## **PROJECT STAKEHOLDERS**

- California Department of Transportation
- Pacific Restoration Group, Inc.
- Stover Seed

## **CHALLENGES**

- Hydrophobic soil consistent with fire reclamation sites
- Poor soil: < 1.5% organic matter
- Limited rainfall
- Navigating heavy traffic next to the site

## **APPLICATION**

- ProGanics® BSM™:
  4,000 lb/ac (4,480 kg/ha)
- BioPrime<sup>™</sup>: 80 lb/ac (90 kg/ha)
- JumpStart™:
  - 2.5 gal/ac (23 L/ha)
- ProMatrix™ EFM™:
  3,000 lb/ac (3,360 kg/ha)

## **RESULTS**

 Despite minimal rainfall, three months after application the site had a blanket of vegetation with wildflowers



Taking a soil test

In 2017, the Freeway Fire ignited 20 acres (8 ha) of brush along the I-210/I-15 interchange in Rancho Cucamonga, California. The California Department of Transportation (Caltrans) needed a quick, reliable solution to restore the vegetation and prevent hillside washouts. Caltrans selected Pacific Restoration Group, Inc. (PRG) and Profile Products to develop a solution that would meet the site's requirements without disrupting the heavy vehicle traffic on the highway. A soil test showed the site had low organic matter leading PRG to recommend Profile's ProGanics® Biotic Soil Media™ (BSM™), an Engineered Soil Media™ (ESM™), designed to ameliorate depleted soils and promote soil health on

challenging sites. In addition to hydraulically applied ProGanics, PRG also incorporated ProPlus BioPrime™ and JumpStart™ to accelerate germination and improve long-term plant vitality.

Finally, PRG capped the project with environmentally friendly ProMatrix™ Engineered Fiber Matrix™ (EFM™) to protect both seed and soil from erosion. The products were applied with just two hydroseeders, making it safer and easier to work without shutting down multiple lanes of traffic. During the three months after application, the site only received 1.7 inches (43 mm) of rain. Despite the lack of rainfall, the site established a blanket of green vegetation with purple and yellow wildflowers.

"The fact that it looked so good within that time frame is pretty unique," said Steve Knutson, with Stover Seed, the project's distributor. "Usually on a site with poor soil and limited rainfall, you'll see some plants. But that was staggering. I would attribute it to JumpStart and ProGanics."



Left: Before application on the scorched slope Right: Three months after application, grasses and forbs were growing in



Significant growth on the site during follow-up inspections