

## 4.5-t HYDROMULCH, TACKIFIER, AND SOIL BINDER

Alternative Names: Chemical Mulches, Bonded Fiber Matrices, Hydroseeding, Hydro-mulching, Hydroseeding, Hydraulic Mulch

### DESCRIPTION

Hydromulch is a slurry-like substance made up of wood and/or synthetic fibers, water and/or other adhesive substances like tackifiers and soil binders, and possibly seed. The slurry is sprayed onto exposed disturbed soils to provide temporary stabilization and dust suppression, especially on steep slopes. Once applied, fibers and seed bind to the soil surface to form a permeable crust that protects the soil surface from precipitation and wind, yet permits infiltration, retains moisture and creates favorable conditions for seed germination and vegetation establishment.



### APPLICABILITY

- For disturbed areas requiring temporary soil stabilization until permanent vegetation becomes established. Should not be relied on for protection beyond a single winter season.
- Not for use near surface waters.
- Not for use on frozen soil, areas with standing water, under freezing or rainy conditions, or when the air temperature will be below 40°F.

### Advantages

- Can be applied in steep areas where regular mulch does not adequately protect the soil surface or used to temporarily stabilize mulch applied to revegetation areas.

### BMP DESIGN APPROACH

Pollutant Source Control

Hydrologic Source Control

Stormwater Treatment

### SCALE OF APPLICATION

All SFR and MFR < 1 acre

MFR 1-5 Acre and CICU < 5 acres

MFR and CICU > 5 acres and all WQIPs

### TYPE OF APPLICATION

Temporary

Permanent

- Relatively inexpensive and efficient method for temporarily stabilizing large disturbed areas.

### Disadvantages

- Need periodic reapplication, especially after storm events.
- Frequent application elevates cost and requires repeated equipment clean up.
- Weakened by pedestrian and construction vehicle traffic.
- Some hydromulches, tackifiers, and soil binders can stain vegetation and paved surfaces if oversprayed.

### DESIGN CONSIDERATIONS

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- Products permitted for use in the Lake Tahoe Region must be non-toxic to plant and animal life, derived from organic materials, and neutral in pH. When product ingredients are not specified due to proprietary confidentiality, submit Material Safety Data Sheets for project approval.
- Petroleum based products are not permitted for use in the Lake Tahoe Region.
- Do not use in proximity of surface waters. Provide adequate buffers to critical habitat and waterways.

### INSTALLATION CONSIDERATIONS

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- Follow manufacturer's specifications for soil preparation, mixing ratios, coverage data, application rates, installation procedures, and equipment clean up after use.
- Soil preparation may include roughening the soil surface and pre-wetting the treatment area.
- Mix fibrous material with water and if necessary tackifiers, soil binders, and seed to form a slurry and spray onto the soil surface by hose or through aerial applications.
- Generally more than one application is necessary to achieve maximum effectiveness, although subsequent applications may be diluted or applied at a lower rate.
- Hydromulches, tackifiers, and soil binders require up to 24 hours or longer curing time until fully effective. Follow manufacturers specifications for drying time needed and apply with sufficient time before anticipated precipitation events.

### INSPECTION AND MAINTENANCE

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- Hydromulches, tackifiers, and soil binders are temporary in nature but need to last long enough to achieve erosion control objectives. Periodic reapplication may be necessary for proper maintenance.
- Inspect all soil stabilization areas regularly and following precipitation events for exposed or eroding soil. Pay particular attention to high traffic areas and steep slopes.
- Reapply to exposed soil and areas where erosion is evident as soon as possible. Minimize impact to adjacent intact areas during reapplication.