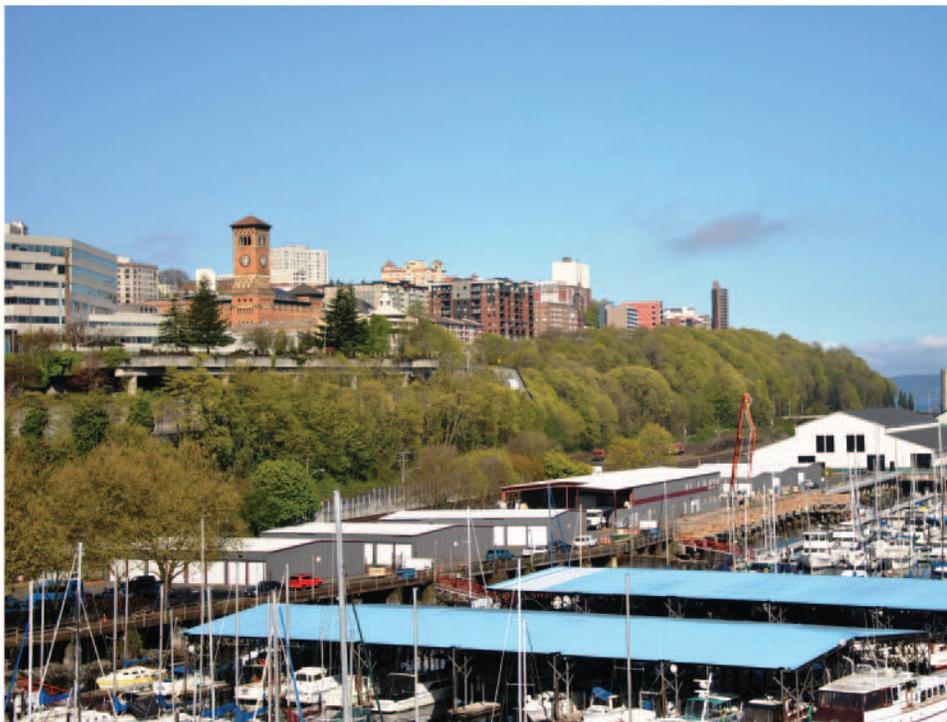




Open Space Restoration and Slope Stabilization Schuster Slope Landscape Management - Planning and Implementation

As Tacoma settled and urbanized, the once natural state of the feeder bluff known as the Schuster Slope was significantly altered by development. The most notable alterations to the slope included Tacoma's first lumber mill (the Hatch Mill) which began operations in 1877, and the Centennial Flour Mill which was in operation from 1905 to 1965. In order to service these industries, significant clearing and re-grading of the hillside was conducted and a rail line was constructed.

In 1973, Bayside Drive (later renamed Schuster Parkway) began construction, and was completed in 1976. In conjunction with the roadway project, a cross-slope recreational trail network (known as the Bayside Trails) was also completed in 1975. This public trail system was closed in 2000 due to vandalism, slope stability, and unsafe conditions.



Partners

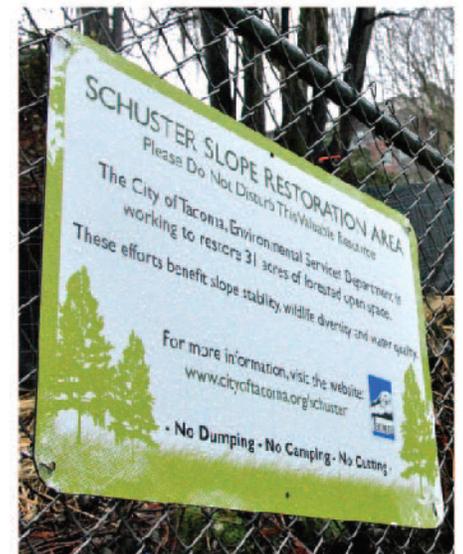
City of Tacoma
Metro Parks Tacoma
Schuster Citizen Steering Committee

Consultant Team of Experts

GeoEngineers, Inc.
Landau Associates
Grette Associates

Location

Adjacent to Commencement Bay in Tacoma, bounded by N Schuster Parkway to the east; Stadium Way (North and South), Stadium High School and private residences to the west; Garfield Gulch to the north; and Interstate 705 off-ramp to the south.



The Problem

Substantial modifications and lack of management of the Schuster Slope have contributed to an unhealthy ecosystem. When compiled with soil conditions, groundwater seeps and frequent rainfall, the Schuster Slope experiences skin slides, and debris flows as it tries to revert to its pre-development, feeder bluff state. The built infrastructure (roadways and buildings) on the top and bottom of the slope constrains the site, requiring intervention to maintain public health and safety.

The Solution

In 2014, the City began a public process to create a landscape management plan to address the declining conditions of the 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 is a permitted 20-year landscape management plan built on the concept of achieving a target ecosystem composition to maximize the ecosystem services that Schuster Slope provides.

Implementation

Implementation of the permitted Schuster Slope Landscape Management Plan began in fall of 2015. The work that is currently underway is on the second three-acre portion at the slope crest along Stadium Way, known as Management Unit 2 (MU-2). This work unit was created following an intensive pruning effort in the winter of 2016 to improve the health and form of previously coppiced maples. Mandatory mitigation underplanting and erosion stabilization efforts are now being carried out.

Next Steps

The restoration work in MU-2 will be completed in February/March, 2017. Monitoring and maintenance will occur on the previously planted Management Unit 1 during the summer of 2017 and recommendations for further plantings will be generated at that time.



Still under development is the process for private citizens to request to manage vegetation on City-owned open space properties within critical areas. This process should be finalized by the end of spring 2017.

For More Information
www.cityoftacoma.org/schuster

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Management Goals

- Achieving a sustainable target ecosystem
- Improving slope stability
- Maximizing stormwater benefit
- Increasing public safety and infrastructure protection

2015 Work Highlights (MU-1)

- Removal of over an acre of invasive weeds
- Installation of nearly 1.5 acres of erosion control nets and blankets
- Planting 426 trees and 5,700 groundcovers and shrubs

2016 Work Highlights (MU-2)

- Invasive weeds control on 2.8 acres
- Planting approximately 350 trees and 5,900 shrubs and groundcovers
- Installation of nearly 1 acre of erosion control blankets and straw wattles