Maine Conservation Fact Sheets for Homeowners Series

Construction Best Management Practices

Erosion control mix is a specific type of mulch available from construction suppliers.

Two sediment barriers are recommended for shoreland areas.

A thick coat of hay mulch is a great way to temporarily stabilize bare soil. The ground should not be visible through the hay.

Purpose:

Erosion and sediment controls are required by law to be utilized anywhere soil is disturbed in Maine. In the shoreland zone, competent use of these tools is extremely important for protecting water quality. SEDIMENT CONTROLS such as silt fences are meant to slow and pond water to capture moving sediment, while EROSION CONTROLS such as mulch are effective preventative measures that keep soil in place and help prevent loss of soil moisture.

Temporary Sediment Controls (Barriers):

- Sediment barriers must be **installed before** any project that causes soil disturbance has begun, and must be **maintained** until the area is fully stabilized and vegetation is established.

- Install sediment barriers as level as possible in a location down gradient of the area of disturbed earth. The barrier should be installed across or at the bottom of a slope with the ends turned up for ponding. Sediment barriers **should not** be placed in areas of concentrated water flows or in ditches.

Acceptable Sediment Barriers:

- **Erosion Control Mix (ECM) berms** are the simplest method of filtering sediment, and should be at least 2 feet wide and 1-1.5 feet tall. This material can be placed directly on the soil surface provided it is relatively free of twigs and branches. ECM berms can be left in place or raked out after the site is permanently stabilized or removed and repurposed as mulch.

- **Silt Fence** must be entrenched, kept taut, and installed according to the manufacturer's directions (see diagram) with the fabric side facing the disturbance. Where additional soil disturbance may increase risk, 12 inches of erosion control mix can be placed on the flap (disturbance side) of the silt fence to act as a backstop and provide additional ponding.

- **Erosion Control Socks** can be purchased in shorter lengths prefilled with straw or ECM, or they can be filled on-site in longer lengths using blowers. For work near water or larger constructions sites, a 12-inch diameter or larger sock is recommended. Smaller socks can be very useful for internal site control and slope interruption on disturbed slopes.

- **Hay bale barriers** aare not the most effective tool for most sites as they need to be installed to adequately pond water, which is difficult to do effectively. However, hay bales are a great tool to have on site for unforeseen situations and also for mulching..

- **Combinations and multiple sediment barrier types,** especially in risky areas like shoreland areas, it is recommended that two sediment barriers be installed prior to soil disturbance. This could be different types or two of the same type.

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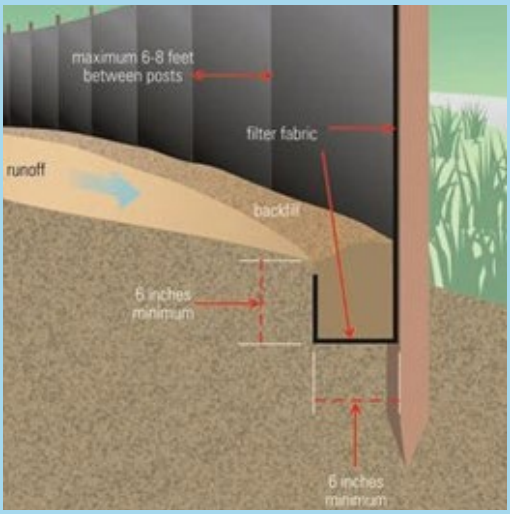

Silt fences must always be trenched in or otherwise secured with stone or 12" of ECM on top of the loose fabric flap.

The silt fence on this site is entrenched properly with space to pond water for sedimentation to occur.

The silt fence on this site is NOT entrenched so sediment is easily able to leave the site unchecked.

Erosion Controls (Erosion Prevention):

- Minimize the area of exposed soil at one time—Exposed soils are sources of erosion.
- Use extra precautions when adjacent to a protected natural resource or on steep and long slopes
- Immediately stabilize all channels or constructed slopes greater than 8%
- Use overwinter practices from Oct. 15 to May 1
- Mulch any soils that will be exposed for longer than 15 days
- Stabilize bare soils as soon as possible, especially cut and fill slopes —Disturbed slopes are vulnerable to unchecked runoff and put all the pressure on sediment controls

Mulching:

Mulch all bare areas as soon as possible and prior to any rainstorm. Mulch should be thick enough so that the soil is not visible. The following types of mulch are best suited for construction projects:

- **Hay mulch or straw** is used as a temporary protective measure to cover bare soils and newly seeded areas. Secure the hay mulch by walking over it.
- **Erosion Control Mix (ECM)** is a special mix of wood waste and gravel that holds up to runoff and has a natural look. It is used as a temporary or permanent soil cover that will eventually allow the growth of new vegetation and can replace the function of natural duff when restoring buffer areas. Recommended depth of at least 4 inches.
- **Erosion Control Blankets** – biodegradable blankets made with various fiber materials can be used in areas where loose mulch may be difficult to keep in place. Blankets are stapled to smooth graded ground in ditches and graded slopes as temporary protection for vegetation growth.

Maintenance:

Until grass and other vegetation is well established, mulched areas and sediment barriers should be inspected regularly for erosion, especially following rain events. Periodically remove sediment and debris that accumulates behind sediment barriers. Erosion Control Mix berms may need to be re-shaped and additional material may be needed to maintain function until permanent stabilization occurs.

Materials:

Maine DEP's Nonpoint Source Training Center maintains a list of suppliers of ECM and other erosion and sediment control products on their "resources" page, available here: https://www.maine.gov/dep/land/training/resources.html

Scan here for more information

EPA

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