



# WATER-WISE TREE CARE FOR THE SAN DIEGO REGION

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## WHY SHOULD I WATER MY TREES?

- Trees are a vital part of your landscaping. They provide numerous economic, environmental, and social benefits. They are also the most expensive element of your landscape in terms of investment and time. A tree that dies can take 20 years or more to replace.
- According to The National Arbor Day Foundation, the presence of properly planted and maintained trees can increase a home's resale value by as much as 15%.
- Tree canopies intercept rain fall, increasing storm water retention.
- Trees provide shade to walkways, parks, and buildings, reducing energy costs.
- Trees improve air quality by removing pollutants. Two mature trees produce enough oxygen for a family of four for one year.
- Trees also conserve water through saving energy; power plants are one of the highest consumers of water in our region.

## HOW MUCH WATER DO MY TREES NEED?

- The species of tree, age of tree and type of soil influence how much water the tree needs. Some types of soil hold water longer than others, and watering young trees is different from water mature trees.
- For new trees: Approximately 5-10 gallons of water weekly is adequate depending on weather conditions. Also you can build a 4 inch high circular ring of soil around the root ball (usually 18-24 inches away from the trunk is sufficient) to contain the water.
- For well-established, mature trees: Water when the top 6in of soil around the tree has dried out. Mature trees should receive water in several places around the tree at least half way between the trunk and edge of the tree canopy (drip line). Water using either a slow dripping hose or drip irrigation and do not allow water to run off.
- **Note – If you are removing or not watering turf grass, don't forget your trees still need water.**

## HOW DO I WATER MY TREES AND STILL CONSERVE WATER?

- Slow, infrequent, deep soaking. Water supply rate should not exceed water absorption (do not allow water to run off).
- Convert existing systems to drip, low flow bubble heads, or micro spray systems for shrubs and trees, not standard spray heads. Trees should be irrigated separately from turf and landscaping as water needs vary.
- Repair existing irrigation system, fix leaks. Inspect system annually to clear emitters and ensure proper operation.
- Include rain sensors and automatic shutoff valves for irrigation controls or manually shut off water during / after rain.
- To test if your soil has enough moisture, take a handful of soil and squeeze it tightly, then release the pressure. If the soil retains its shape, there is adequate moisture in the soil and you do not need to water. If it crumbles and falls apart, you need to water. If it oozes water, the moisture content is too high.

## HOW ELSE CAN I CONSERVE WATER?

- Mulch, Mulch, Mulch! Proper mulching techniques will significantly reduce water evaporation.
- Important! Keep mulch 4-6 inches away from the tree trunk. Mulch should be placed 2-4 inches deep around the tree and out to the edge of the canopy. Organic mulch such as wood chips should be used to keep soil temperatures lower.
- Mulching is one of the easiest ways to save water and promote healthy root systems. Proper mulching helps maximize water conservation in hot weather and further increases storm water retention.
- During severe drought, water only enough to sustain the tree rather than providing excess water to promote growth.

## TEN DROUGHT TOLERANT TREES AND ANNUAL ENVIRONMENTAL BENEFITS WHEN MATURE

- If planting new trees under overhead power lines, make sure the trees are compatible ( less than 25 feet at maturity) and always plant the right tree in the right place.
- The benefit values below are approximations based on mature trees using the National Tree Benefit Calculator.

Tree	Scientific Name	Storm Water Intercepted (gal)	Energy Savings (Kw Hrs)	Carbon Stored (lbs)
Australian Willow	<i>Geijera parviflora</i>	324	27	9
California Sycamore	<i>Platanus racemosa</i>	1260	124	149
Canary Island Pine	<i>Pinus canariensis</i>	812	66	137
Crape Myrtle	<i>Lagerstroemia indica</i>	320	42	12
Jacaranda	<i>Jacaranda mimosifolia</i>	375	49	10
Melaleuca (paper bark)	<i>Melaleuca linariifolia</i>	324	27	9
Coast Live Oak	<i>Quercus agrifolia</i>	598	53	246
Peppermint tree	<i>Agonis flexuosa</i>	324	27	9
Western Redbud	<i>Cercis occidentalis</i>	320	42	12
Torrey Pine	<i>Pinus torreyana</i>	1094	99	178

### FOR MORE INFORMATION:

SelecTree – <http://www.selectree.com>

Calif. Urban Forest Council – <http://www.caucf.org>

Arbor Day Foundation – <http://www.arborday.org>

Tree Benefit Calculator – <http://www.treebenefits.com>

SDG&E Tree Safety Website – <http://sdge.com/safety/treesafety>

City of San Diego Water Department - <http://www.sandiego.gov/water>

San Diego County Water Authority – <http://www.sdcwa.org>

Landscape Watering Calculator - <http://apps.sandiego.gov/landcalc/start.do>