

Capitol Park Drought Management Plan

California State Capitol

<u>Capitol Park</u> surrounds the California State Capitol and offers special points of interest, memorials, and monuments to remind us of our history and natural beauty. Capitol Park was established in 1860 and is the oldest arboretum west of the Mississippi. It is listed as a historical site by the Office of Historic Preservation.

The 40-acre park is home to over 900 trees (some more than 100 years old) and hundreds of other plantings. Capitol Park contains over 200 different species of trees from all parts of the world. Several of the trees hold State or National titles for the largest in their species, and some trees remain from their original plantings in 1872.

The Department of General Services (DGS) has taken several measures throughout Capitol Park to conserve water through sustainable landscape maintenance practices while ensuring the survival of trees and plantings from around the world. Additionally, expanded measures have been taken in alignment with Governor Newsom's <u>Executive Order N-7-22</u> to suspend irrigation of non-functional turf in designated areas equaling a water savings of 16,888 gallons/week.

Irrigation Scheduling

- Sections of Capitol Park are watered up to three days per week, with the main focus on ensuring that the trees are sufficiently watered and sustained. The trees that are growing in Capitol Park have been planted and sustained with a turf irrigation system. This means that the tree roots have a potentially shallower root system which requires frequent watering as opposed to trees that have been planted and irrigated with a deep watering method to encourage roots to potentially grow deeper into the soil.
- 2) All watering in Capitol Park is performed within the City of Sacramento watering schedule ordinance hours.

Capitol Park Automated Water Management System

 The Capitol Park automated irrigation system is powered by Motorola ICC Pro software. The Capitol Park irrigation system has an onsite weather station to track wind, temperature, humidity, and soil moisture content. The irrigation computer makes run time and programing recommendations based on local weather readings and data to provide optimal irrigation support. The software also includes the capability to read and track data from the mainline water meter and provide reports on water flow rates.



Capitol Park grounds

a) Irrigation programming is written with multiple irrigation cycles with shorter run times to maximize water absorption and minimize water runoff.

b) High water flow alerts are written into the irrigation programming to detect potential leaks and/or breaks.

c) Pending daytime temperatures and soil moisture content, wind

alerts are programmed to stop irrigation cycles when winds consistently exceed 30 mph to prevent water waste.

Capitol Park Current Water Usage Reduction and Conservation

- Capitol Park has completed the construction phase of a turf reduction project. This project removes approximately 7500 square feet of turf and replaces it with decomposed granite pathways and plant material irrigated with drip irrigation. The planting portion of this project is anticipated to start in spring 2022, and plant material will be added with a planting completion time of approximately spring 2023. (This turf reduction is being performed in specific areas that will not adversely impact tree health due to the proposed reduction in water).
- 2) In an effort to conserve water, Capitol Park has installed drip irrigation and low water use plant material in some existing flower beds, replacing high water use plant material and traditional spray irrigation.

- 3) Capitol Grounds to add several hundred cubic yards of Walk-On-Bark mulch to its landscapes per year.
- 4) Lawn aeration is performed in high foot traffic areas to minimize water runoff and promote increased water absorption into the soil.
- 5) Irrigation programming is written with multiple irrigation cycles with shorter run times to maximize water absorption and minimize water runoff.
- 6) No scheduled irrigation is being performed during afternoon hours when temperatures are hot and peaking.



7) Programming is written to avoid watering during windy conditions when temperatures and soil moisture content permit.

8) DGS's Facilities Management Division teamed with the California Highway Patrol and the Joint Rules Committee to ban the use of water barrels in Capitol Park. All event organizers and tent companies are now

Capitol Park flower garden

required to provide alternative methods to securing tents and temporary structures on Capitol grounds.

9) With the increased need for hardscape pressure washing due to transient cleanup and health and safety concerns, staff are instructed to utilize hose-end shut-offs to conserve water during the scrubbing and sanitation process.

Monitoring and Response for Damaged Irrigation

- 1) Irrigation maintenance and water conservation is an essential job task for groundskeepers. Identifying ways to save water and minimize or eliminate water loss is a critical step that all groundskeeping staff must prioritize on a daily basis.
 - a) Grounds staff are trained to be alert for potential irrigation issues and water waste.

b) When observing landscape areas that have been watered recently, grounds staff look for irrigation issues that include, but are not limited to, pooling of water near irrigation heads, overspray that exceeds more than 24 inches onto the sidewalk, sprinkler line blowouts, and vandalized irrigation.



Capitol Park grounds worker

c) When performing an irrigation check/audit after 10:00 a.m., grounds staff utilize testing irrigation signage which notates to observers that the irrigation system is running for a maintenance check as opposed to a regularly scheduled irrigation cycle.

d) Staff notifies grounds supervisor of irrigation damage and repairs.

e) Grounds supervisor tracks and logs irrigation vandalism.

f) California Highway Patrol and/or building security are notified of repeated vandalism to increase awareness and request additional patrols.

g) DGS's Facilities Management Division has coordinated with the California Highway

Patrol to communicate and relay information pertaining to irrigation leaks and or damaged sprinkler heads that are observed by officers while patrolling Capitol Park during the nighttime hours.



 FMD Mission: "Delivering professional building management services through value offered customer care and a strong commitment to excellence – for all of California."
FMD Goals: 1. Be outstanding stewards for our state ASSETS 2. Take care of our PEOPLE 3. Provide great CUSTOMER SERVICE Facilities Management Division Capitol Historic Region | State of California | Government Operations Agency 1300 L Street | Sacramento, CA 95814 t 916.324-2548 | f 916.324-0911