Strategies (continued)

4. Community Involvement & Funding:

a. Municipal decision-makers are encouraged to increase spending on urban tree maintenance to maximize tree health and their indirect benefits to communities.

b. Providing proper training and value to the workforce appointed for healthy UTC maintenance is crucial for efficient cooperation between local forestry and parks departments.





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SUPPLY SECURITY

Stormwater Management via NBS #3

How Do Urban Tree Canopies (UTCs) Contribute to **STÖRMWATER MANAGEMENT?**

Rainfall Interception: Tree canopies intercept rain before it hits the ground.

- Reduces volume/speed of runoff
- Delays evapotranspiration process

Infiltration Enhancement: Tree roots help loosen and aerate soil.

- Increases capacity to absorb water
- Reduces surface runoff
- Promotes groundwater recharge

Pollution Filtration: Trees and the soil around them act as natural filters.

- Captures and breaks down pollutants (heavy metals, nutrients, & sediments)
- Prevents contaminant access to storm drains/waterways

Reduced Erosion: Trees help prevent erosion.

• Stabilizes soils and slows runoff, especially on slopes and along streambanks.

Stormwater System Relief: By managing water at the source, UTCs reduce the burden on stormwater infrastructure.

 Lowers risk of system overflow and water treatment costs.

Successful Urban Forestry Initiatives in SoCal









Challenges of Maintaining URBAN TREE CANOPIES

Urban areas tend to be densely populated with buildings, roads, and other infrastructure that can limit the amount of space for trees to grow. Moreover, the soils in urban landscapes are often compacted by construction and heavy foot traffic, further inhibiting root growth and nutrient uptake. Many cities, unfortunately, lack adequate funding and resources for proper tree selection and maintenance, which can hinder the longterm health of urban tree canopies. Choosing a location for UTC installation requires much preparation and research beforehand as failing to do so can lead to unsustainable competition for water, sunlight, and nutrients amongst neighboring vegetation. Most urban trees in California cities are medium water users with reduced drought resilience based on historical planting patterns (California State Water Resources Control Board). The careful consideration of local ordinances and development density is crucial for efficiently balancing the needs of municipalities and private homeowners with the health of urban trees.

Strategies for **Increasing Urban Tree** PLANTING & **MAINTENANCE**

1. Planning & Policy:

- a. Include forest canopy targets in citylevel strategies and plans.
- b. Connect local policy to state-level regulations and goals on climate mitigation. Building partnerships between residents and their respective governments can help leverage capacity and improve knowledge and public support for urban forestry.
- 2. Planting: Be intentional with the specific tree species you wish to plant in your neighborhood. Native plant species are always recommended, but some factors to consider while designing your UTC are heat stress tolerance, drought tolerance, sunlight exposure requirements, pest resistance, soil compaction, and root systems.
- 3. Maintenance: Proper watering, mulching, and damage prevention practices are key to the longevity of urban trees. Adequate pruning and tree removal practices can also help to ensure long-term tree health and decrease the potential for property damage.