

CARBON STORAGE

Trees absorb and retain carbon dioxide from the atmosphere. Young, fast growing trees absorb carbon at the fastest rate. Larger, mature trees store the most total carbon. About 51,000 tons of carbon are stored in Lake Oswego's street trees alone—that's the same amount of carbon that would be emitted if you drove your car from Lake Oswego to the sun, 93 million miles away.



Black Cottonwood

ENERGY CONSERVATION

When planted strategically, trees shade and cool houses in the summer and block wind in the winter, reducing the need for both air conditioning and heating. Electricity saved annually from trees in Lake Oswego is 1,239 MWh (megawatt hours), or enough to power over 100 homes for an entire year. Natural gas savings are 37,221 therms annually—the average annual usage of almost 70 homes combined.

WATER QUALITY

Trees play a crucial role in protecting water quality. Leaves and needles break the force of rain, slowing the movement of water and reducing water pollution, runoff and flooding. Lake Oswego's street tree canopy intercepts 31,581,200 gallons of water per year (about 50 Olympic swimming pool's worth). Lake Oswego trees also prevent erosion, holding the soil in place on steep slopes. Their shade cools stream temperature, which is critical for aquatic life.

WILDLIFE HABITAT

Urban forests provide wildlife habitat and serve as a corridor between larger patches of habitat. Habitat corridors in the city of Lake Oswego connect the Willamette River shoreline, Tryon Creek State Park, and undeveloped lands in Stafford triangle. Living trees, standing dead trees (snags) and downed wood act as breeding, nesting, and hunting areas for a wide variety of animals, particularly migratory birds.



Great-horned owl (by Ecobirder)

REAL ESTATE VALUES

Numerous economic studies show that trees add value to your property. In Lake Oswego, more than \$1.9 million in property resale value per year is due to the presence of trees. According to Northwest Builder Magazine, one mature tree can add approximately \$6,000 to a property's value.



Oregon White Oak, Heritage Tree
The largest oak identified in Lake Oswego

COMMUNITY HEALTH BENEFITS

Trees help make Lake Oswego healthy and peaceful. Not only do they provide oxygen, views of trees have beneficial effects on the mood of office workers and extend the human lifespan. Studies have shown that hospital patients heal more quickly when their hospital room overlooks trees. Trees also provide recreational and educational opportunities. People prefer to be outside around trees, encouraging exercise. The presence of trees has been shown to reduce crime.

STATE OF THE URBAN FOREST

Lake Oswego's urban forest bestows great beauty and distinction to our City. Trees increase our quality of life, economy, health, and environment. In 2009, Lake Oswego's *State of the Urban Forest Report* calculated the benefits of trees. This is what we discovered.



The Peg Tree, Douglas fir

AIR QUALITY

Not only do trees provide oxygen, they remove 32,000 pounds of airborne pollutants (including ozone, carbon monoxide, sulphur dioxide, and particulate matter) annually in Lake Oswego. The pollution absorbed by 300 trees will counterbalance the air pollution produced by one person over their entire lifetime.

MOST BENEFICIAL TREES TO PLANT IN LAKE OSWEGO

The State of the Urban Forest Report found that Lake Oswego needs more young conifers.

Douglas-fir

Native to the region and fast growing, Douglas-fir rapidly absorb carbon dioxide, and their dense evergreen needles help protect our streams and stormwater systems. Plant in a sunny spot, at least 15 feet from any buildings and away from overhead wires.

Other Beneficial Conifers:

- western redcedar
- Willamette Valley ponderosa pine

Beneficial Deciduous Trees:

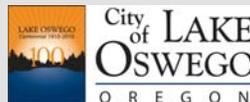
- Oregon white oak
- bigleaf maple
- black cottonwood



Heritage Tree named "Doug," Lake Grove Elementary School

Threat to trees:

English ivy is the biggest threat to trees besides human encroachment. It is recommended to remove English Ivy from trees and property.



The Benefits of Trees in Lake Oswego