

Appendix E: Trees

E.1 Preservation, Maintenance and Growth of the Tree population

The current tree population of Los Osos is decreasing drastically due to recent drought conditions, disease, decommissioning of septic systems and neglect. With the loss of trees, it is also a loss of part of the community's character. Large populations of Monterey Cypress, Monterey Pine, Italian Stone Pine, Coast Live Oak and Eucalyptus have declined. Being an asset to the community, trees conserve energy, clean the air, sequester carbon, provide storm water management, beautify the community, provide shade and improve the environmental, economic and quality of life in Los Osos. Therefore, understanding trees are a valuable resource to our community, it is essential that every effort be made to protect, maintain and expand our urban forest both on public and private lands. The County of San Luis Obispo will work with the community and local agencies to increase and support tree planting and preservation goals.

E.2 Benefits of Trees

E.2.1 Economic benefits

The urban forest contributes to the well-being of the residents of Los Osos in many ways. Trees add value to adjacent homes and business. Research shows that businesses on tree-scaped streets show 20% higher income streams. Realtor based estimates of street tree versus non-street tree comparable streets relate a \$15-25,000 increase in home and business value. This in turn adds to the tax base and operations budgets of the County.

E.2.2 Environmental benefits

Trees contribute to improving our air quality, water quality, and providing wildlife habitat. Trees leaf and branch structure absorb the first 30% of most precipitation, allowing evaporation back into the atmosphere. This moisture never hits the ground. Another 30% of precipitation is absorbed back into the ground and taken in and held onto by the root structure, then absorbed and transpired back to the air. Trees provide rain, sun, heat and wind protection shielding wildlife, humans and structures. Tree coverage offers shade from direct sunlight, shelter from the rain and lowering the air temperatures by 5-15 degrees. Trees and shrubs improve air quality by absorbing carbon dioxide and other pollutants, removing dust and sand particulates, and releasing oxygen. Carbon dioxide is absorbed for the photosynthetic process, but other emissions such as nitrogen oxides, carbon monoxide, and volatile organic compounds are reduced significantly from the proximity to trees. The leaves and shrubs filter the air from moving dust and sand particles. Urban street trees provide a canopy, for birds to enjoy, a root structure and setting important for insect and bacterial life below the surface; at grade for pets and people to enjoy, all of which connects the urban human to the natural environment.

E.2.3 Human benefits

Trees provide oxygen for humans. They release oxygen when they use energy from sunlight to make glucose from carbon dioxide and water. One large tree provides a day's supply of oxygen for up to four people. It is an indisputable fact that humans need trees to breathe and survive.

E.2.4 Social benefits

Trees seem to make life more pleasant in a couple of ways. They convert the streets, parking, and buildings into a more aesthetically pleasing environment. The paved roads, parking lots and structures that create cities are a grey visual and harsh environment without the trees and shrubs to soften and relieve the eyesore. Trees are an integral part of traffic calming measures. Trees also improve health, emotion, and wellbeing for all ages. Studies have shown that trees can reduce stress, and that views of trees can speed the recovery of surgical patients. The advantage of trees expands past their physical benefits, by creating a more calming, visually pleasing environment for all to gain from.

E.3 Areas for Consideration for Tree Corridors

- South Bay Boulevard from Los Osos Valley Road to Santa Ysabel
- Los Osos Valley Road from South Bay Boulevard to Pecho Valley Road at Rodman Drive
- El Moro Street from 3rd Street to Santa Ysabel
- Santa Ysabel from South Bay to Pasadena
- Intersection of South Bay Boulevard and Santa Ysabel
- The intersection of South Bay Boulevard and Los Osos Valley Road
- Santa Ysabel route from 7th to Ramona Avenue to 9th Street to Los Osos Valley Road
- 10th Street from Santa Ynez to Los Osos Valley Road