

Final Soil Stabilization for Construction Projects

Upon completion of construction, the disturbed soil areas (DSAs) of the site must be stabilized in accordance with the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity* and the *Caltrans Statewide Storm Water Management Plan (SWMP)*. This bulletin reviews the criteria for meeting final soil stabilization requirements in order to file a Notice of Completion of Construction to terminate coverage under the Permit.

The Requirement

Final stabilization of a DSA is satisfied when all soil disturbing activities are complete and *either* (1) a uniform vegetative cover with 70 percent coverage has been established over the area or (2) an equivalent stabilization measure has been applied.

What is Considered a DSA?

DSAs are areas of exposed, erodible soil within the construction limits that result from construction activities, excluding the following:

- Areas where soil stabilization, erosion control, highway planting, or slope protection are applied, and associated drainage facilities are in place and functional.
- Roadways, construction roads, access roads, or contractors' yards that have been stabilized by the placement of compacted subbase or base material, or paved surfacing.
- Areas where construction is completed in conformance with the contract plans and permanent erosion control is in place and functional.

The 70 Percent Solution

Final stabilization of DSAs using native vegetation is satisfied when *"a uniform vegetative cover equivalent to 70 percent of the native background vegetation coverage has been established."* The key requirements of this stabilization option are described here.

Uniform Vegetative Cover

Native vegetation must be established uniformly over each DSA on the site. Stabilizing seven of ten slopes, or leaving an area equivalent to 30 percent of the DSA completely unstabilized, will not satisfy the "uniform vegetative cover" standard.

The Resident Engineer is responsible for determining that the measure applied by the contractor (seeding matrix, etc.) is consistent with a density of at least 70 percent of the native vegetation over the entire DSA. Caltrans Maintenance is responsible for providing ongoing follow-up to ensure that the vegetation becomes established.

Native Background Vegetation Coverage

For environmental and aesthetic reasons, the density of the vegetative cover on stabilized areas should be consistent with that of the native vegetative coverage adjacent to the construction site. If the site had been disturbed prior to the project, the existing vegetation is probably not representative in type or density to the "native background" coverage. In this case, the Resident Engineer uses an undisturbed/ unmaintained area near the construction site to estimate what the native coverage on the site would have been.

What Constitutes 70 Percent?

The contractor must establish vegetation over the entire DSA at a minimum density of 70 percent of the native vegetative coverage. For example, if native vegetation covers 50 percent of the undisturbed ground surface, the contractor must establish 35 percent vegetative coverage uniformly over the entire DSA ($.70 \times .50 = .35$ or 35 percent).



Native background vegetation of less than 100%.



Native background vegetation of 100% coverage.

Equivalent Stabilization Measures

In lieu of vegetative cover, the contractor can apply an alternate measure that provides equivalent soil stabilization to the DSA. Such equivalent measures include blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

For application details, refer to the *Construction Site Best Management Practices (BMPs) Manual*.



Erosion control blanket being used as an equivalent soil stabilization measure.

