

CITY OF WOODLAND

URBAN FOREST RESOURCE

2018



The Urban Forest

An Urban Forest refers to all public and private trees and shrubs that grow within an urban area. Woodland's urban forest covers 1,394 acres and provides an average 15% canopy cover across the community. When all possible planting sites are considered, Woodland has the potential to increase canopy cover to approximately 50.5%.

Woodland's urban forest is storing 148,194 tons of carbon (CO₂) in leaves and woody biomass, valued at over \$5.2 million. Each year trees sequester an additional 7,496 tons of CO₂, valued at \$264,288.

The urban forest includes more than 14,000 publicly-owned and managed trees. This subset of the overall urban forest provides more than 150 acres of canopy (2% of overall land cover). To date, public trees have sequestered 9,011 tons of CO₂ (\$135,158). The majority (89%) of public trees are in fair or better condition. Replacement of Woodland's public tree resource with trees of similar size, species, and condition, would cost nearly \$30.5 million.

Diversity in an urban forest is important to improve resilience and reduce the impact from pests and disease. Woodland's public tree inventory includes more than 170 unique species. The top 3 most prevalent species represent 28% of the overall public tree resource. Forestry experts recommend that no species represent greater than 10% of the overall forest. In Woodland, London planetree (*Platanus × hispanica*) and Chinese pistache (*Platanus × hispanica*), which represents 10% of the overall population.

Annual Community Tree Benefits

- \$1.7 million annually in overall benefits from community trees, an average of \$117 per tree.
- \$1.2 million in benefits to property values, health, aesthetics, and socioeconomics, an average of \$85 per tree.
- \$264,269 in energy savings through shade and wind breaks, an average of \$19 per tree.
- 782 tons of CO₂ sequestered, valued at \$11,723 for an average of \$1 per tree.
- 3.1 tons of air pollutants removed, valued at \$118,626 for an average of \$8 per tree.
- 7.2 million gallons of stormwater intercepted, valued at \$56,051 for an average of \$4 per tree.
- For every \$1 invested in public trees, the community receives \$2.51 in benefits.

