

# Defending Puget Sound

## Point Defiance Regional Treatment Facility



### Regional Treatment Facility

The City of Tacoma and Metro Parks Tacoma shared a vision to provide stormwater treatment through a park amenity at the entrance to Point Defiance Park.

Functionally, this facility is designed to capture the worst pollutants before they wash into an impaired area of Puget Sound overloaded with heavy metals from the Tacoma Asarco Smelter Plume, a toxic legacy from a copper smelter that operated for nearly 100 years. This innovative approach provides treatment for 754 acres in a footprint of only 5,500 square feet. This is a major step forward in improving water quality that can be replicated around the globe.

As an amenity, this facility is designed to utilize a challenging steep slope and provide interest to the entrance of the park through an impressive six-pool waterfall. The concrete pools provide a powerful reflective mirror for all of us to see how we impact the world around us. It is sure to become an icon of Tacoma, as a defender of Puget Sound.

### Environment

Up to 8 million gallons of stormwater treated a day! More than any other of its kind!



**Park Amenity**  
A prominent waterfall feature is located at the entrance to Point Defiance Park.

### Education

Open channel design provides visual learning and easy access for sampling.



# The Details

## Point Defiance Regional Treatment Facility



### Pretreatment

A 10 ft diameter device traps trash, debris, and larger sediment.



### Troughs & Treatment Cells

Woodchip mulch and drought-tolerant plants provide a significant amount of pollutant removal through filtration and absorption. High flowrate engineered media completes the filtration process.



### Swale

Water from the cells flow into the bioswale and groundwater is also treated by the vegetation in the swale.



### Design Team

Engineer: Parametrix, Inc.  
Landscape Architect: Site Workshop

### Construction Team

General Contractor: Ceccanti, Inc.  
Precast Concrete: Oldcastle Precast, LLC.  
Manufacturer: Contech Engineered Solutions  
Landscape: Johnson Brothers Landscaping

### Construction Budget

The \$3.4 million project was funded by a \$1 million Washington State Department of Ecology grant, and City of Tacoma Surface Water Funds.

#### For Additional Information

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