

What is an Erosion Prevention and Sediment Control Plan?

Erosion and sediment control is much more than silt fence and hay bales. Prior to developing an Erosion Prevention and Sediment Control Plan (EPSCP), it is important to have minimized the areas of disturbed soils and the duration of exposure. It is also imperative to control water at up-slope site perimeters, control water on-site, control sediment on-site, and control sediment at the downslope site perimeters.

An EPSCP is the final element in the erosion and sediment control planning process and a necessary component of an Act 250 permit application. The EPSCP ensures that sediment transport is addressed in one of the most crucial stages of the project: the planning stage. A good erosion prevention and sediment control plan first minimizes the extent of disturbance by focusing on erosion control (minimizing disturbed areas, seeding, mulching, matting) by controlling the amount of soil that can run off and by stabilizing exposed soil. Sediment control measures (i.e. stabilized construction entrances) then focus on any sediment that has escaped your erosion control measures. Erosion prevention measures are far more effective than sediment control measures (such as silt fence) and should be the primary focus of any EPSCP.

An EPSCP has five primary components:

1. Location map (USGS and other)
2. Existing conditions site plan
3. Grading plan and construction timetable
4. Erosion prevention and sediment control site plan and timetable
5. Narrative briefly describing the four plans

The **location map** shows the proximity of the site to any surface water bodies, roads, etc. and should include a USGS map, as well as a map of greater detail.

The **existing conditions site plan** shows the grading and features as they exist. It should also include a soils map for the existing conditions.

The **grading plan and construction timetable** shows the proposed finished contours and addresses sequencing of the project, a key component of erosion control. The timetable does not have to contain specific dates, but should show how each phase of the project relates to the others. This plan also shows that you have taken steps to minimize the amount of exposed soil at any time.

The **erosion prevention and sediment control site plan and timetable** should be prepared using the grading plan as a base. The site plan depicts the location of all erosion and sediment control measures and the timetable charts the sequencing of control measures. It may be possible to combine the grading and erosion control plans.

The **narrative** should briefly describe the four plans; highlight erosion control measures and why they will be effective, site characteristics, and erosion control done in the planning stages, such as phasing the project.

For further information, please consult the *Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites* or call the Watershed Management Division at 802-828-1535.

1. Location Map (small scale, 7 1/2 minute U.S.G.S quadrangle)

- property lines of the project
- critical natural or man-made features within 3000 feet of the project, including streams,
- ponds, wetlands, roads, buildings, and utilities
- sufficient nearby features to allow reviewer to locate the site for an inspection

2. Existing Conditions Site Plan (scale 1" = 100' or larger)

- existing topographic contours (5 feet or smaller interval)
- drainageway, water features
- general vegetative cover types within 200 feet of water features (e.g. field, hardwood forest, grass etc.)
- vegetative cover types in all proposed disturbance areas and areas receiving and treating runoff from the construction site
- soil map and key
- identified sensitive areas (e.g. steep slopes, erodible soils, wet areas)
- structures, roads, utilities
- north arrow, scale, date, elevation datum
- property lines

3. Grading Plan and Construction Timetable (scale 1" = 100' or larger)

- existing and proposed topographic contours
- limits of soil disturbance and method to be used for demarcation of these limits on site
- areas of various construction phases, including sequential and concurrent activities
- proposed structures, roads, utilities
- location of topsoil stockpiles, staging areas, equipment storage, and refueling/maintenance areas and stump disposal areas
- location of disposal areas for excess soil (include map if off-site)
- boundaries for undisturbed riparian buffers
- north arrow, scale, date, elevation datum
- property lines

4. Erosion Prevention and Sediment Control Plan (scale 1" = 100' or larger)

- limits of soil disturbance
- riparian conservation buffer limits and method to be used for demarcation
- location of all structural erosion and sediment control measures and details
- location of areas to be seeded and mulched
- stormwater pathways
- erosion control matting on slopes greater than 3:1
- no hay bales or silt fence running across contours or in areas of concentrated flow
- chart of inspection and maintenance schedule of all control measures
- name and phone number of on-site coordinator
- storm sewer inlets adequately protected (detail required)
- stabilized construction entrance shown (detail required)
- north arrow, scale, date, elevation datum

Note: If necessary to convey the sequential nature of construction activities and associated erosion and control implementation, several plans sheets showing successive site conditions are recommended.

5. Narrative

- general description of project

Site Inventory and Analysis

- site drainage characteristics (up and down-gradient)
- drainage, waterways, bodies of water
- topography, existing roads, buildings, utilities
- vegetation
- soils
- proximity to natural or man-made water features

Grading Plan and Timetable

- description of proposed grading, seasonal limitations
- timetable of all major construction and earth change activities, including stabilization methods for winter

Erosion Prevention and Sediment Control Plan and Timetable

- description of the strategies of the control plan and why it will be effective in protecting water resources
- description of seeding and mulching plan including:
 - location of areas to be seeded
 - lime and fertilizer application rates
 - seed mixes (appropriate for soil type)
 - types of mulch/matting materials and discussion of appropriateness of each measure for soil type, topography, etc.
 - mulch/matting application rates
 - mulch/matting anchoring methods (including discussion of windthrow and winter conditions)
 - mulching/matting dates
- description of all structural erosion and sediment control measures
- design calculations for all temporary and permanent structural control measures
- description of the inspection, maintenance, and records program for all control measures
- identification, basic qualifications, and contact number for on-site coordinator