

PROJECT STAKEHOLDERS

- British Columbia Ministry of Transportation
- Brock White Construction Materials

CHALLENGES

- Poor soil: 8.7 pH and < 0.5% organic matter
- Wildlife trampling growth
- High altitude
- Steep slopes

APPLICATION

- ProGanics® BSM™: 5,600 kg/ha (5,000 lb/ac)
- Aqua-pHix™: 94 L/ha (10 gal/ac)
- JumpStart™: 47 L/ha (5 gal/ac)
- BioPrime™: 179 kg/ha (160 lb/ac)
- Flexterra® HP-FGM®: 4,480 kg/ha (4,000 lb/ac)
- Fertilizer (18-18-18): 81 kg/ha (72 lb/ac)

RESULTS

- The areas treated with ProGanics and Flexterra showed better establishment and erosion protection than areas where only seed and mulch were applied
- BC MOT agreed to use ProGanics on future projects

The British Columbia Ministry of Transportation (BC MOT) was experiencing issues establishing vegetation near a renovated bridge along a key wildlife corridor. Brock White teamed up with Profile to conduct a soil test to evaluate the soil's fertility and its ability to support vegetation as a growing medium. The analysis revealed poor soil conditions with low organic matter and an alkaline pH. Brock White knew Profile's ProGanics® Biotic Soil Media™ (BSM™) would produce the desired vegetation on the site. ProGanics is a hydraulically applied Engineered Soil Media™ (ESM™) that provides organic matter and soil building components to modify the soil chemistry and initiate vegetative growth.



July 2016: Significant difference in growth between ProGanics-treated area in foreground and the area not treated with ProGanics on the far left



ProGanics installation in March 2016

After meeting with Brock White, BC MOT agreed to test ProGanics on one quadrant of the project.

The team decided to bolster the ProGanics with products from Profile's ProPlus® line, including JumpStart™, BioPrime™ and Aqua-pHix™. JumpStart and BioPrime accelerate germination and improve long-term plant vitality. Aqua-pHix lowers the pH of alkaline soils to more ideal levels for plant growth. Because of the extreme slopes, the team then capped the project with Profile's Flexterra® High Performance-Flexible Growth Medium® (HP-FGM®) the industry's highest performing hydraulically applied erosion control product. The other three quadrants were treated with BC MOT standard seed and wood with tack mulch. Not only did ProGanics noticeably enhance the initial establishment of vegetation compared to the untreated areas, but after two years its effects on both soil and vegetation health were still evident. Because of this demo, BC MOT plans to use ProGanics on future projects where soil quality is poor.



Substantial root development two years later on ProGanics-treated area



November 2016: ProGanics-treated area in foreground has better established vegetation than the area not treated with ProGanics on the far left