SCHUSTER SLOPE LANDSCAPE MANAGEMENT

Historically, Schuster Slope was a feeder bluff contributing sand and soil to beaches along the Tacoma shoreline, and the site was ripe with evergreen trees such as Douglas fir and Western red cedar. The slope was significantly altered through tree clearing by Tacoma's first lumber mill, and regrading that occurred as a result of the railroad.

Substantial modifications and lack of forest management in the past have led to an unhealthy ecosystem at Schuster Slope. The combination of groundwater seeps, frequent rainfall and loose, sandy soils have contributed to shallow landslides as the slope regresses to it pre-development, feeder bluff state. The built infrastructure, including roadways and buildings on the top and bottom of the slope, constrain the site, requiring intervention to maintain public safety.

MANAGEMENT GOALS

- Achieve a sustainable target ecosystem
- Improve slope stability
- Maximize *stormwater benefit
- Increase public safety and infrastructure protection

THE PLAN

In 2014, the City began a public process to create a landscape management plan to address the declining state of Schuster Slope. The goal was to ensure this plan was reflective of the current conditions, best available science, regulation compliance and public interests.

The result was a permitted 20-year landscape management plan built on the concept of achieving a target forest ecosystem to maximize the nature-based services that Schuster Slope can provide.

* Stormwater is rainwater or snow melt that has not soaked into the ground. It carries pollutants from streets and lawns to lakes, streams and the Puget Sound without being cleaned. Too much stormwater runoff can cause flooding.

Summary of Restoration Work 2015-2018

- Trees planted = 2,476
- Plants Installed = 26,500
- Erosion Contol Materials Installed = 1.5 acres
- Invasive Weeds Removed = 8.1 acres

2017 Highlights

- 600 trees & 9,300 plants were installed in Management Unit (MU) 1 & MU2 (see map on opposite page)
- Invasive weed control on 4.3 acres of MU1 & MU2
- Vegetation monitoring in MU1

2018 Highlights

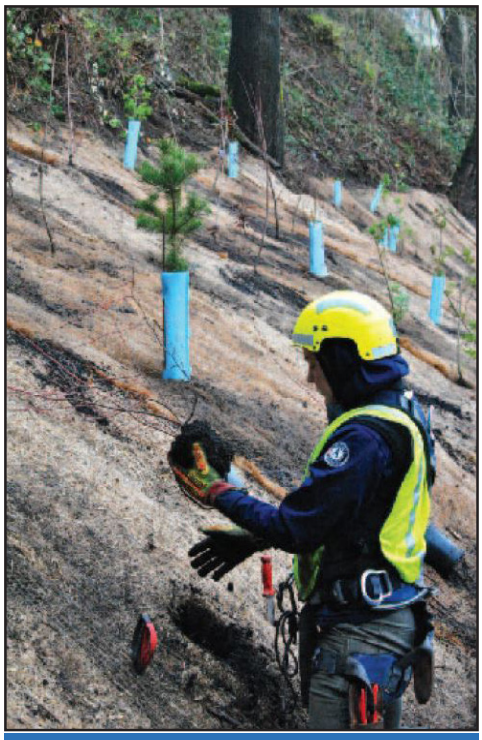
- Infill planting of 1,100 trees and 5,700 plants in MU1 & MU2
- Invasive weed control across the slope
- Vegetation and slope monitoring in MU1 & MU2

Ongoing Restoration Efforts

Vegetation and slope monitoring occur in restored areas to track progress and adaptively manage future restoration efforts. In compliance with vegetation species and density targets, infill planting takes place to help move the slope toward a sustainable plant community and restore natural function.

Site conditions such as steep slopes and loose, sandy soils make restoration work slow. Field crews require ropes and harnesses to maneuver safely across the area.

City staff, in cooperation with the Tacoma Police Department and local non-profit organizations, regularly patrol the area for people experiencing homelessness in an effort to provide services to this population. Encampments are removed to ensure the safety of individuals and projects.



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Next Steps

A thorough geotechnical review of site conditions on the lower slopes south of Stadium Bowl will occur in 2019 in anticipation of expanded vegetation management. Work crews will sweep all 31 acres of Schuster Slope to control invasive climbing vines that smother and topple trees.