

City of Berea, Kentucky Stormwater Best Management Practices (BMPs) Erosion Prevention Practices (EPPs)

EPP 4.2.5

Activity: Temporary Seeding

PLANNING CONSIDERATIONS:

Design Life: 1 yr

Acreage Needed: As Needed

Estimated Unit Cost: Low

Annual
Maintenance:
20% of Capital
Costs







Target Pollutants

Significant ♦ Partial ♦ Low or Unknown ◊

Sediment ♦ Heavy Metals Nutrients ♦ Oil& Grease ◊ Bacteria & Viruses ◊

Oxygen Demanding Substances Toxic Materials ♦ Floatable Materials ♦ Construction Waste ♦

Description

Temporary seeding is used as a means of providing stabilization subject to erosion. This management practice is likely to create a significant reduction in sediment loss and a partial reduction in nutrients and toxic materials.

Temporary seeding may also prevent costly maintenance operations on other erosion control systems and improve the visual resources of the construction area.

Suitable Applications

Apply to areas that are left in rough grade condition, and will not be disturbed for 21 days or more.

Approach

Conventional Seeding

Common methods of application include: disc, cultivator, broadcasting, and no-till drilling.

Hydroseeding

Hydroseeding uses a mixture of mulch, seed, and tactifier which is sprayed over a disturbed area for coverage.

Installation/ Applications

Seed bed Preparation

- Prepare area to be seeded.
- Apply seed, fertilizer, and lime as required
- ➤ Apply mulch as specified in EPP-4.2.10.
- Grade as needed to permit the use of conventional equipment for seedbed preparation, fertilization and seeding.
- Apply to bare or denuded areas, soil stockpiles, if they will not be used for more than 21 consecutive days.
- Soil material should be capable of supporting permanent vegetation and have at least 25% silt and clay to sufficiently hold moisture during establishment.
- In compacted areas, soil should be loosened to a depth of 6-8 inches.
- Protect areas against seed wash-out using surface roughening diversions or terraces.
- Soil should be analyzed for fertilizer and lime requirements.

Conventional Seeding

- Work lime and fertilizer into the soil with disk harrow, springthooth harrow or like equipment to a depth of 2 inches.
- Apply seeding uniformly with a cyclone or drill. Seed no deeper than ¼" to ½".
- Weather conditions should be taken into account when seeding areas. Seeding should not take place during adverse weather conditions.

Hydroseeding

A practice of applying a hydraulic spray that seeds, fertilizes and tacks in a single step.

- Prepare a homogenous mixture in a slurry tank: Seed (inoculated if needed), fertilizer, wood cellulose or wood pulp fiber mulch, and water. (Ordinary mulch is not suitable for hydroseeding).
- Apply within one hour after mixture is prepared. The application rate should be approximately 35 lbs per 1000 sq ft.
- > Spray in two, orthogonal directions (i.e. north/south and east/west) for an even distribution of the hydroseed mixture.
- A straw mulch can be applied after hydroseeding at a rate of 100 lbs per 1000 sq. ft.

The chart below displays the recommended rates for temporary seeding.

Seeding Rates

March 1 to October 31	Per 1000 SF	Per	
March 1 to October 31	Per 1000 SF	Acre	
Oats	3 lbs	120 lbs	
Perennial Ryegrass	1 lbs	40 lbs	
Tall Fescue	1 lbs	40 lbs	
Wheat	1 lbs	40 lbs	
Annual Rye	3 lbs	120 lbs	
		Per	
November 1 to February 28 Annual	Per 1000 SF	Acre	
Rye	3 lbs	120 lbs	
Wheat	3 lbs	120 lbs	
Perennial Ryegrass	1 lbs	40 lbs	
Tall Fescue	3 lbs	120 lbs	

Source: Kentucky ESPC Field Guide

Activity: Temporary Seeding			EPP 4.2.5		
Maintenance	Inspect frequently during the first six weeks following planting to assure that appropriate moisture levels are maintained and determine if stands are uniform and dense.				
	>	Water until grass is thoroughly established, especially during dry, hot seasons or adverse conditions.			
	>	Check for damage caused by equipment or heavy rains. Damaged areas should be repaired, fertilized, seeded, and mulched. Tack or tie down mulch as necessary.			
Inspection Charlest		Area is watered daily until stabilization has taken place.			
Checklist		After stabilization, water as needed.			
		Heavy equipment has not been used within area.			
		Washout areas have been repaired.			
		Vegetative coverage is (check one): ☐ 20-40% ☐ 40-60% ☐ 60-80% ☐ 80-100%			