Tree Preservation, Management and Urban Forest Stewardship: A presentation to officials from Canberra, Australia

July 24, 2019

History

• “Oswego” founded in 1847
• Iron Smelter started production in 1867
• Narrow gauge railroad in 1886
• Oswego Lake Country Club 1924
• Noted architects design fine homes in the 1930s and 1940s
• Residential development accelerated in 1940s and 1950s
• Name changed to Lake Oswego in 1960
Demographics

- Incorporation: 1910
- Area (square miles): 11.4
- Oswego Lake (acres): 405
- Council/Manager City Government
- Population: 38,215
- Median Resident Age: 45.3
- Registered Voters: 29,198
- Occupied Households: 16,293
- Neighborhood Associations: 24
- Citizen Advisory Boards: 11
- Community Volunteers: 600+

Culture & Recreation

<table>
<thead>
<tr>
<th>Library</th>
<th>Public Golf Courses</th>
<th>Public Indoor Tennis Facilities</th>
<th>Adult Community Center</th>
<th>Historic Iron Furnaces</th>
<th>Parks/open space acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>625</td>
</tr>
</tbody>
</table>

Public Safety

- Number of police officers: 42
- Number of patrol units: 14
- 911 calls answered: 21,546
- Fire stations: 4
- Number of fire personnel: 52

City General Obligation Bond

- Standard & Poor’s: AAA
- Moody’s: Aaa
- General obligation debt: $7.6 million
- General obligation debt limit: $331.2 million

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1936
Urban & Community Forestry Program

Managing the health and viability of the urban forest through:

- Regulations
- Voluntary Stewardship
- Education
- Community Engagement

Urban & Community Forestry Plan

Stewardship & Education:
- Host community events and educational workshops
- Foster Arbor Week events
- Celebrate Heritage Trees

Forest Health
- Clarify responsibilities for street tree maintenance
- Conduct a street tree inventory
- Develop a street tree replacement program

Forest Size
- Promote large canopy street trees
- Increase canopy in open spaces
Urban & Community Forestry Plan

Tree Maintenance
- Create an approved street tree list
- Improve growing space, including the use of structural soils

Invasive Species
- Make invasive plant removal a part of community outreach efforts
- Integrate invasive plant removal in park management

Program Integration and Funding
- Quantify the benefits of trees
- Link community forestry with the Storm Water Management Plan
- Use grants to fund new initiatives

State of the Forest Report

City-Wide Canopy Cover 44%
  Public Lands 62.8%
  Street Trees 13%
- Approximately 40,300 Street Trees
- 25% are either bigleaf maple and Douglas-fir
- More than 75% are 12” or smaller in diameter
- Nearly 80% were classed in “Good” condition
- Utility line and infrastructure conflicts
- English ivy is the biggest problem
Street Tree Benefits Quantified

- Lake Oswego’s Street Trees:
  - Remove 32,000 pounds of airborne pollutants annually;
  - Store about 51,000 tons of carbon;
  - Provide electricity savings to power over 100 homes for an entire year and natural gas savings equivalent to the average annual use of almost 70 homes combined; and
  - Intercept about 50 Olympic-size swimming pools worth of rainwater annually.

Management Considerations

- Invasive Species
- Existing Trees
- Diversity
- Right tree in the right place
Urban & Community Forestry Program

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Sensitive Lands
Protected Riparian Area

To preserve the wooded character of the City and protect trees as a natural resource by:

- Regulating the removal of trees
- Protecting trees during construction
Tree Removal

**Nine Permit Types:**

- Invasive
- Dead Tree
- Hazardous Tree
- Emergency Tree
- Type I
- Type II
- Verification
- Forest Management
- Topping

A healthy, non-invasive tree over 15” diameter considered significant to the neighborhood due to size, species, or distinctive character, or the only remaining tree on a property.
Mitigation for Tree Removal

New trees must be planted...

- To replace trees removed by Type II or Verification tree removal permit types; or,
- If required by a condition of approval

Planting Standards:
- Ratio of one tree planted for each tree removed
- Except 2:1 for “significant tree” removal for
- Native species must be replaced with native species
- Minimum 6’ tall evergreen tree or 1.5” caliper deciduous tree
- Except RC/RP/HBA reduced to 2’ tall evergreen or 0.5” caliper deciduous
- On-site, off-site, or payment in lieu

Type II Tree Removal Apps Online
Type I and II Permits Issued 2014-2018

Who Are Applying for Type II Permits?
Who Removes the Most Type II Trees?

![Graph showing tree removal by type and year]  
- **SF Owner:** 490 (2015), 386 (2017), 268 (2018)  
- **Other:** 78 (2015), 79 (2017), 164 (2018)

What Species of Trees are Being Removed Under Type II Permits?

- **2017:**  
  - Douglas-fir: 24%  
  - Maple: 16%  
  - Cypress: 16%  
  - Pine: 4%  
  - Cedar: 9%  
  - Ornamental Fruit: 6%  
  - Oak: 9%  
  - Other: 22%

- **2018:**  
  - Douglas-fir: 24%  
  - Maple: 17%  
  - Cypress: 8%  
  - Pine: 7%  
  - Cedar: 6%  
  - Ornamental Fruit: 15%  
  - Oak: 4%  
  - Other: 17%
Decisions and Appeals of Type II Apps

<table>
<thead>
<tr>
<th>Type II Permits</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # Applications</td>
<td>374</td>
<td>264</td>
<td>395</td>
<td>380</td>
<td>324</td>
</tr>
<tr>
<td># Apps Approved</td>
<td>360</td>
<td>245</td>
<td>374</td>
<td>343</td>
<td>274*</td>
</tr>
<tr>
<td># Apps Denied</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td># Apps Withdrawn, Voided, or on Hold</td>
<td>13</td>
<td>19</td>
<td>16</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td># Apps Appealed</td>
<td>2</td>
<td>4 (2 withdrawn)</td>
<td>2 (1 withdrawn)</td>
<td>4 (1 withdrawn)</td>
<td>2</td>
</tr>
</tbody>
</table>

*As of April 2019, there were 18 Type II applications from 2018 that had been tentatively decided, but were still pending final decision.

Tree Protection

**Required for:**
- Development permit
- Building Permit
- Plumbing Permit

When a tree is on or near the construction area
Tree Protection Measures

- Civil violation
- Separate offense for:
  - Each cut tree
- Prime facie evidence
- Remedies
  - Enforcement fee
  - Restoration fees
  - Citations
  - Arborist prescribed treatments
  - Cumulative remedies
Urban & Community Forestry Program

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Natural Area Restoration
Natural Area Restoration

Caring for the Urban and Natural Environment

Natural Areas

- 99,654 native plants planted
- 255 total acres of invasive species removed

Invasive Species Removal Program

- 77 acres of restoration
- 6.5 acres of invasive treatment

Habitat Enhancement Program

- 167 acres of restoration
- 100,661 native plants installed

Natural Areas

- 3,065 total volunteer stewardship hours
- 46 coordinated stewardship work parties
- Friends groups for natural areas
  - 9 groups
  - 520 volunteers
  - 957 hours
- High school supported groups
  - 6 events
  - 152 volunteers
  - 253 hours

Technical Assistance and Incentives

Program Totals (2018)

- Total Assessments: 451
- Total Certifications: 187
- Total Acres Enrolled: 128.7
- Community Demonstration Sites: 21
- Discounted native plants sold annually: 19,000
Heritage Trees

- Heritage Tree Program:
  - Established in November 1997
  - Recognizing that trees may be considered important to the community because of unique characteristics or values.

- PARKS Board Responsibility:
  - To review all Heritage Tree nominations at a public meeting; and
  - Vote to designate trees complying with designation requirements.

- Designation Criteria:
  - The tree or tree grove is of landmark importance due to age, size, species, horticultural quality or historic importance; and
  - The tree is not irreparably damaged, diseased, hazardous or unsafe, or the applicant is willing to have the tree treated by an arborist and the treatment will alleviate the concern.

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Heritage Tree Statistics

![Bar chart showing private and public ownership of heritage trees.](chart.png)

- Private: 24
- Public: 14
Heritage Tree Statistics

Quantity Designated by Year

Heritage Tree Statistics

Percent by Species

Douglas fir 21%
Oregon white oak 18%
Giant sequoia 11%

Western redcedar 3%
Sycamore 3%
Sugar maple 3%
Scarlet oak 2%
Saucer magnolia 3%
Ponderosa pine 3%
Pacific dogwood 3%
Madrone 3%
Ginkgo 3%
European beech 3%
European white birch 3%
Decidous cedar 3%
Camperdown elm 3%
Coast redwood 5%
Black walnut 5%
American elm 5%

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Heritage Trees of Lake Oswego

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Arbor Week
Forestry at the Farmers’ Market

Poetry & Art Contests
Tree City USA

Four TCUSA Standards:
• Tree Board
• Tree Ordinance
• Minimum $2 per capita tree planting and maintenance expenditure
• Annual Arbor Day proclamation and celebration

Thank you for visiting Lake Oswego!
Tour Itinerary