



# Soil Stabilization

## Construction Site Fact Sheet No. 6



### What Is Soil Stabilization?

**Soil stabilization** is a general term for any biological, physical, chemical, or combined engineering method that provides protection of the soil against the impacts of wind, rain, and stormwater runoff. Stabilization measures prevent erosion and runoff from occurring on soil stockpiles, bare or disturbed areas, and slopes.

**TO EFFECTIVELY CONTROL EROSION  
YOU NEED TO PROTECT AND STABILIZE  
BARE AND DISTURBED SOILS AND SLOPES  
USING SEASONALLY APPROPRIATE  
TECHNIQUES.**

### Soil Erosion & Sediment Control Handbook

More information on soil stabilization measures and how to control erosion at your site may be found in Section Four of the latest Soil Erosion and Sediment Control Handbook.

<http://www.dem.ri.gov/soilerosion2014final.pdf>

### Techniques

An area is considered fully stabilized when the area has an established stand of vegetation or suitable non-vegetative cover and is free from future uncontrolled discharges.

**TEMPORARY VEGETATIVE COVER** is the establishment of vegetative cover on soils exposed for a period greater than one month but less than 12 months; considered established when there is approximately 80% vegetative surface cover.

**PERMANENT VEGETATIVE COVER** is the establishment of permanent vegetative cover by seeding and mulching exposed soils with an appropriate seed mixture to facilitate long term stabilization following site preparation and topsoiling; considered established when ground cover is ~95%, prevents soil erosion and withstands severe weather conditions.

**STRUCTURAL SOIL STABILIZATION** practices include mulches, stone aggregate, turf reinforcement matting, erosion control blankets, riprap, cellular confinement systems, gabion mattresses, or articulating concrete block revetment systems. All need to be installed in accordance with manufacturers' recommendations and good engineering practices.



## Keys to Success

1. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbance activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days.
2. Stabilization must be completed using vegetative stabilization measures or using alternative measures whenever vegetative measures are deemed impracticable or during periods of drought.
3. All disturbed soils exposed prior to October 15th shall be seeded by that date.
4. Any such areas which do not have adequate vegetative stabilization by November 15th must be stabilized through the use of non-vegetative erosion control measures.
5. If work continues within any stabilized areas during the period from October 15th through April 15th care must be taken to ensure that only the area required for that day's work is exposed, and all erodible soil must be restabilized within five (5) working days.

### Questions?

**Call the RIDEM Office of Customer and Technical Assistance  
401-222-6822**