SOUTHEAST METRO Stormwater Authority

Hydromulch as an Erosion Control for Temporary and Final Stabilization

SEMSWA may conditionally allow the use of hydromulch as an erosion control during temporary or final stabilization. Hydromulch is performance-based and must function effectively under site conditions. This document outlines the purpose and function of hydromulch, various types of hydromulch, and requirements for SEMSWA acceptance on your construction site.

In this Document:

Overview

Hydromulch is a temporary erosion control product, not a revegetation method. Use of hydromulch requires SEMSWA inspector approval, and improper product selection or installation may result in rejection, reapplication, or replacement.

If the accepted GESC/ESC plan specifies hydromulch and includes hydromulch specifications, hydromulch shall be installed in accordance with the accepted plan.

If hydromulch is not shown on the accepted GESC/ESC plan and is proposed to meet temporary or final stabilization requirements, this minor modification (Section 2.5 of the GESC Manual) must be accepted by the SEMSWA inspector prior to installation. Because SEMSWA does not provide a standard detail, products shall be selected and installed at application rates, thicknesses, and tackifier concentrations sufficient to achieve stabilization and consistent with manufacturer recommendations unless otherwise accepted by SEMSWA. Hydromulch that fails to perform may be rejected and require reapplication, replacement, or alternative stabilization measures.

1. What Hydromulch Is (and Is Not)

Hydromulch is:

✓ A hydraulically applied erosion control product

✓ Used to temporarily stabilize exposed soil

✓ Effective for reducing wind erosion, dust, soil loss

Hydromulch is not:

❌Hydroseeding

❌A substitute for required seeding

❌A substitute for permanent stabilization

If temporary or permanent seeding is required, all seed selection, soil preparation, and soil amendments must comply with SEMSWA Standard Details and the approved plan set.

2. Colorado Environmental Limitations

Hydromulch performance in Colorado is affected by:

- high winds
- low humidity
- rapid drying
- elevated ultraviolet (UV) exposure

Under these conditions, hydromulch products, including Bonded Fiber Matrix, may:

- dry rapidly
- crack
- lose cohesion
- delaminate from the soil surface
- blow off exposed areas.

Hydromulch failure due to wind, drying, or UV exposure is the contractor's responsibility.

3. Hydromulch Product Types

Product types and their performance in Colorado conditions

Flexible Growth Medium/High-Performance Matrix/Engineered Products
Generally preferred for arid & wind-exposed sites.
Proper installation remains critical — failure can still occur.

Bonded Fiber Matrix (BFM)
Improved performance, but may still fail due to drying,
UV degradation, wind exposure, or insufficient application thickness.

Paper & Lightweight Fiber Mulches
Generally perform poorly in arid conditions — not acceptable for exposed sites.
Wood fiber hydromulches include integral tackifier, but type & concentration
are often insufficient for CO's high winds, low humidity, and elevated UV,
and do not guarantee acceptable performance once fully dried.

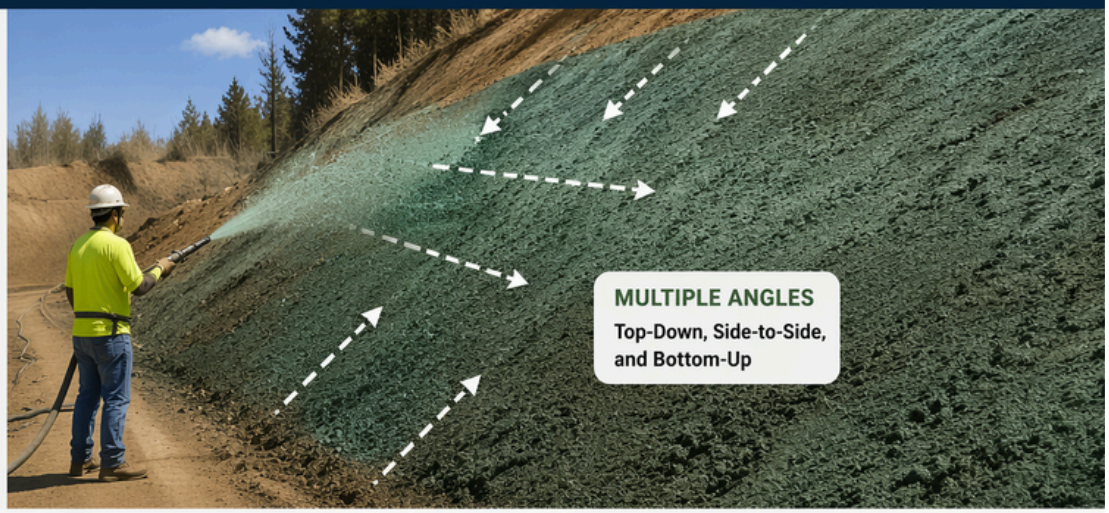
APPLY HYDROMULCH FROM MULTIPLE ANGLES

for Uniform Coverage, Maximum Soil Contact, and Optimal Performance

WHY MULTIPLE ANGLES?

Applying hydromulch from multiple angles ensures complete coverage, better soil contact, and improved erosion control—especially on steep slopes and uneven terrain.

- Reduces the risk of bare spots and thin areas
- Improves mulch bonding and lowers erosion risk
- Promotes uniform protection until vegetation is established



Apply from the top of the slope and work downward. Ensures material reaches the entire surface.

Apply laterally across the slope from one side to the other for even distribution.

Apply from the bottom up to reach areas that may be shadowed or missed from above.

BEST PRACTICE: Overlap passes from multiple angles to eliminate voids and achieve consistent thickness and coverage.

4. Installation and Approval Requirements

All hydromulch products must be installed in strict accordance with manufacturer recommendations, including mixing procedures, water volumes, slurry consistency, application rate, coverage, thickness, and environmental limitations.

Use of hydromulch that is not included on the accepted GESC/ESC plan requires SEMSWA inspector coordination and acceptance prior to installation. Contractors must provide the proposed product, locations of use, intended purpose, duration of use, and whether irrigation will be provided.

5. Hydromulch Suitability Table

Hydromulch Type	Wind Resistance Once Dry	Water Holding Capacity (Comparative Range)	Functional Longevity (Typical Range)	Irrigation Needed	Suitability in Colorado
Paper (Cellulose) Mulch	Very Poor	Low	Very Short	Yes	Not Acceptable
Wood Fiber Mulch	Poor to Moderate	Low	Short	Often	Not Acceptable
Wood / Paper Blend	Poor	Low	Very Short	Yes	Not Acceptable
Bonded Fiber Matrix (BFM)	Moderate to Good	Moderate	Moderate	Often	Limited Use
Flexible Growth Medium / High-Performance Matrix (HPM)	Good to Very Good	High	Longer	No	Preferred

Table Use and Limitations: Values shown represent comparative summaries derived from manufacturer-reported testing and published product information. Ranges are provided to assist with product classification and planning only and do not constitute acceptance criteria, performance guarantees, or minimum required values. Actual field performance depends on site conditions, weather, installation quality, and maintenance. Final acceptance is determined by the inspector based on observed site conditions and performance at the time of inspection.