

# Biotic Soil Media Demo: One-Step vs. Two-Step Application

White River National Forest, CO



## PROJECT OVERVIEW

### CUSTOMER:

Forest Service

### PRODUCTS:

ProGanics BSM  
ProGanics DUAL  
High-Performance Hydromulch  
Slow-Release Organic Fertilizer  
Organic Soil Conditioners  
Fast-Acting Lime

### LOCATION:

White River National Forest, CO

### CHALLENGE:

Poor soil health: low organic matter, low macro/micro nutrients and low pH. Southwest-facing slope which endures extreme sun in the summer and high winds and snowstorms in the winter at 11,000 feet in elevation with a remote water source. Meeting the standards and guidelines of the Forest Service Management Plan to protect our soil resources and watershed health.

### SOLUTION:

Use a prescriptive approach based on a soil test to determine the appropriate products needed to provide long-term vegetation and erosion control. Demonstrate two different application methods for a side-by-side comparison of their ability to resist erosion and enhance vegetation.

### PRODUCT ADVANTAGES:

- ProGanics BSM and ProGanics DUAL both provided significant organic matter to promote increased vegetation and erosion control.
- Soil amendments including humate, mycorrhizae, biochar and microbiology increase the soil health by increasing the soil structure, speed of root establishment and nutrient uptake to ensure improved soil health.
- High-performance hydromulch stood up to the severe weather conditions providing successful erosion control.

“After one year, both applications held up to harsh weather conditions, steep slopes and unstable soils resulting in successful vegetation establishment and erosion control.”  
– The Forest Service

**BACKGROUND:**

Throughout the White River National Forest, the steep slopes, harsh weather conditions and short growing season continue to provide challenges in establishing vegetation to meet the Forest Service requirements. Remote locations and poor soils increase erosion, endangering the surrounding waterways.

**PROJECT SCOPE:**

The remote location and lack of access to water meant this slope was a perfect opportunity to compare two products side by side to demonstrate their ability to hold up to the conditions while decreasing labor and water procurement.

**METHOD:**

ProGanics BSM, soil amendments and high-performance hydromulch were applied in a two-step application approach. ProGanics DUAL and soil amendments using a one-step application approach were applied side by side to the two-step application.

**THE SOLUTION: FERGUSON WATERWORKS:**

Ferguson worked with land owners, the Forest Service and contractors to perform a soil test and determine a solution. The challenges faced on this project are found throughout the White River National Forest, but also throughout the Rocky Mountains. Working with our partners and using scientific data allowed for the successful nature of this project and future projects which face similar challenges.

**For more information, ask an expert: [Laura Finch \(720\) 557-5842](tel:7205575842)**