another perfect addition to slopes. Once mature, it doesn't require any supplemental watering beyond precipitation and prefers full sun. It will tolerate some shade, but it grows more slowly in full shade than full sun. Deergrass adds interest and texture to a slope and can be planted as a border or to define different sections of a slope as a design feature.

## EROSION CONTROL EXHIBIT (continued) Materials



### Water Capture and Diversion

Stones can be used to direct or divert water toward an area that needs more saturation and keep water in your yard. They're available at local landscape supply stores or can even be re-purposed chunks of concrete that are colored to match your desired look. Gravel, pebbles or other ground cover is added as filler to help slow water flow so more sinks in. The capture basin on the right side is lower and lined with river rock. It stores excess water from bigger rainstorms and soaks in over time to water nearby trees.



### Erosion Protection: Jute Blanket

It may take a growing season or two for new plants to root and take hold. To keep topsoil protected from time and weather, different types of "blankets" are used. They are netting or mesh with varied sizes of openings. They not only protect the surface, but serve as framework for plants with creeping growth habits to grow on and through. Most blanket materials are available at local garden centers. Many have the added bonus of being biodegradable. The Jute shown on the left is 100% biodegradable and last about 2-3 years.



### Erosion Protection: Straw Wattle

Wattles slow, spread, and increase filtration of water and limit sediment runoff. They're typically used on slopes with less than 30% ground cover and at high erosion risk. Simply put, wattles are the big guns of erosion control. They're made of a straw matrix with a heavy-duty polypropylene net casing, and effective for about two years. Wattles are the perfect protection material while plants are becoming established. Some ground cover may grow up and over it adding interest to the terrain of the slope. Proper installation is key. The Garden can guide you in this process.