



Campus Tree Care Plan



Purpose

The CSU Bakersfield (CSUB) Tree Care Plan's (TCP) purpose is to provide goals, guidance, and standardization regarding planting, selection, and maintenance of trees at the CSU Bakersfield physical main campus as well as advance a culture of tree stewardship among the student, staff, faculty, and surrounding community of CSU Bakersfield.

This includes the coordination and approval of tree removal, the protection of trees during construction, and the proper selection, planting, and upkeep of new trees.

The TCP is not intended to be an exhaustive representation of CSU Bakersfield and/or CSUB Capital & Facilities Management Services' administrative procedures. The TCP provides tree guidance that should be paired with the existing campus protocols for state-run facilities. If any goal or policy in the TCP is found to be less ambitious or in direct conflict of the state, CSU, or CSUB policy, then the state, CSU, or CSUB policy will supersede the TCP.

The TCP is consistent with CSUB's commitment to scholarship, ethical behavior, diversity, service, global awareness, and life-long learning.

Goals

The goals of CSUB's first Tree Care Plan are to:

Increase student and community engagement events related to tree service-learning and advancing knowledge about trees' role in carbon sequestration.

Metric: Hold at least 2 tree planting, care, or maintenance volunteer events annually.

Plant only drought-tolerant and/or native tree species on campus grounds.

Metric: Make at least 95% of tree selections from the CSUB Approved Tree Species List.

Establish and follow a standardized process regarding tree pruning and removal.

Metric: Spend 75% or more of tree pruning and removal funds with accredited Tree Care Industry Association accredited contractors or companies that are members of TCIA, depending on local availability.



About CSUB

Centrally located on a 375-acre site in the southern San Joaquin Valley, CSU Bakersfield is home to the Roadrunners – moving forward at lightning speed and championing intellectual progress. CSUB continuously rises in national rankings for its economic value and commitment to student success. Most CSUB graduates remain in the Valley to solve our region’s complex challenges.

CSUB is the only public university within a nearly 100-mile radius. Alumni have succeeded in every sector – from education to healthcare to agriculture – fueling Kern County’s regional economy and supporting the local community. Historically, the Southern San Joaquin Valley has been home to many trees that tolerate alkaline soils, such as Valley Oaks, Ash Trees, Fremont Cottonwoods, Elderberry, Button Willow, Narrow-leaved Willow, and other willows.

In addition to its professional and educational accolades, CSUB is also rated a STARS Silver institution by the Association for the Advancement of Sustainability in Higher Education. CSUB was awarded the distinguished honor of being the second university in the nation to become a Keep America Beautiful collegiate affiliate. CSUB is also a partner of the US EPA’s Green Power Partnership.

Stewardship

A primary goal of the Tree Care Plan is to enhance environmental stewardship at the CSU Bakersfield campus and beyond. One of the most impactful practices in advancing stewardship is organizing experiential extracurricular opportunities open to the public. CSUB will expand individuals' sense of pride in our natural environment, educate about maintaining tree health, and inform how trees are essential to a healthy ecosystem and livable planet.

Trees are a powerful tool in fighting climate change as trees support natural carbon sequestration. As trees grow, carbon is permanently stored in tree roots and branches.

Trees and shrubs can significantly increase effective rainfall in a region, which is important because of the ongoing drought. Generally, the taller and wider the tree root system, the more moisture is caught.



Responsible Authority

Capital & Facilities Management Services Department

The primary responsibility of the CSUB TCP belongs to the CSUB Capital & Facilities Management Services (CFMS) Department, which is overseen by the Associate Vice President of CFMS.

The AVP of CFMS appoints (or acts as) the Chair and appoints Vice Chair of the Campus Tree Advisory Committee which organizes the group's meeting time, as well as develops and distributes agendas. The Campus Tree Advisory Committee meets at least once per quarter. The AVP of CFMS also provides direction to the CFMS Roads & Grounds Manager, who provides the TCP to the University staff and contractors that perform tree-related work.

This department is responsible for funding tree expenditures for state-run facilities and in recovering tree expenses associated with non-state projects or facilities.

Campus Tree Advisory Committee

The CSUB Sustainable Landscaping Working Group acts in the role of **Campus Tree Advisory Committee** (CTAC) for the purpose of enacting the CSUB Tree Care Plan. This working group also meets to discuss non-tree related sustainable landscaping practices as appropriate.

The CSUB Sustainable Landscaping Working Group, consisting of volunteers and public sector employees, is expected to actively participate and contribute to policy and guideline issues, as well as research and perform information gathering to aid in the campus TCP.

The members are responsible for organizing the annual campus Arbor Day event and at least one additional service-learning tree planting event each year.

Members of the CTAC do not have a term limit. At minimum, the CTAC must consist of:

- One (1) Roads & Grounds representative
- One (1) Sustainability & Energy Management representative
- One (1) Faculty Representative interested in advancing and/or knowledgeable about tree and environmental health
- One (1) Student Representative interested in advancing and/or knowledgeable about tree and environmental health
- One (1) Community Representative interested in advancing and/or knowledgeable about tree and environmental health

Policies

For situations not listed in the Policies section, ANSI A300 standards will be consulted by the Tree Advisory Committee. The group will consider explicitly listing the policy in the Tree Care Plan depending on the frequency of such situations.

Tree Selection & Planting

The guiding principle for tree selection shall be to first refer to the CSUB Approved Tree Species List (Appendix A). The CSUB Approved Tree Species List is to be made up of trees that are one or more of the following characteristics: drought-tolerant, California or regionally native, and/or support the campus' biodiversity.

The List and any changes or removals to the list, will be reviewed and approved by the Campus Tree Advisory Committee.

The only deviations to these tree selection practices will be for educational purposes as determined appropriate.

Trees will be planted mindfully and in areas determined appropriate to fit their future size and purpose. Planting locations will be reviewed to ensure appropriate irrigation of the tree to be planted, or irrigation will be adjusted to avoid death due to overwatering.

Tree Trimming and Removal

All tree trimming and removal shall be performed in accordance with the American National Standards Institute (ANSI) A300 standards.

Tree trimming and removal should be prioritized by concerns for Safety & Property, Tree Health, and then Aesthetics in that order.

Care will also be given to adhere to California and federal regulations regarding maintenance activities near endangered species habitats. Specifically, the San Joaquin Kit Fox (*Vulpes macrotis mutica*) makes dens on the CSU Bakersfield campus.

Tree Maintenance & Landscaping

Newly planted trees will be reviewed for need of stakes for support and fertilization.

All green tree trimmings are to be sent to green waste facilities for mulching or compost processing.

Tree Damage Prevention and Assessment

As it is difficult to improve tree health after damage has occurred, the TCP prioritizes damage prevention.

Protection & Preservation

Construction and Trenching Activities:

Contractors will receive a copy of the Tree Care Plan's protection and preservation practices at the time of commencing a project.

Contractors will provide clearance to not impact tree's root zone directly from construction activities directly or indirectly from contractor vehicles. The clearance will be marked by stakes and tape and/or a border of landscape flags when on the job or construction site. For transportation up to the construction site, contractors will have been told at time

The clearance should be to the tree's irrigation/drip line at minimum. Another recommended practice for determining size of clearance zone is to measure the diameter of the tree 4.5 feet from the ground. For each inch of trunk diameter, one foot of clearance must be given. For example, a tree 6 inches in diameter should have protection at least 6 feet away from the trunk.

Damage & Removal Assessment

When tree damage occurs on the campus, the Roads & Grounds Manager will assign someone to assess the damage and cost to replace a tree of comparable size. Contractors or other parties to cause such damage will be asked to appropriately compensate in the form of replacing a tree of similar size if the damage was caused due to negligence and failure to follow the TCP policies. The new tree should be selected from the Approved Tree List.

Tree removal may occur without CTAC advisement when a tree is assessed by an arborist to cause damage to people or property.

Trees removals due to aesthetic purposes are discouraged and would need to be brought to the Tree Advisory Committee for review.

Prohibited Practices

Trees will not be planted in places where their root zones will grow in competition with other tree root zones or in proximity of building foundations.

Similarly, trees will not be planted so that their estimated future canopy size may interfere with and potentially damage buildings or other campus property.



Communication Strategy

The CSUB Tree Care Plan will be posted on the CSUB Sustainability webpage found at www.csub.edu/sustainability. Direct access to the webpage is accessible from the University homepage (www.csub.edu).

The TCP will be made available in English at the time of adoption and in Spanish no later than 30 business days of adopting.

As mentioned above, the TCP's construction policies will be made available to contractors at the time of commencing a project.

The TCP and Approved Tree Species List will be provided to the campus tree service and development contractors.

Appendix A

California State University, Bakersfield Approved Tree List

updated 09/29/2022

Edits to this list are made by the CSUB Tree Care Advisory Committee. The list prioritizes drought-tolerant, regionally and California-native Trees & Plants, though other trees may be approved as recommended by the committee.

Scientific Name	Common Name	CA native (yes/no)	drought tolerant (once established) (yes/no)
Evergreen Trees			
Quercus wislizenii	Interior Life Oak	yes (CA)	yes
Quercus douglasii	Blue Oak	yes (CA)	somewhat
Pinus sabinana	gray pine	yes (CA)	yes
Deciduous Trees			
Fraxinus latifolia	California ash	yes (CA)	no
Populus fremontii	Cotton wood	yes (CA)	no
Salix goodingii	Gooding's willow	yes (CA)	no
Salix laevigata	Arroyo willow	yes (CA)	no
Sambucus nigra	Elderberry	yes (CA)	no
Quercus lobata	Valley Oak	yes (CA)	no
Prosopis glandulosa	Honey Mesquite	yes (CA)	yes
Chilopsis linearis	desert willow	yes (CA)	yes
Cercis occidentalis	Western Redbud	yes (CA)	yes
Shrubs			
Atriplex polycarpa	Alkali saltbush	yes (CA)	yes
Big sagebrush	Artemisia tridentata	yes (CA)	yes
Ericameria nauseosa	Rabbit brush	yes (CA)	yes
Ephedra californica	Mormon tea	yes (CA)	yes
Larrea tridentata	Creosote bush	yes (CA)	yes
Malacothamnus fasciculatus	Pink flowered bush mallow	yes (CA)	yes
Peritoma arborea	bladderpod	yes (CA)	yes
Salvia apiana	white sage	yes (CA)	yes
Salvia mellifera	black sage	yes (CA)	yes
Jupinerus californica	juniper	yes (CA)	yes
Ribes aureum	golden currant	yes (CA)	yes
Baccharis salicifolia	mulefat	yes (CA)	yes
Lianas			
Vitis girdiana	Desert grape	yes (CA)	no
Vitis californica	California grape	yes (CA)	no
Grasses			
Leymus triticoides	Alkali Rye grass	yes (CA)	yes
Typha domingensis	Southern cattail	yes (CA)	yes
Typha latifolia	Broadleaf cattail	yes (CA)	yes
Muhlenbergia rigens	deer grass	yes (CA)	yes
Festuca idahoensis	Idaho fescue	yes (CA)	yes
Ground cover			
Arctostaphylos 'Emeral Carpet'	Manzanita	yes (CA)	yes
Lessingia filaginifolia	Silver Carpet	yes (CA)	yes
Sedum spathulifolium 'Cape Blanco'	Sedum	yes (CA)	yes
Zauschneria californica	California Fuchsia	yes (CA)	yes
Sisyrinchium bellum	blue eyed grass	yes (CA)	yes
Verbena Lilacina 'De La Mina'	Verbena	yes (CA)	yes
Achillea millefolium	common yarrow	yes (CA)	yes
Pentstemon spectabilis	showy pentstemon	yes (CA)	yes
Epilobium californica	California Fuchsia	yes (CA)	yes
Eriogonum fasciculatum	California buckwheat	yes (CA)	yes
Diplacus aurantiacus	sticky monkeyflower	yes (CA)	yes
Asclepias speciosa	showy milkweed	yes (CA)	yes

<i>Asclepias fascicularis</i>	narrow leaf milkweed	yes (CA)	yes
<i>Symphotricum chilense</i>	California aster	yes (CA)	yes
Succulents and cacti			
<i>Dudleya brittoni</i> 'Giant Chalk Dudleya'	Dudleya	yes (CA)	yes
<i>Dudleya cymosa</i> 'Orange Form'	Dudleya	yes (CA)	yes
<i>Dudleya pulverulent</i> 'Chalk Liveforever'	Dudleya	yes (CA)	yes
<i>Opuntia basilaris</i>	Bakersfield cactus	yes (CA)	yes
Plants removed from above (not recommended)			
<i>Arctostaphylos</i> 'Howard McMinn'	Manzanita	yes (CA)	yes
<i>Artemisia</i> 'Powis Castle'	Wormwood	yes (CA)	yes
<i>Carpenteria californica</i>	Bush Anemone	yes (CA)	yes
<i>Eschholzia californica</i>	Orange California Poppy	yes (CA)	yes
<i>Gilia capitata</i>	Blue Thimble Flower	yes (CA)	yes
<i>Heracleum lanatum</i>	Cow Parsnip	yes (CA)	yes
<i>Heromeles arbutifolia</i>	Toyon	yes (CA)	yes
<i>Lupinus propinquus</i>	Blue Bush Lupine	yes (CA)	yes
<i>Mimulus bifidus</i>	White Monkey Flower	yes (CA)	yes
<i>Mimulus lweisii</i> x <i>cardinalis</i>	Monkey Flower (pink)	yes (CA)	yes
<i>Penstemon barbatus</i>	Beard Tongue	yes (CA)	yes
<i>Penstemon heterophyllus</i> 'Blue Springs'	Foothill Penstmon	yes (CA)	yes
<i>Rhus integrifolia</i>	Lemonade Berry	yes (CA)	yes
<i>Adenostoma fasciculatum</i> 'Black Diamond'		yes (CA)	yes
<i>Ephedra californica</i>		yes (local)	yes
<i>Nolina parryi</i>		yes	yes
<i>Fremontodendron californicum</i>	Flannel Bush	yes (CA)	yes
<i>Quercus agrifolia</i>	Coast Life Oak	yes (CA)	yes

nurseries for native plants:

Annie's nursery, <https://www.anniesannuals.com/>

Las Pilitas nursery, <https://www.laspilitas.com/>

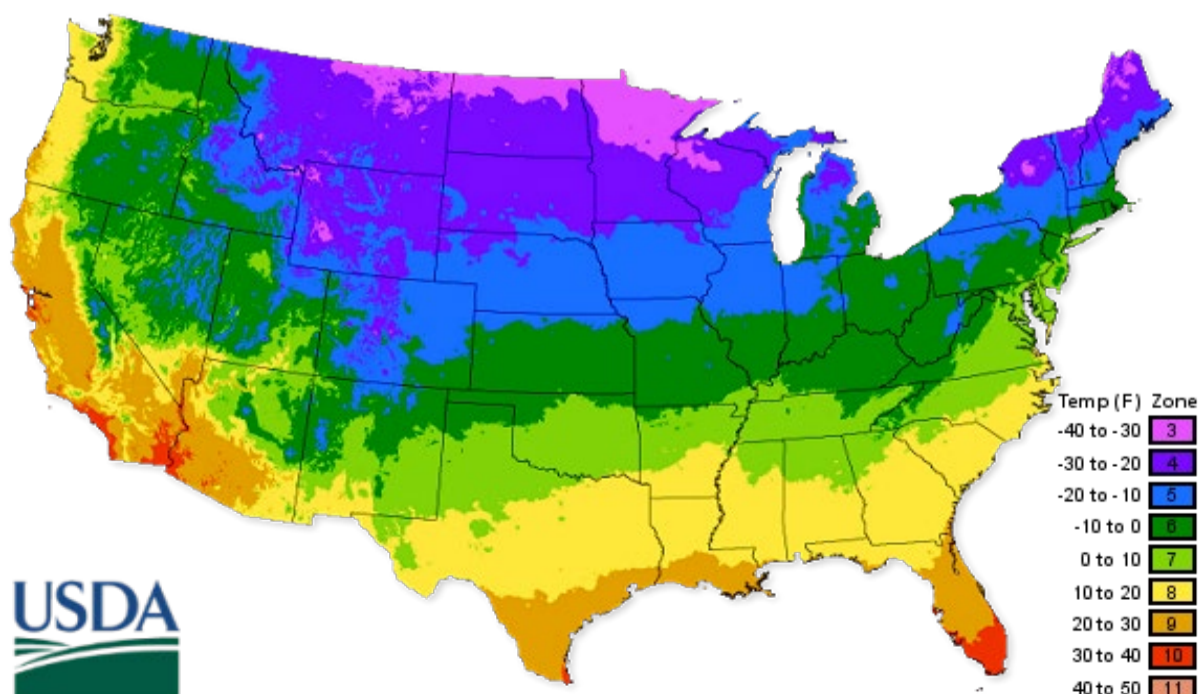
Theodore Payne Foundation: <https://theodorepayne.org/visit/>

Antelope Valley Resource Conservation District, <https://www.avrcd.org/>

More info: https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=7010

Kern Native Plant Society Annual Plant Sale: <https://cnps-kern-plant-sale.square.site/s/shop>

Kern Native Plant Society Website: <https://kern.cnps.org/>



Appendix B

Glossary

ANSI – American National Standards Institute <https://www.ansi.org/>

arborist – a specialist in the care of trees

deciduous – of a tree or shrub shedding its leaves annually

drought-tolerant – the ability to which a plant or tree maintains its biomass production during arid or drought conditions

ecosystem – a biological community of interacting organisms and their physical environment

invasive – especially of plants or a disease tending to spread prolifically and undesirably or harmfully

native trees – occurs locally and is well adapted to the naturally occurring site conditions

pruning – cutting away dead or overgrown branches or stems

staking – support a tree or plant with a stake or stakes

TCIA – Tree Care Industry Association <https://www.tcia.org/>