



## Dealing with Mandatory Water Restrictions



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In response to continuing drought conditions across California, many water agencies and cities have imposed days-of-the-week outdoor watering restrictions on commercial and residential landscapes. Some have also restricted the amount of time an irrigation system can run each irrigation day. What will happen to landscapes and how can professional landscape managers keep their client's lawns and landscapes thriving?

Most trees, shrubs, and groundcovers will perform acceptably under the water restrictions presently imposed because they have some degree of drought tolerance. A lawn will probably survive the summer, but depending on the type of grass, the number of watering days and runtime minutes on each watering day, its appearance and wear tolerance may not be good. Exactly how it looks and performs depends on the weather, the type of grass, how fast (precipitation rate) and how uniformly (distribution uniformly) the irrigation system applies water, and the maintenance practices followed.

When watering days or run times are restricted, sites in coastal climate areas will generally see better turf performance than those in warmer inland valley or desert areas. Lawns with tall fescue, which is the most common grass in non-desert areas, may thin out, be less green, show large brown areas, and may stop growing completely if watering is restricted to less than three days per week or if runtime is limited so that an irrigation system applies 1 ½ inches of water or less per week in mid-summer. Lawns with bermuda, zoysia, buffalo, or St. Augustine grasses will perform better under these conditions because they are lower water users and more drought tolerant.

During water restrictions, it is critical that the irrigation system apply water evenly over lawns and that it function properly at all times. Other landscape plants are less sensitive to uneven water application. Frequently observe the irrigation system while it is operating and make repairs or adjustments so maximum effect is gained from the water applied. Be certain spray or rotary heads are adjusted and spaced to apply water evenly from one head to another. If they do not, heads should be adjusted or added to get uniform water coverage. Also, check to see that heads are not applying water to sidewalks and streets, and adjust or replace them accordingly.

## Mandatory Water Restrictions (cont.)

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Irrigation managers should set watering schedules so that enough water is applied on a watering day to wet most of the root zones of plants without creating runoff. The root depth can be up to a foot for tall fescue and at least a few feet deep for bermuda, zoysia, buffalo, or St. Augustine grasses. It will require multiple irrigation cycles several minutes to an hour apart during the evening or early morning hours of an irrigation day to effectively water lawns. Since most trees, shrubs, and groundcovers have some drought tolerance and most of their roots are one to two feet deep, enough water should be applied to these plants to rewet the soil to this depth range about every 5 to 10 days. It might require several watering cycles on consecutive days to accomplish this without runoff. If restrictions on watering days and runtimes limit deep infrequent watering, request a variance. Just be sure the amount of water applied does not exceed what the restriction would otherwise allow during the calendar period.

Lawns should be mowed at the correct height – 2½ to 3 inches for tall fescue and about 1 to 1½ inches for bermuda, zoysia, buffalo, or St. Augustine grasses. Buffalo grass can be allowed to grow much taller or be an un-mowed grass. Woody plants should not be heavily pruned during periods of limited water. Groundcovers should be trimmed only to keep them in bounds.

Limit fertilizer applications during periods of drought. No more than 4 to 6 pounds of actual nitrogen should be applied to each 1,000 square feet of lawn per year. Tall fescue should be fertilized in spring and fall but not in mid-summer. On the other hand, bermuda and other similar grasses should be fertilized in late spring through fall. Established trees and shrubs usually need no fertilizer to maintain acceptable appearance, while groundcovers may benefit from 1 to 2 pounds of actual nitrogen per 1,000 square feet applied in the spring or early summer.

Following these irrigation and cultural management practices can make it possible to maintain an attractive landscape with limited water.

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