

THE SMART WAY TO  
**ELIMINATE SOIL EROSION**

# GeoMatrix

## High Performance Spray-On Blanket (HPSB)

GeoMatrix Slope Stabilization System is the one-and-only highly executable hydraulic erosion blanket that provides both an economical and powerful new innovative approach to customized soil stabilization.

GeoMatrix Slope Stabilized Systems contains a tackifier that has a base of Polysaccharide gum in combination with proprietary additives and crosslinkers. It contains components that retard the tackifier from re-dissolving in rainwater, at least until vegetation is established.

The binding agents react with the guar by the formation of new covalent carbon hydrogen bonds. By adjusting the Polysaccharides to crosslinker additives, it will make the GeoMatrix HPSB an extremely strong and resistant erosion control mat that can sustain a tensile strength of over 160 PSI.



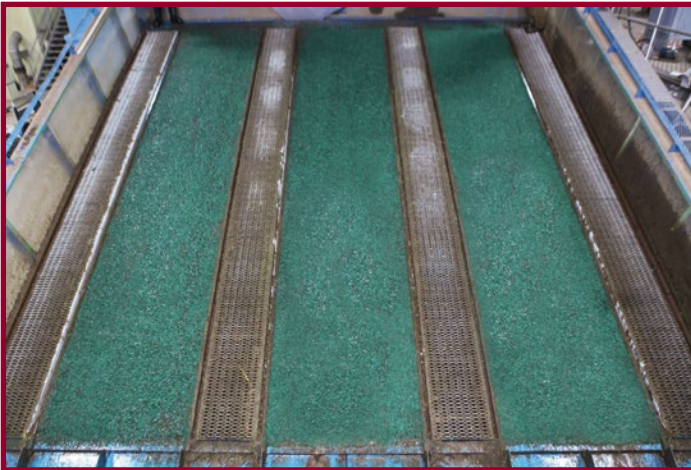
# GeoMatrix Slope Stabilization Systems

## Stages 1, 2 & 3

**Stage 1** The application proved to be an exceptionally powerful economical spray-on erosion control blanket. GeoMatrix Fiber was applied at rate of 3000 lb. per acre along with a blend of other proprietary crimped fibers and crossbinders to ensure a tight intimate interlocking bond to the soil matrix. It performed better than any other product that is currently available in the industry based upon Utah State University's lab results.



**Stage 2** A stronger resiliency to soil erosion was observed when the GeoMatrix Fiber content was increased to 3500 lb. per acre and additional cross binders were added to augment the bonding to the soil. This bond was so powerful, it performed as well as a double net straw erosion control blanket and it was able to accelerate the germination of the seedlings.

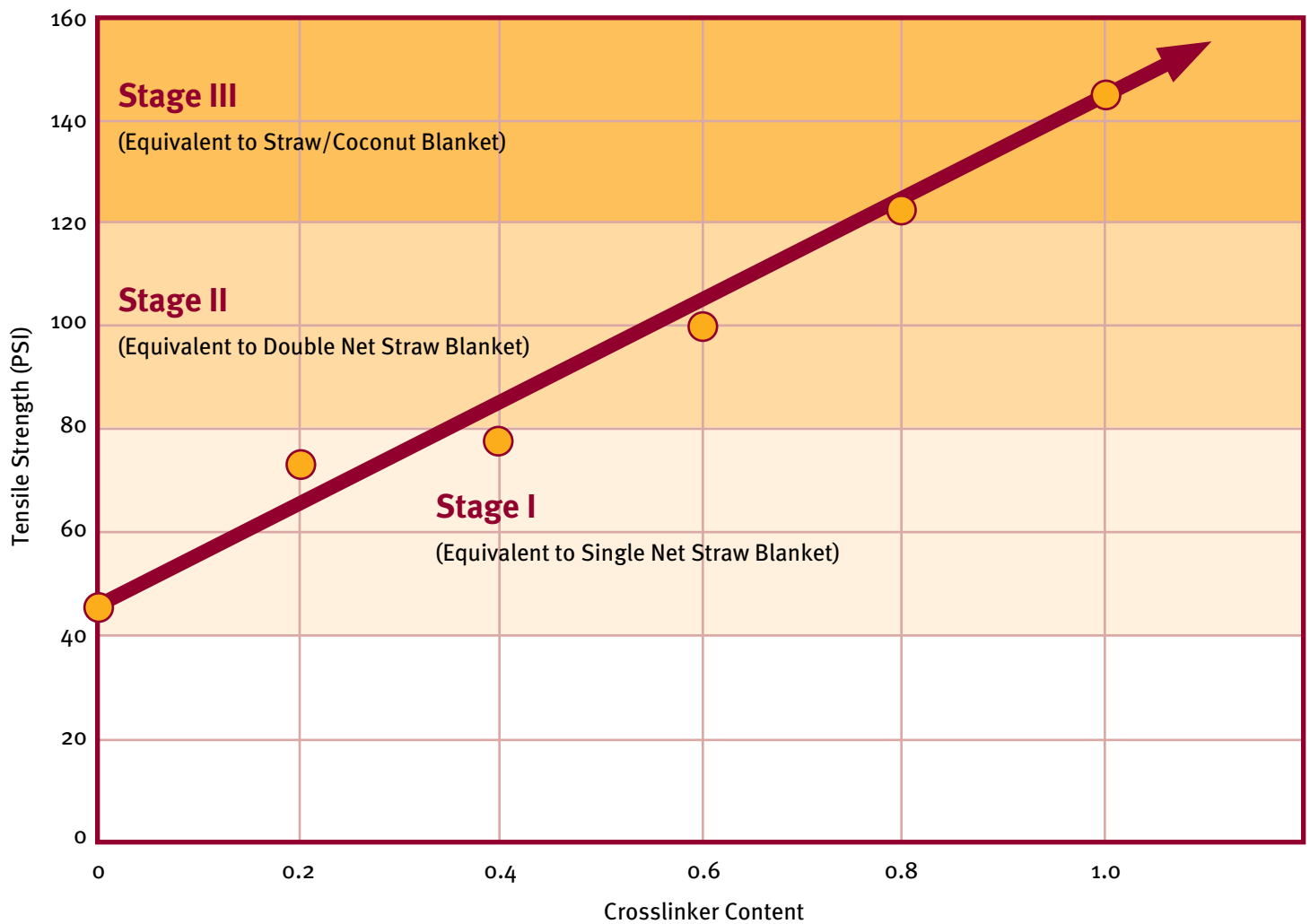


*Test conditions after 60 minutes  
Rainfall: 5 inches per hour  
Slope gradient: 2.5:1*

**Stage 3** The best spray-on soil stabilization product available. The additional GeoMatrix fiber at 4000 lb. per acre and cross-binder along with exponentially more crimped fibers added to the significant increased tensile strength to provide protection against large rain events. Also, water retention within the system was amplified due to the increase in GeoMatrix fiber which enhanced the turf maturation.



# Tensile Strength Effect of Proprietary Crosslinkers Blended with GeoMatrix Fibers



# Technical Data

Properties*	Test Method	Units	Value
Water Holding Capacity	ASTM D7367	%	1200
Moisture Content	Scale	%	+/- 10
Material Color	Observed	n/a	Green
Cover Factor	Large Scale	n/a	.50 maximum
Percent Effectiveness	Large Scale	%	.50 minimum
Functional Longevity	ASTM D5338	n/a	Up to 12 months
Ecotoxicity	EPA 2021.0	%	96-hr LC50 > 100%
Biodegradability	ASTM D5338	%	100
Thermally Processed Wood Fiber			70-90%
Blended Hydro-Colloidal Based Tackifier			10-20%

## Recommended Applications

- Mild or steep slope stabilization
- Long-term or short-term stabilization
- Environmentally sensitive areas
- Enhancement of vegetation establishment
- Stopping soil migration from applied surfaces
- For uneven slope surfaces

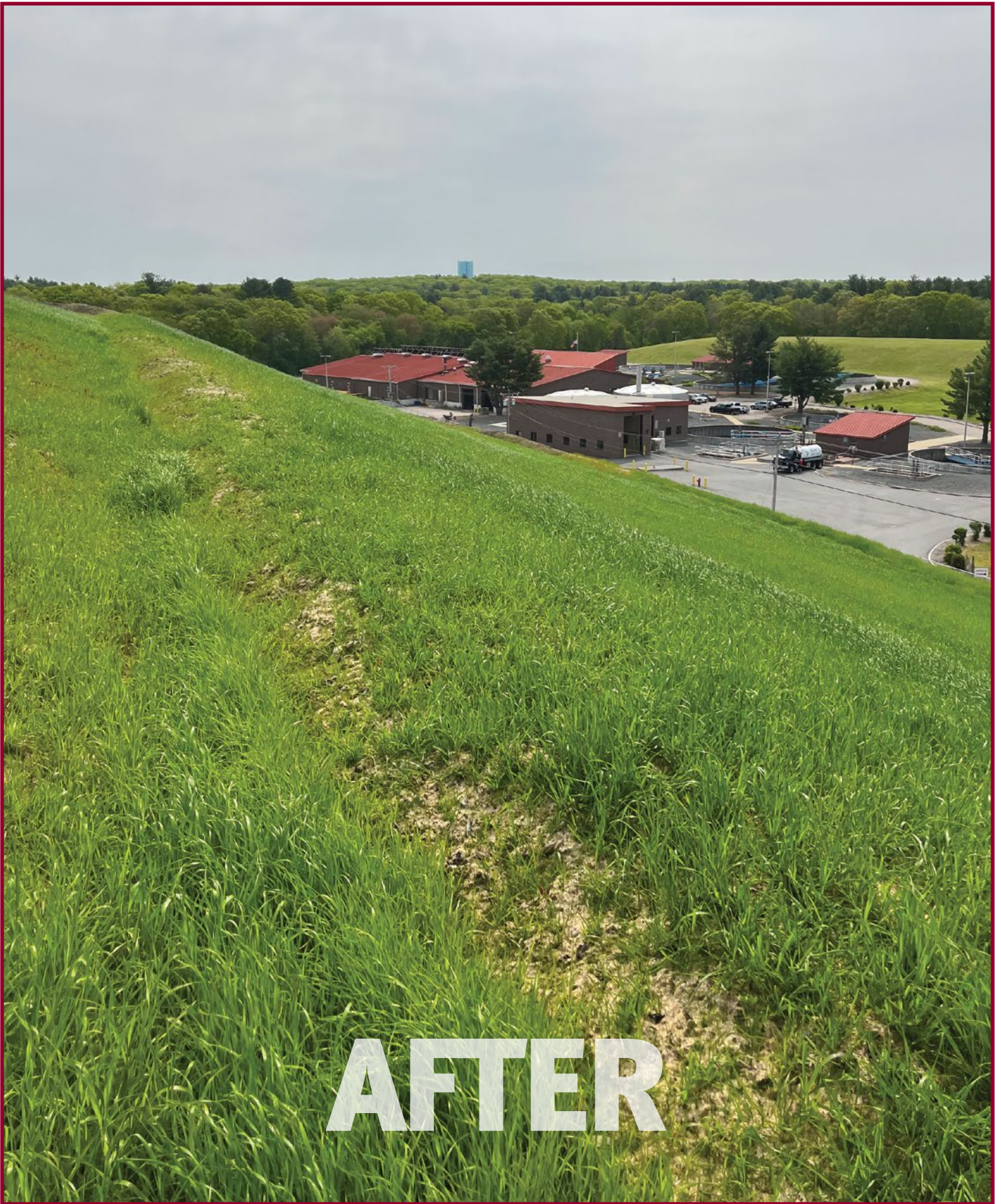
## Recommended Usage & Rates

Stages	Slopes	Lbs. of GeoMatrix Fiber Per Acre	Binding Agents*
Stage 1	4:1 or less	2,000 - 3,000	~240 lbs.
Stage 2	4:1 to 3:1	3,000 - 3,500	~290 lbs.
Stage 3	3:1 or greater	3,500 - 4,200	~320 lbs.

\* To determine an appropriate rate, speak with a GeoEnvironmental representative at 888-802-3550.



**GeoMatrix Application in February**



**Slope Stabilization Complete in May**



## Hayman Fire Rehabilitation Effort

The Hayman Fire burned 137,000 acres . . . Mr. Bob Arello (of Hydrograss Technologies) determined the appropriate polymer needed for the soil conditions and developed the correct mixture of mulch, tackifier and polymer for our area.

I was very pleased with the product that we received and the expertise and professionalism of Mr. Arello and Hydrograss Technologies. I would highly recommend this company for future reclamation work.

— **Denny Bohon**  
U.S. Forest Service





**g** **GeoEnvironmental**<sup>TM</sup>  
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