SELECTION AND PLACEMENT ISSUES

BENEFICIAL TREE SELECTION & PLACEMENT



Large tree on small right of way obstructing sidewalk and traffic intersection and growing into power lines



Tall tree had to be heavily pruned due to powerline



Tree on slope has exposed roots due to erosion and needs heavy staking for stability



Higher water use tree died during drought. Low water use tree survived



Tall conifers placed between building and overhead power lines with ample room to grow to full size



Small stature whitethorn acacia appropriate for planting under powerlines

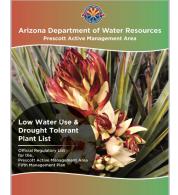


Arizona cypress in public space with ample space to reach maturity without heavy pruning



Example tree placement based on solar angles, heat tolerance, water needs and other factors Source:

https://tucsoncleanandbeautiful.org/n ative-trees-for-tucson/



Low water use plant lists are available throughout Arizona Source: https://new.azwater.gov/conservati on/landscaping



Map of projected New Mexico climate zones by the year 2100. Climate resilient plants lists are available throughout New Mexico

Source: https://treenm.org/wp-content/uploads/2022/08/Climate-Ready-Trees-Zone-Lists-6.23.22.pdf

URBAN TREE THREAT Tree selection and placement issues

ISSUES

- Tree canopies growing into overhead utility lines
- Trees obstructing sidewalks, streets, intersections or other access
- Trees planted on mounds resulting in exposed roots and other issues
- Higher water use trees

MANAGEMENT OF EXISTING TREES

- Use certified utility tree trimmers to prune trees that have reached or may reach powerlines
- Prune trees as needed to provide necessary access
- Stabilize eroding slopes or mounds where trees are planted to prevent further soil erosion and provide more solid footing for trees
- Assess tree condition during extreme weather/climate conditions and provide additional water or other assistance to keep trees healthy

STRATEGIES FOR SELECTING AND PLACING NEW TREES

- Learn tree characteristics and their suitability to basic site conditions including sun/shade patterns, prevailing wind and storm patterns, heat and cold extremes, soil type, drainage, taking into account user needs for evergreen and/or deciduous species, solar panel access, etc.
- Anticipate future changes in climate including average and extreme high/low temperatures, rainfall and other key climate conditions
- Learn about heat- and drought-tolerant species for placement in hot, harsh urban environments, including native southwest US tree species
- Take into account insect and disease infestations that are present or potentially coming to an area, and choose species that are resistant, especially in locations where infested trees have been removed
- Learn tree water needs and determine how to consistently meet these needs. If water supply may be scarce due to drought and/or limitations on potable water use, select drought tolerant, low water-use species, including native southwest trees
- Place trees in locations that provide sufficient space for their mature canopy size, taking into account:
 - Presence of underground and overhead utility lines
 - Access that will be needed for sidewalks and streets
 - Safe view lines that will be needed for pedestrian and drivers
 - Presence of buildings and walls, distance to nearby trees

REFERENCE AND RESOURCE WEBSITES - TREE SELECTION AND PLACEMENT

- https://wwv.isa-arbor.com/store/product/104/
- https://new.azwater.gov/conservation/landscaping
- https://dffm.az.gov/sites/default/files/media/APS%20Right%20Tree%20Right%20Place%20Brochure-EN.pdf
- https://www.aztrees.org/Resources/Documents/Planting_Guides/RightTreeRightPlace_guide.pdf
- https://treenm.org/wp-content/uploads/2022/08/Climate-Ready-Trees-Zone-Lists-6.23.22.pdf
- https://www.nature.org/content/dam/tnc/nature/en/documents/Climate-Ready-Trees-Report-Nov2020.pdf
- https://www.youtube.com/watch?v=EI5HbSKm-CQ



