



Golf Course Drought Contingency Plans

Given the current conditions of the state’s water resources, establishing a drought contingency plan should be a top priority. Below is a checklist of items that should be included in a drought contingency plan. Typically drought restrictions have four stages: Drought Watch – up to 10% voluntary reduction, Drought Alert – 20% (mandatory), Drought Critical – up to 40% (mandatory), Drought Emergency – more than 40% (mandatory).

Determining Use and Reductions:

Determine how much water is used on the golf course each year (usually reported in Acre Feet).

Determine the total irrigated area (usually reported as Acres) of the property.

Determine the total number of irrigated turf acres.

Determine the percent water demand by each area of the golf course (Example below).

Drought Levels	1	2	3	4
(i.e. Total Water Usage = 100% with greens accounting for 3%)				
• Greens (i.e. 3%)	3	3	3	3
• Tees (i.e. 10%)	10	10	10	8
• Fairways (i.e. 30%)	30	30	25	15
• Roughs (i.e. 35%)	35	30	20	17
• Driving Range (i.e. 8%)	5	0	0	0
• Driving Range Tee (i.e. 3%)	3	3	0	0
• Landscape Areas (i.e. 5%)	4	2	1	0
• Common Areas (i.e. 3%)	1	1	0	0
• Out of Play Areas (i.e. 3%)	0	0	0	0

Calculate the percentage of reduction for each area under the four stages of drought.

Other Helpful Practices:

- Visually inspect all of the irrigation system components for wear and leaks

- Encourage deep and infrequent irrigation cycles
- Utilize proper cultural practices that encourage vertical water movement
- Clean off equipment with pressurized air instead of water
- Utilize wetting agents to maximize the effectiveness of the water that is applied
- Utilize more hand watering rather than turning on irrigation heads

Golf Courses that utilize **recycled water** will also see a reduction in the amount of water they can use. A reduction in the amount used is a reduction in the amount that can be recycled. Courses should plan for a reduction in the amount delivered to the course. Consult with the wastewater treatment plant operators to get an estimate of approximate reduction and implement the corresponding drought contingency measures.

Golf Courses that utilize **groundwater** for their irrigation needs should also consider implementing a voluntary reduction of irrigation needs equal to or slightly less than the restrictions implemented in the immediate area. All sources of water are vital during droughts and golf courses need to show restraint during these times for future resource management.

Tips to Share with Golfers and Members:

- Post the notice from the water provider in a high traffic area regarding the percent reduction or water restrictions.
- Post the adopted written drought contingency plan for the golf course.
- Utilize as-builts of the irrigation system to highlight areas that have been selected for a reduction in irrigation. Color code various areas to illustrate the percent reduction (i.e. 10% reduction – areas highlighted in green, 20% reduction – areas highlighted in orange, 40% reduction – areas highlighted in blue, greater than 50% reduction – areas highlighted in red). Post these photos/posters in high traffic areas. If as-builts are not available, use an aerial photo of the course or digital pictures of each hole and highlight the reductions with different color highlighters, pins, etc.
- Inform golfers that they will see a reduction in course conditions, especially those in the highlighted areas listed above.
- Be prepared to give interviews to media personnel regarding the steps your facility has made to address the drought.