



## CASE STUDY: Swedish Medical Center, First Hill Campus

### Transitioning to Sustainable Landscape Practices

*For: Properties managed by on-site staff*

#### Overview

In 2011, Swedish Medical Center transitioned its First Hill campus from conventional landscape practices to more sustainable ones. In the process, Swedish saved money, reduced water use, improved its landscape appearance and quality, and protected the health and safety of patients, visitors, staff and the environment.

#### Step 1 – Assess the landscape

Landscape Coordinator Liesl Zappler assessed the landscape using the following criteria:

- Landscape area uses
- Visibility to the public, patients, and staff
- Plant health
- Weed problems
- Maintenance effort required
- Appearance

#### Step 2 – Develop a plan

Liesl developed the Swedish Grounds Department Plan based on using proper horticultural practices to create and maintain landscapes sustainably. The Plan's foundation is to eliminate the need for using pesticides by improving soils, designing beds to fill in quickly and shade out weeds, applying arborist wood chip mulch in beds, using a weed flamer for hardscapes, and ensuring plant health by putting the 'right plant in the right place'. Using the Step 1 criteria, grounds staff renovated landscape beds using a mixture of evergreen shrubs, perennials, and landscape features such as rocks, logs, and art to provide year-round interest. They renovated the irrigation systems to be more efficient and eliminated past practices of overwatering.

#### Step 3 – Implement based on priorities and affordability

Landscape changes were prioritized based on the results of the assessment and ease of implementation. Small projects were worked into existing budgets, while larger projects were developed and budgeted into a five-year plan which estimated costs and benefits. An Integrated Pest Management (IPM) policy was adopted, resulting in a 5-Star EnviroStars award for the campus.

#### Step 4 – Budget for materials and labor

The purchase of weeding tools, and upgrading power equipment to be either battery powered or to comply with California emissions standards, cost approximately \$3,000. This was partially offset by a \$500 matching voucher from the King County EnviroStars program. Due to budget cuts, staffing was reduced by 1.6 FTE, but the new landscape was more resilient so quality was maintained.

#### BOTTOM LINE SAVINGS

##### MATERIALS

**\$6,598** (one-time savings) by eliminating annual spray contract

##### WATER

**\$2,384** (annual savings)

**Year-One Savings \$8,982**

*Savings used to support short- and long-term grounds projects (see page 2 table)*



Before



After

**Before:** Broadway Entrance Sculpture Bed was planted with annuals and juniper. Pesticides were used.

**After:** The same bed, now flowering with drought tolerant perennials, requires little maintenance and no pesticides.

Examples	BEFORE	THE CHANGE	AFTER: RESULTS & BENEFITS
<p>Short -Term Project: Tropical Garden <i>(fits within existing budget)</i></p> <p>Cost estimate:</p>	<ul style="list-style-type: none"> <li>• Bed was sparsely planted with juniper, daphne, and annuals.</li> <li>• The daphne was leggy; the area lacked interest.</li> <li>• Herbicides were used for weed control.</li> </ul> <p>Annual maintenance: \$300</p>	<ul style="list-style-type: none"> <li>• Plants were chosen for drought tolerance, ease of maintenance, and year-round seasonal interest.</li> <li>• Compost was added to improve soil and plant health.</li> <li>• Arborist chips were used to suppress weeds and retain moisture.</li> </ul> <p>Implementation: \$1,245</p>	<ul style="list-style-type: none"> <li>• Aesthetics and habitat of the area were greatly enhanced.</li> <li>• Hummingbirds are frequently seen.</li> <li>• Herbicides are not used.</li> <li>• Water use was cut in half.</li> </ul> <p>Annual maintenance: \$60</p>
<p>Long-Term Project: Carl Linnaeus Tribute &amp; Healing Garden <i>(part of 5-year plan)</i></p> <p>Cost estimate:</p>	<ul style="list-style-type: none"> <li>• Cherry trees suffered from brown rot.</li> <li>• Shrubs were hedged and made into 18 round balls that required repetitive pruning.</li> <li>• Herbicides were used.</li> <li>• An annual calendar-based insecticide program was used on trees and shrubs.</li> </ul> <p>Annual maintenance: \$1,020</p>	<ul style="list-style-type: none"> <li>• All plant material was removed.</li> <li>• The irrigation system was improved.</li> <li>• Soil was amended with compost.</li> <li>• Stone wall, path, and benches were added.</li> <li>• Compost was donated by Cedar Grove (\$300) and stone donated by Scrivanich Natural Stone (\$3,500).</li> <li>• Plants were selected from Sweden's Linnaeus Garden list.</li> <li>• Arborist chips were used as mulch.</li> </ul> <p>Implementation: \$43,000</p>	<ul style="list-style-type: none"> <li>• Aesthetics greatly improved.</li> <li>• Patients, visitors and staff have a place to relax and enjoy nature.</li> <li>• Annual spray contract and supplemental applications were eliminated.</li> <li>• Water use was cut in half.</li> </ul> <p>Annual maintenance: \$160</p>

## Resources

- **Seattle Public Utilities "For Landscape Professionals"** [www.seattle.gov/util/landscapeprofessionals](http://www.seattle.gov/util/landscapeprofessionals)
- **King County EnviroStars Program** [www.envirostars.org](http://www.envirostars.org)
- **Water Efficient Irrigation Program & Rebates** [www.savingwater.org](http://www.savingwater.org)
- **Seattle area watering index** [www.iwms.org](http://www.iwms.org)
- **Thurston County IPM Pesticide Ranking** [www.co.thurston.wa.us/health/ehipm/ipm\\_cntyimp.html](http://www.co.thurston.wa.us/health/ehipm/ipm_cntyimp.html)

