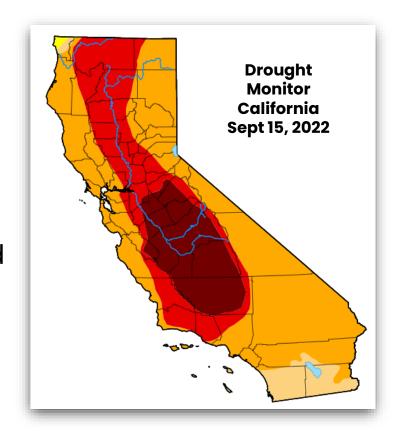
City of Davis State Action on Water Conservation and Prioritizing Trees in Drought



Drought Conditions Persist

- State in a third year of drought
- Yolo County in extreme drought (U.S. Drought Monitor)
- March 28 Governor issued Executive Order N-7-22
 - Required suppliers to move to a Shortage Level 2 of their Water Shortage Contingency Plan
 - Required submittal of Annual Water Supply and Demand Assessments
 - Included a prohibition on the irrigation of non-functional turf for Commercial, Industrial and Institutional properties
- Reductions in water availability state-wide





Water Conservation Update

- City Council implemented Shortage Level 2 of the Water Shortage Contingency Plan on May 24, 2022
- State and City saw increased water use January April 2022 (compared to 2020)
- City saw decreases in water usage over the summer months
 - Summer 2022 (June-Aug.) use for Davis decreased 8.7% from 2020
 - July 2021 August 2022 water usage has decreased by 5.34% compared to 2020
- City drought outreach campaign in summer 2022
 "There's No Doubt We're In a Drought"







CII Non-Functional Turf Ban

- State-wide ban on irrigation of decorative or non-functional turf with potable water in commercial, industrial and institutional settings
- Regulation applies to turf (mowed grass) that is ornamental and not otherwise used for recreation
- The irrigation ban does not apply to:
 - residential lawns
 - school fields
 - sports fields
 - areas regularly used for civic or community events



State FAQs Non-Functional Turf Ban

What is the definition of "turf"?

The State defines turf as "a ground cover surface of mowed grass."

What is "non-functional turf"?

Non-functional turf is mowed grass that is ornamental and not otherwise used for human recreation purposes.

Are there any exceptions to the non-functional turf irrigation ban?

The ban does not apply to residential lawns or any turf that is regularly used for human recreational purposes, such as community spaces, or sports fields and other turf spaces used for recreation or events. The regulation does not ban the irrigation of trees or other non-turf plantings.



State FAQs Non-Functional Turf Ban

Does the regulation affect trees? Do urban trees need to be watered?

- The regulation does not restrict the watering of trees, just turf.
- The Board urges people to continue to water trees, even while reducing or stopping the irrigation of turf.
- Trees that are just getting established may need to be watered more frequently, including hand watering.
- The regulation allows continued irrigation of trees even if turf, such as turf under trees, will receive water.
- Visit the <u>Save Our Trees section within SaveOurWater.com</u>





Resources for Turf Conversion

- Landscape irrigation can account for up to 65% of water use in the Sacramento Valley.
- Converting non-functional turf to water-wise landscaping can reduce water use and potentially lower your water bill.
- When converting non-functional turf, be mindful of trees being supported by existing irrigation.
- If you have trees in otherwise non-functional turf that is irrigated by sprinklers, consider converting your irrigation to drip irrigation.
 - Drip irrigation applies water slowly onto the soil, allowing the water to infiltrate into the root zone of the tree to ensure it continues to receive water.
 - Learn more about converting to drip irrigation on the <u>irrigation</u>
 <u>page</u>





Turf Conversion Plans

- City of Woodland/Yolo Resource Conservation District water-wise landscape plans with turf alternatives for mow strips.
- Plans include planting lay-outs and irrigation installation and timing instructions:
 - California Natives (plants native to California)
 - California Native Meadow (grass-like groundcover and native wildflowers)
 - Valley-Wise Plan (native and non-native plants adapted to the Woodland/Davis area)
 - Saline Alkaline Soils Plan (for soils with a high pH)

PLANTING PLAN for Woodland Water-Wise Mow Strips

VALLEY-WISE



A DROUGHT-TOLERANT LAWN ALTERNATIVE of native and nonnative plants well-adapted to Woodland and surrounding areas.

Before you start: Completely remove turf grass, taking care not to damage tree roots. Wor ompost into the soil if needed. Lay down weed barrier landscape fabric and staple in place Ready to plant: Lay out plants according to the planting layout below. Plant by cutting an x

nstall the drip irrigation; Lay out tubing and staple down. Add 1 emitter for each 1-gall ound the drip line of the tree, or none at all depending on the type of tree and how well stablished it is. Add emitters, if necessary, as plants grow. A separate irrigation valve is

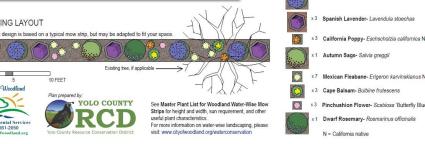
once a week for 1 hour. YEAR TWO: Water once every two weeks for 1 hour. YEAR THREE Water once or twice a month for 1 hour. Adjust as needed. Actual plant water need will yarv







Dwarf Rosemary- Rosmarinus officinalis

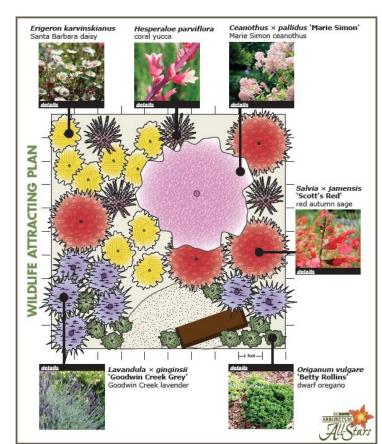


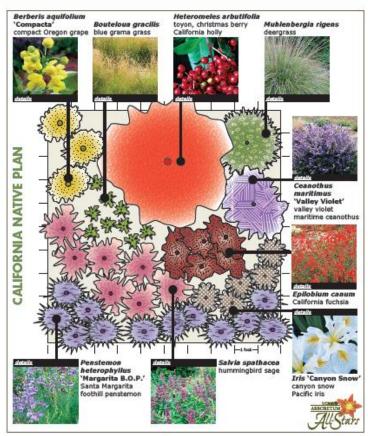


Turf Conversion Plans

UC Davis Arboretum and Public Garden printable planting plans:

- Low Maintenance Planting
 Plan
- California Native Planting
 Plan
- Wildlife Planting Plan
- Arboretum All-Star
 Planting Plan







Prioritizing Trees in Drought

- Tree watering not limited under the water waste prohibitions or days per week irrigation restrictions
- Essential to water your trees during the hot, dry summer months
- Overhead spray not a good option for tree watering
- Add mulch (3-5" layer) not against tree trunk
- Information provided in Greener Davis outreach – social media, e-blasts, website, workshops

Prioritize and Protect Trees

Tree watering is not limited under the water waste prohibitions or days per week irrigation restrictions. Trees serve an important, functional purpose above and beyond ornamental landscaping, particularly with their vital role in the water cycle.

It is essential to water your trees during the hot, dry summer months. Overhead spray is not a good option for tree watering; deep watering of trees is preferable. Providing a 3-5-inch mulch layer under the tree canopy helps to retain soil moisture in the spring and

- If your tree is still young and staked:
- Give it 10 gallons of water once a week Once the roots are established and staking is no longer needed, weekly water is no longer necessary.

If you have a mature tree

- Supplemental water is only needed once a month during hot and dry weather, twice a Drip or flood irrigation over the critical root zone is best.
- Avoid overhead spray, if possible. If overhead spray is the only option, do not allow

While deep watering a tree might sound like a lot of water, it is about the equivalent of 1-2 CCF over the year, or an additional \$5-10 per year on your residential utility bill.

- Video: Watering mature trees
- Video: Watering young trees
- Drought and Trees

Find more tips on caring for your trees at <u>City of Davis Urban Forestry</u> and <u>Tree Davis.</u>





Young Tree Watering

- Young, established trees are trees that no longer have support stakes
- Require infrequent deep watering for root development and good tree growth.
 - Drip irrigation is best to apply water slowly onto the soil, allowing the water to infiltrate into the root zone
 - Good starting point approximately 40 gallons of water to infiltrate per watering
- A good system is calibrated to adapt to soil, weather conditions, and tree type prior to installing and irrigating.



Canopy

Drip line

Mature Tree Watering

 Mature trees may only require watering in the hotter summer months.

 Water should be applied under the drip line when possible.

 Trees should be watered so the soil is at field capacity (the water remaining in soil after it has been thoroughly saturated and allowed to drain freely).

 During extended dry periods, it is important to keep trees properly irrigated to preserve the City's urban forest while saving water.



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