Seattle: the Evergreen City

Sustainability Practices & Places

Dr. Kathleen Wolf
University of Washington, Seattle U.S.
June 3, 2008
Outline of Talk

- Introduction to Seattle
- Elements of Sustainability
  - Water
  - Food
  - Wildlife
  - Forests
Seattle  sea to mountain
Home to . . . . .
University of Washington
Home to . . . . Starbucks
Home to . . . . . Microsoft
Home to . . . . . Amazon.com
Home to . . . . Ichiro - thanks!

- source: Associated Press
Outline of Talk

- Introduction to Seattle
- Elements of Sustainability
  - Water
  - Food
  - Wildlife
  - Forests

Seattle: The Evergreen City
Elements of Sustainability

- ecology - work with natural systems
- social - involve citizens
- partnerships - government, neighborhoods, NGOs
Natural Cycles

The natural water cycle

source: City of Auckland, NZ
Urban Cycles

source: City of Auckland, NZ
Outline of Talk

- Introduction to Seattle
- Elements of Sustainability
- Water
- Food
- Wildlife
- Forests
Water Management

Low Impact Development

example:
SEA Street
SEA = Street Edge Alternative
SEA Street - before

- source: Seattle Public Utilities
SEA Street - after

- source: Seattle Public Utilities
SEA Street - all project

- Benefits
  - stormwater management
  - pleasant community
  - rain garden

- source: Seattle Public Utilities
SEA Street - street park

- source: Seattle Public Utilities
SEA Street classroom & demonstration
Rain Garden

Rain Garden in a neighborhood setting

Location
Rain gardens are often located at the end of a roof gutter or downspout, as a buffer between the lawn and the street.

Plant Choices
Choose native plants based on need for light, moisture, and soil. They also add structure, height, and flower color for seasonal appeal and butterfly habitat.

Depth
A typical rain garden is between four and eight inches deep. This depth proportionate to surface area helps ensure water will infiltrate quickly and not pond.

Size
A rain garden is typically 5 to 10 percent of the size of the impervious surface that generates runoff.

Soil Amendments
A good soil mix for rain gardens is 65 percent sand, 15 percent topsoil, and 25 percent compost.
Rain Garden - parking lot
LID - parking lot

- source: Pierce County, Chamber Creek Properties
LID - 4 year growth

- source: Pierce County, Chamber Creek Properties
LID - Cistern
Cistern Steps (Seattle, Buster Simpson)
Environmental Art (water)
City Stream
Cistern
Steps
cascade
of water
Outline of Talk

- Introduction to Seattle
- Elements of Sustainability
- Water
- Food
- Wildlife
- Forests
Community Gardens

- P-Patch Gardens
- fresh organic food

- food planning & policy
P-Patch Gardens

- organic gardening only!
- 2,500 plots
- 6,000 urban gardeners
- 7-10 tons of food to food banks each year
- allotment gardens & market gardens
Market Gardens

- members subscribe
- weekly fresh food
Community Gardens as Parks

- good food & good design
- quality public spaces
Outline of Talk

- Introduction to Seattle
- Elements of Sustainability
- Water
- Food
- **Wildlife**
- Forests
Wildlife-Salmon

- salmon recovery
- habitat restoration

- better salmon streams = better human habitat
Urban Salmon Streams

- source: Trust for Public Lands
River & Stream Restoration
eco-restoration
volunteers/NGOs

EarthCorps
Outline of Talk

- Introduction to Seattle
- Elements of Sustainability
- Water
- Food
- Wildlife
- Forests
City Trees - Streets

- planning and management
- goal! increase canopy
people help plant & steward
City Trees - Natural Areas

- planning and management
- goal! restore natural systems
Invasive Species - English Ivy

- dispersal: roots, birds/berries

- source: Ceiridwen Terrill
Citizen Stewards

- volunteers
- NGOs (EarthCorps)
Outline of Talk

Elements of Sustainability

- Water
- Food
- Wildlife
- Forests

partners
natural systems
social systems
ecology = health
Seattle:
the Evergreen City

The End

Questions or Comments?