



## EarthLite™ Bioswale ES Soil

**EarthLite™ Bioswale ES Soil** blend is a custom blended bioswale soil with the addition of **PermaMatrix® BSP** and **EarthLite™ Stormwater** Filter Media. Primarily used as a bioremediation soil blend, it will provide everything needed to grow a sustainable plant community that can filter out toxins in stormwater. **EarthLite™ Bioswale ES Soil** is an engineered blend of natural sandy loam, clay and **EarthLite™ Stormwater** Filter Media, combined with PermaMatrix® BSP Foundation that increases the microbiological organics of the soil. It is a superior growing medium for both native and non-native plant communities and should be used at a depth of at least six inches with twelve inches preferred depth.

## EarthLite™ Bioswale ES Effective For

**EarthLite™ Bioswale ES Soil** is effective for remediating nitrates in the bioswale. With the combination of PermaMatrix® BSP Foundation a proper mycorrhizae community is a cornerstone of this blend. Mycorrhizae fungi develops deep and fibrous root systems that aid in Mycofiltration and greatly reduces nutrient leaching into stormwater. By reducing nitrate leaching it will reduce the toxic algae blooms in near by water ways. **EarthLite™ Bioswale ES Soil** also maintains a healthy plant community that will maintain the performance of the bioswale for years to come. With a healthy and vibrant plant community bioswales are key to point source pollution control.

## EarthLite™ Bioswale ES in Reclamation

**EarthLite™ Bioswale ES Soil** can be used anywhere where a high performing top soil is required. Constructed Wetlands, Wet Meadows, and Streambanks all can benefit from Bioswale ES Soil.

## EarthLite™ Bioswale ES Applications

- Biofilters and Bioswales
- Reclamation of water quality swales
- Constructed Wetlands
- Top Soil applications
- Vegetated bag walls and along Streambanks

## EarthLite™ Bioswale ES Contact Info

Sunmark Environmental Services LLC  
PO Box 1210 Fairview OR 97024

**503-241-7333**  
[info@sunmarkenvironmental.com](mailto:info@sunmarkenvironmental.com)

[www.Earth-Lite.com/soil](http://www.Earth-Lite.com/soil)

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Sunmark Environmental certifies that **EarthLite™ Bioswale ES Soil** contains the properties and characteristics on this sheet.

# EarthLite™ Bioswale ES Technical Data

- ⇒ Suitable for use in topsoil replacement applications!
- ⇒ Replacement soil for existing water quality and bioswale systems.
- ⇒ Easily adapted to new bioswale specification designs.
- ⇒ Value add, high performing soil blend.
- ⇒ Increases the survivability and sustainability of plants.

**System Effectiveness**

The effectiveness of a properly amended bioswales increases with increased contact time between soil and stormwater, and increased vegetative cover. This is all best achieved by using **EarthLite™ Bioswale ES Soil** that can adequately slow down, infiltrate, and retain water, as well as support plant life. In areas where nutrients are a concern to water quality, Bioswale ES is capable of retaining high amounts of phosphorus and nitrogen. Phosphorus retention is improved with the addition of PermaMatrix® BSP Foundation that increases the level of the phosphorus mining of the mycorrhizae fungi. Increasing the carbon content of soil with Earthlite Stormwater Filter media can help retain nitrogen and reduce heavy metal leaching.

**Particle Gradation**

Sieve Size (Mesh)	Percent Passing %
1 Inch	100%
#4	80%
#10	50%
#40	35%
#100	10%
#200	5%

**Physical Characteristics**

Total Carbon	5%
Applied Color	Brown
Microbial Content	High
Mycorrhizae Content	Endo/Ecto Blend

**Physical Properties**

Mineral (Sand/Silt/Clay)	60%
Organics (Compost)	33%
Filter Media (Biochar)	6%
Amendments (PMBSP)	1%

**Application Rate**

Bioswales	12 to 18 Inches
Wetlands	6 to 12 Inches
Uplands	6 Inches



MYCOFILTRATION

