Industrial and commercial water users have successfully implemented the following water use efficiency tips to save and use water efficiently—and you can too!

**Design and maintenance criteria for turf and landscape areas**

- Contact the Department of Water Resources or your local water supplier about possible landscape water auditor classes for your golf course managers.

- Hire a golf course designer and/or landscape architect with water use efficiency experience to design an efficient landscape and irrigation system.

- Use turf only where actually necessary: immediate picnic areas/ outside lunch areas and golf course target areas (greens, tees, landing areas).

- Use only low-water-use plant material in nonturf areas. Use drought-tolerant native plants that require little to no irrigation after establishment.

- Design dual watering systems with sprinklers for turf and low-volume irrigation for flowers, trees, and shrubs. Operate sprinkler system before sunrise and after sunset. Amount of irrigation can be determined by the evapotranspiration rate which is available from DWR for most areas.

- Use automatic irrigation systems and adjust schedule regularly. Use evapotranspiration-based water budgeting, adjusted monthly.

- Access the CIMIS Web site at www.cimis.water.ca.gov for evapotranspiration data

- Limit or exclude turf from roughs.

- Mow turf at higher mower settings.

**Exterior areas**

- Discontinue using water to clean sidewalks, tennis courts, pool decks, driveways, and parking lots.

- Stop irrigation water from running onto streets and alleys.

- If necessary, use multiple stop/ start irrigation setting to allow sufficient soak-in time.

- Inspect irrigation system regularly for leaks, broken pipes, stuck, clogged or broken heads, and needed adjustments—once a week in traffic areas, once a month in non-traffic areas. Repair and adjust within 24 hours with the correct parts.

- Use a soil probe to check moisture level.

- Use properly treated recycled water for irrigation where available.

- Mulch around trees and shrubs.

- Replace non-functional turf with gravel, mulch or low water using groundcovers.

- Aerate the soil. Grasscycle clippings or topdress with fine compost on turf.

- Install rain sensors to irrigation controllers.

- Don’t assume brown spots are dry areas requiring irrigation. They may be from grubs, fertilizer spills or other non-water related causes.

- If a brown spot is the result of poor distribution uniformity, don’t “water to the dry spot” adjust the irrigation system instead.

- Choose low water-using grass species and varieties.
Water Use Efficiency Ideas for Golf Courses, Parks and Commercial Landscapes

- Make sure the irrigation system is operating at the correct pressure. Too high pressure will result in misting and wear or failure of parts. Too little pressure will prevent head to head coverage.

- Check with the local water provider to see what assistance programs may be available.

- If possible, water during cool hours of the day.

- Avoid watering when windy. Use the least amount of pesticides and fertilizers to maintain turf and other landscape areas.

- Use balanced and timed release fertilizers.

**General suggestions**

- Start a Water Use Efficiency Program.

- Increase employee awareness of water use efficiency.

- Install signs encouraging water use efficiency in employee and customer restrooms.

- When cleaning with water is necessary, use budgeted amounts.

- Read water meter regularly (weekly) to monitor success of water use efficiency efforts and to help detect leaks.

- Assign an employee to monitor water use and waste.

- Seek employee suggestions on water use efficiency; place suggestion boxes in prominent areas.

- Determine the quantity and purpose of water being used.

- Use recycling systems for chillers and cooling towers.

- Install energy and water efficient air conditioning equipment.

- Conservation suggestions for clubhouse areas are contained in the “Restaurants” and “Hotels and Motels” checklists.

**Maintenance procedures**

- Sweep materials from floor instead of washing down whenever possible.

- Instruct clean-up crews to use less water where appropriate.

- Check water supply system for leaks.

- Repair dripping faucets and continuously running or leaking toilets.

**Survey the facility**

- Identify water source points.

- Develop a schematic of all water entry points (know where your faucets, time clocks, solenoids, booster pumps, sprinklers and bubblers are located).

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**For more information** and to request this brochure in an alternate format, contact: California Department of Water Resources, Office of Water Use Efficiency at 901 P Street, Third Floor P.O. Box 942836 Sacramento, California 94236-0001; or e-mail Julie Saare-Edmonds at landscape@water.ca.gov or call her at (916) 651-9676.

This checklist has been revised from a copy first published and distributed by the Los Angeles Department of Water and Power. The ideas presented here are not intended to be an endorsement by the California Department of Water Resources of any specific method, process, or product but are merely suggestions for saving and using water more efficiently.