

Bellevue Parks & Community Services Department



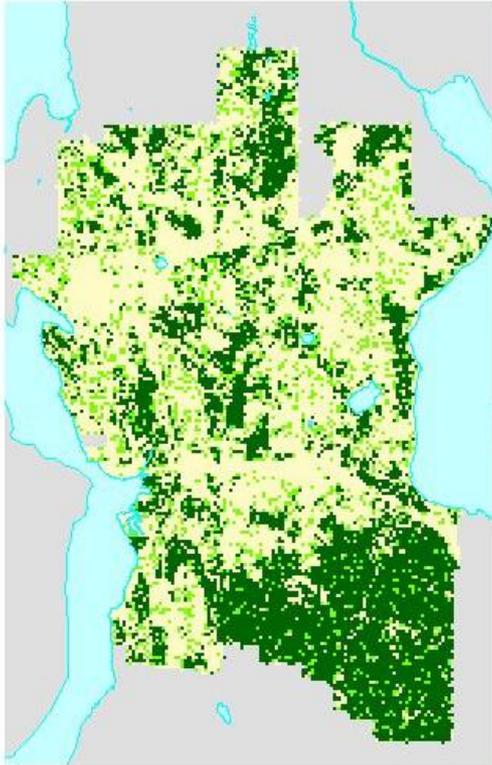
Natural Resource Management Division - March 8, 2016

Natural Resource Division

- **Staffing – 21 FTEs, 12 LTEs, Seasonal staff**
- **Program Areas**
 - **Forest Management**
 - **Street Tree and Arterial Landscape**
 - **Greenway, Trails & Farms**
 - **Community Parks & Visitor Centers**
 - **Water Conservation & Irrigation**

City-wide Canopy

Areas with heavy concentrations of tree cover (50% tree canopy) decreased 37%.



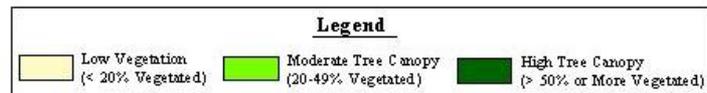
Landsat MSS 1972 30 Meter Pixel Resolution



Landsat TM 1986 30 Meter Pixel Resolution



Landsat TM 1996 30 Meter Pixel Resolution



City-wide Tree Canopy

1985 to 1996 – 12% decline

1996 to 2006 – 9% decline



Tree Loss 1985 - 1996
Landsat Analysis

Legend
■ Trees
■ Tree Loss 1985-1996
■ Water

Source: American Forests
Barbom
0 0.5 1 Mile
⊕ AMERICAN FORESTS

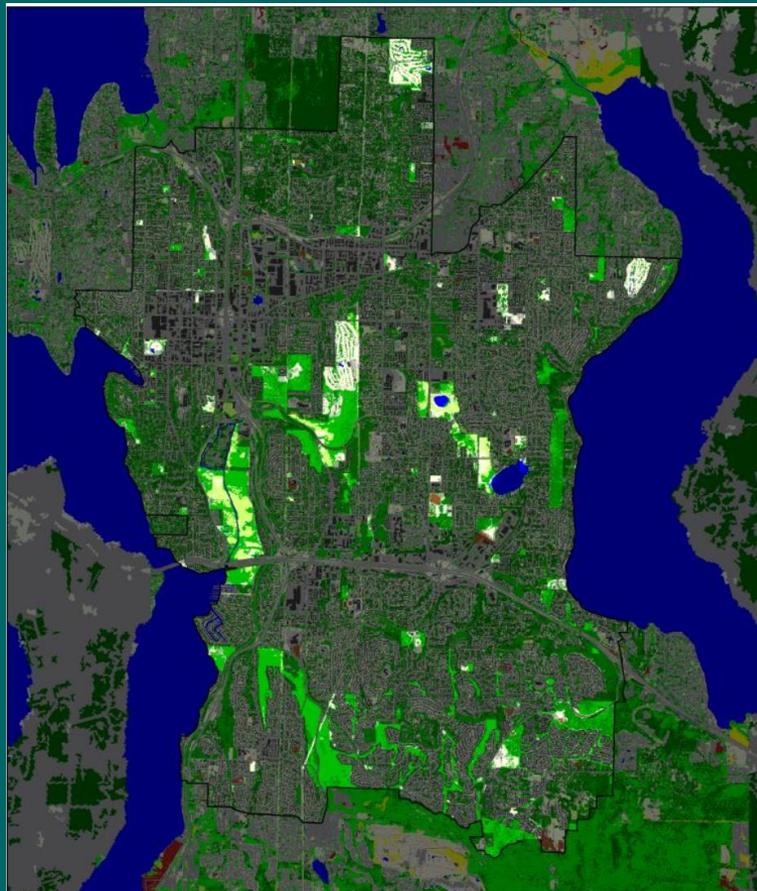


Tree Loss 1996 - 2006
Landsat Analysis

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■ Trees
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Source: American Forests
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Parks Tree Canopy



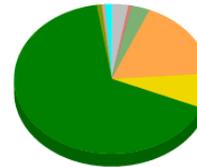
Parks Zoning

Legend	
Light Green	Deciduous Trees
Dark Green	Evergreen Trees
Yellow-Green	Shrub
White	Open Space
Brown	Bare
Grey	Paved Surfaces
Dark Grey	Buildings & Structures
Light Green	Trees over impervious
Dark Grey	Other Impervious
Blue	Water

Source: American Forests
 Date: 06/22/2009
 0 0.5 1 Miles



Analysis Report for Parks



Land cover areas are in acres.		
Impervious Surfaces	72.6	2.9%
Impervious Surfaces: Buildings/ structures	13.4	0.5%
Impervious Surfaces: Paved	73.9	2.9%
Open Space - Grass/Scattered Trees	445.4	17.6%
Shrub	188.4	7.4%
Trees	1,671.6	66.1%
Trees: Impervious understory	19.7	0.8%
Urban: Bare	17.8	0.7%
Water Area	26.9	1.1%
Total:	2,529.7	100.0%

Total Tree Canopy: 1,691.4 acres (66.9%)

Values and Benefits

- Stormwater - \$20,650,000

City-wide Tree Canopy

CITYWIDE - 7,708 Acres - 36.1% Canopy Cover

Urban Res.	Suburban Res.	Central Bus.	Commercial	Industrial	Parks	ROW
456 - 30%	4,932 - 35%	28 - 7%	465 - 21%	134 - 19%	1,691 - 67%	763 - 20%

Forest Management

Program Goals & Objectives



- Public Safety
- Forest Health
- Fish & Wildlife Habitat
- Recreation & Education
- Protect Water Quality
- Land Use Buffering

Forest Management Statistics

- 2,000 acres of forested open space, riparian corridors, wetlands and NGPA's
- Approx. 100 miles of shared property and ROW boundaries
- I-Tree Study (2011)
 - # of Trees = 257,000
 - Tree Cover = 74.3%
 - Pollution Removal = 136 tons/year (\$961,000)
 - Carbon Storage = 72,900 tons (\$1.34 million)
 - Carbon Sequestration = 2,400 tons/year (\$44,000/year)

Forest Management Program

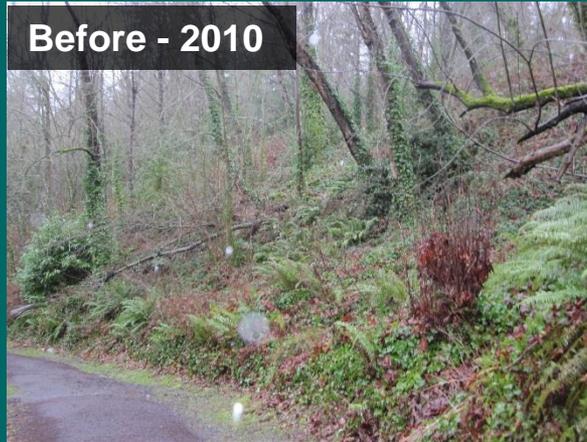
Service Delivery & Stewardship

- Customer Service
- Boundary Inspections
- Tree Mitigation
- Inventory
- Forest Enhancement
- Maintenance
- Outreach



Forest Management

Chism Park Forest Enhancement



- Restored 9 acres of forested area
- Planted 1,920 trees

Forest Management

Program Accomplishments

(Since 2010)

- Over 36 acres restored (23 sites)
- Over 4,700 trees planted
- 19 acres acquired (Patterson, Eastgate)



Street Tree and Arterial Landscape Program

- **10,000 + trees and 214 acres of formal landscape – Parks and Transportation**
 - **Information and Outreach**
 - **Bellevue's Street Trees**
 - **Trees of Bellevue**
 - **Guide to Planting Trees in Bellevue, WA**
 - **Preferred Tree List**
 - **Internal city subject area resource**

Streetscape & Arterial Landscapes Design

- **Comprehensive Plan**
- **Bellevue Parks & Open System Plan**
- **Enhance ROW & Urban Boulevards**



STREET TREES & ARTERIAL LANDSCAPES

Resource Base

- Maintain 11% of formal City ROW landscaping
- Transportation CIP
- Developer Installed Frontage Improvements



STREET TREES & ARTERIAL LANDSCAPES

Program Activities

Landscape and Tree Maintenance

- Contracted landscape maintenance
- Pruning
- Watering
- Site enhancement & renovation
- Tree replacements
- Subject area resource



STREET TREES & ARTERIAL LANDSCAPES

Program Activities

Transportation CIP Project Coordination

- Design & Plan Review
- Construction Inspection
- Standards & Specification Development
- On-site consultation



STREET TREES & ARTERIAL LANDSCAPES

Program Activities

Utility Coordination

- Review power and telecommunication franchise tree trimming
- Construction impacts to landscapes & irrigation



Greenways and Trails Program

Program Goals

- Provide recreation opportunities for walkers, bicyclists, joggers and birdwatchers.
- Provide system connectivity and accessibility to Parks, Open Spaces and surrounding neighborhoods through a network of 85 miles of trails



Greenways and Trails Program Stewardship

- Customer Service
- Trail Maintenance
- Trail Design and Construction
- Trail inventory, Wayfinding and Mapping
- Working with Volunteers through outreach (Arbor Day, Stewardship Saturdays and Eco-Fridays)

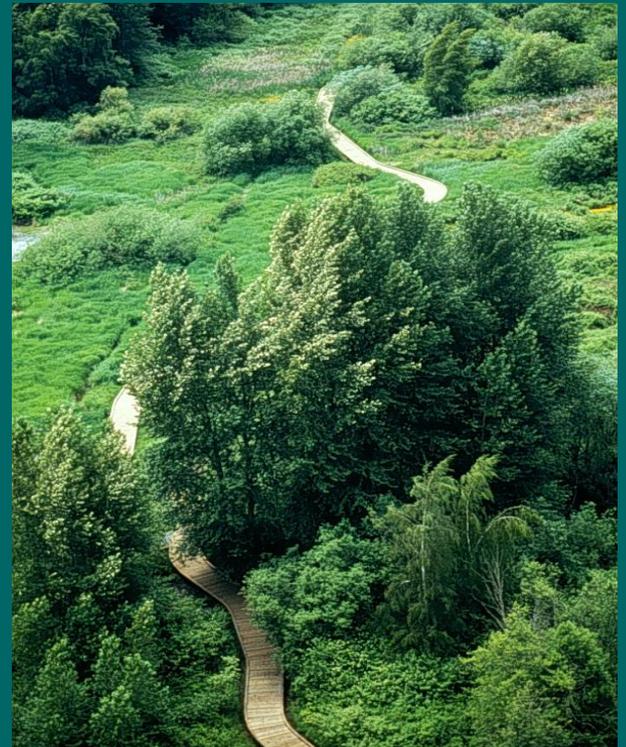


Greenways and Trails Program

Lake to Lake Trail & Greenway

The Lake to Lake Trail and Greenway is the backbone to over 60 miles of multi- use trails connecting Lake Washington to Lake Sammamish.

- The Trail and Greenway provides access to the City's pristine Park & Open Space System.
- It captures the very essence of Bellevue's vision of a "City in a Park"
- Provides interconnectability, accessibility and recreational opportunities to the citizens of Bellevue

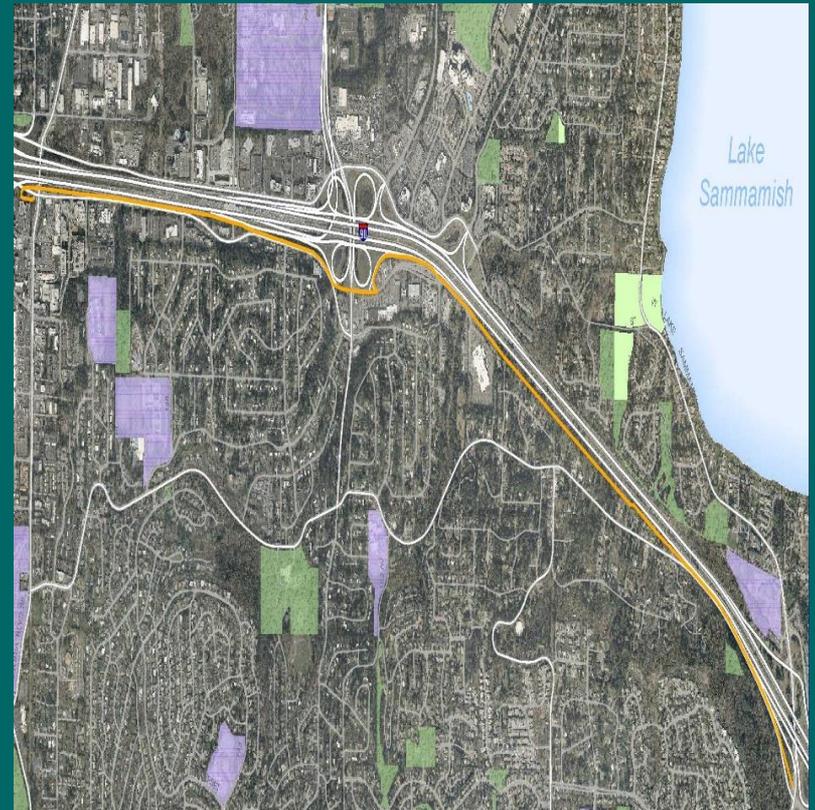


Greenways and Trails Program

Mountains to Sound Greenway

A regional Trail system that stretches from the Puget Sound to the Cascade Mountains.

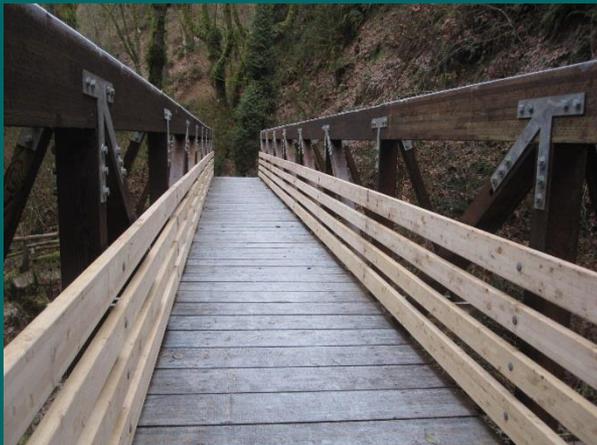
- Enters Bellevue at Enatai Park crosses Mercer Slough and currently ends at Factoria.
- Eastgate Gap Project (3.6 mi missing link from Factoria to Lakemont Blvd)
- Chris Masek in Transportation is part of the team to develop this link .



Greenways and Trails Program

South of I-90 Greenway System

Coal Creek
Natural Area
Primrose Loop
120 ft. bridge
construction



High lead system
used to get materials
to bridge site 350 ft.
below



Greenways and Trails Program

Patterson Property Trail Project



- Newly acquired Patterson Property in the Newport Hills area
- Half mile nature loop trail will provide a natural woodland experience and walking access to the 5 acre natural area
- Trail construction by in house crew and volunteers

Nature Parks & Visitor Centers

Instilling Community Stewardship Through Citizen Education and Involvement

- **Environmental Education and Interpretation Program**
- **Volunteer Program**
- **Community Farms and Garden Program**
- **Summer Ranger Program**
- **Well KEPT Program**

Nature Parks & Visitor Centers

Environmental Education and Interpretation

- MSEEC, LCVC, LHGB Ranger Station and Winters House

- **51,580 total visits**

- Environmental Programs

- *Family Discovery and Adult Enrichment Series*

- *PSC Partnership at MSEEC*

- *BYWH Demonstration Site*

- **17,116 total participants**



- Interpretive Signs and Kiosks

Nature Parks & Visitor Centers Volunteer Program

- Stewardship Saturdays
- Eco-Fridays
- Arbor Day Event
- Park Stewards
- Master Naturalists
- Partnerships
 - 1,441 volunteers
 - 16,921 hours
 - \$301,902 savings



Nature Parks & Visitor Centers

Community Farms and Gardens Program

- Mercer Slough and Larsen Lake Blueberry Farms
- LHGB Ag Land
- Seasonal Produce Stands
- P-Patch Program
- Master Gardener Demonstration Garden



Nature Parks & Visitor Centers Park Ranger Program

- 6 Seasonal Summer Rangers
- Memorial Day – Labor Day
- 7 days/week; 8am – 12pm
 - *4,927 parks patrols*
 - *1,826 assistance contacts*
 - *55,929 good will contacts*



Nature Parks & Visitor Centers

Well- KEPT Program



- 10 Seasonal Youth Employment Positions
- Job Skills and Career Development Training
- Environmental Focus
 - removed 70 yards of noxious vegetation from natural areas
 - installed 725' of new trail

Water Conservation & Irrigation

- 79 developed parks sites
- 52 streetscape sites
- 225 irrigation controllers
- 2,250 separate zones
- Central control (Maxicom)
- ET based watering
- Annual backflow testing
- Plan & design review

