

LEAK DETECTION AND REPAIR

- Replace washers on dripping faucets. A 1/16-inch opening at 40 psi will leak 970 gallons in 24 hours.
- Prevent leaks by checking all faucet washers at least once a year.
- Some kitchen sink type faucets are equipped with hard to get at "O" rings. If your faucet leaks and new washers fail to correct the problem, remove the delivery arm and take to the hardware store. They will normally have a special device to replace the arm "O" ring right on the spot.
- If you suspect a leak but can't locate it, check your water meter at a time when no use is being made of water (hot or cold). If the right-hand digit (in the case of a digital direct read type dial) or "one foot" indicated (in the case of a multiple dial meter) is moving, you have a leak. Call your local water company and ask them to assist you in finding the leak. They normally have available an expert well equipped with sound or other detection equipment and can usually quickly help you find the problem.

- Check shut-off valves at least once a year for proper operation and leaks.

ADJUSTMENT AND OPERATION OF TOILET

- Do not flush toilet to simply carry away a soiled tissue; place a waste basket next to the toilet.
- Check toilet tank to see that water is not standing so high as to escape down the vertical overflow tube. Bend float arm down to correct for high water but be sure float arm is screwed tightly into ball cock assembly housing.
- Check inlet valve to toilet tank for positive shut-off when float arm is fully elevated. Valve may be worn and need replacement.
- Inspect vertical overflow pipe for pitholes below the waterline. Replace if any are found.
- Check toilet tank for leak to bowl by using a few drops of food coloring or vegetable dye tablet. If it is leaking, check plunger ball to see if it is obstructed with grit or debris at the seal or is worn and in need of replacement.
- The rubber plunger ball should drop neatly into the opening at the bottom of the tank. If it doesn't, adjust the connecting rod until the ball falls freely.
- Check flush handle mechanism to see that it is not hanging up.



BATHING AND PERSONAL HYGIENE

- When washing hands, face, etc., use stopped to fill bowl, thus avoiding running water to waste while you wash.
- Brush teeth first using cold water in hot-line while waiting for the hot water.
- Turn water off while actually brushing teeth.
- Use glass of water to rinse your mouth rather than cleaning brush under water flow repeatedly and brushing teeth several times. You'll save your teeth and water.
- Consider shaving with an electric razor; it's cheaper than heating the hot water for a safety razor shave.
- When preparing to take a shower, run only the hot water first; then add cold water.
- When adjusting shower water temperature, subtract hot (or cold) water rather than adding turns.
- When showering, throttle faucet controls down.
- Turn shower off while lathering up (a cut-off valve installed on or behind shower head or a thermostatic mixing valve makes this operation simple).
- Scrub with wash brush, wash cloth or hand to dislodge stubborn dirt rather than relying on force of water to do the job.
- Turn off water while lathering shampoo into your hair.
- Don't stand in the shower for long periods. Five minutes is a recognized average and quite adequate.
- Showers use less water than a bath if you confine your shower to four minutes.
- Allow small children to bathe together.
- Consider use of disposable diapers.
- Know the capacity of your hot water heater. Much water can be wasted trying to get hot water out of a cold tank.

LAUNDRY

- Wash only full loads. If you must do a short load, use level control to reduce water required.
- If buying a new clothes washer, check water and/or energy saving features.

COOKING/KITCHEN

- Keep capped bottle of drinking water in refrigerator to avoid letting water run to obtain cold drink.
- Draw coffee or tea water for what you expect to consume rather than always making a full pot.
- Consider saving water used to boil vegetables for use in soups.
- Use a lid on pots while boiling food.
- Thaw frozen foods ahead of time rather than thawing with running hot water.
- Remove ice trays from freezer ahead of time rather than freeing with hot water.
- Pre-wash dishes for automatic washer only if necessary, and if you do, stopper sink and merely soak dishes in a soapy solution, then load directly into dishwasher.
- Stopped sink when washing pots, pans, dishes, etc.
- Add vinegar (1/4 to 1/2 cup) to dishwash water to cut grease readily from dishes, pots and pans.
- Operate garbage disposal at the end of kitchen sink clean-up rather than several times during the process of preparing a meal.
- Compost vegetable peelings on your garden instead of using garbage grinder.

EMERGENCIES AND VACATION

- Leave explicit written watering instructions for the person tending your yard.
- Check all faucets to be sure they are turned off completely before leaving house for extended periods.
- If feasible, shut off main house supply valve before leaving for extended periods; if not, shut off supplies to washing machine, hot water heater and, if possible, the dishwasher.
- Check for leaks and repair.
- In case of a broken pipe or other "blow out", immediately shut down nearest shut-off valve. Instruct family members on where shut-offs are located and how to turn them off; also where the wrench is kept in case they are stubborn.
- If all else fails in an emergency, you will find a stop-cock type shut-off valve on the street side of your water meter in the meter box. It is stubborn but can be shut off with a wrench. Merely turn the shut-off one-fourth turn

so that it sets at right angles to pipe direction.

- If your home is not equipped with an easy to get at and operate shut-off valve, install one.

GARDEN/LAWN AND YARD

- The key to successful lawn irrigation is to irrigate slowly, deeply and infrequently. Complete drying between irrigation will eliminate many lawn disease problems.
- Never irrigate lawns daily; once or twice a week during the warm season is adequate. Daily water will cause loss of nitrates and a yellowish-green appearance, invasion of weeds and diseases, soil compaction, loss of deeper roots, as well as waste of water.
- On vigorous, well-fertilized lawns, irrigate at the first sign of wilting (when imprint of a footstep remains flattened for a few minutes).
- When irrigating clayey or tight soils, apply water over short periods separated by a soaking-in period of at least twice the length of the application, i.e. 10 minutes on, 20 minutes off, 10 minutes on, etc.
- When irrigating sandy loam or open soils, apply water rapidly and in one continuous period.
- For clayey, tight soils use sprinklers that emit water at as slow a rate as attainable.
- Treat steep slopes like you would a clayey (tight) soil area.
- Stop irrigating when water commences to run off.
- Ideal time to irrigate is early morning when winds are low, people are not about and the sun is low.
- During the irrigation season, water on the cool days if you have choice.
- Set sprinklers to avoid waste to sidewalks and gutters.
- Don't leave sprinklers unattended for long periods. Out of sight - out of mind.
- Avoid mist spray sprinkler heads. They evaporate much water.
- Use 1/2-inch garden hose; it is normally more than adequate for garden irrigating.
- Do not rely on nozzles as faucets. Always shut off faucet when through using a hose.
- Check hose washers at least annually.

- Keep sprinkler heads clean to assure even distribution of water.
- Occasionally, about 12 to 24 hours after irrigating, check soil with a soil tube, auger, probe or spade and note depth of water penetration by change in color and feel of soil. If any soil in the root zone is dry, apply water longer in future irrigations.
- Purchase and use a hand tensiometer probe to check irrigation needs of trees and shrubs. Probe 24 to 36 inches under trees and 12 to 24 inches under shrubs. When gauge reads moderately dry (50 to 70 centibars) apply water you think adequate. Check reading again 12 to 24 hours after irrigating. If this reading is 5 to 15 centibars your irrigation was correct. If less than 5, apply less water next time. If more than 15, apply more water next time.
- Take pains to make a happy home for new turf by building up soil with nitrogen balanced sawdust, rice hulls or other organic amendment. The time taken to build a good root zone will save many hours of irrigation and produce a much more attractive lawn.
- During growing season, mow lawns high - 1-1/2 to 2 inches. This will build deeper roots and a deeper root zone from which to draw water; hence the lawn will require less sprinkling.
- Keep lawn and garden weed free.
- Aerate lawn annually to avoid compaction and hence rapid run-off.
- Fertilize your lawn with care. A well nourished lawn requires less frequent sprinkling.
- Be careful when planting flower beds and landscaping not to place a high water using plant next to a low water using plant. You can't satisfy both. Check with your nurseryman.
- When landscaping, consider the many attractive California native plants available. They require less water.
- Dig basins around trees and shrubs to hold the water.
- Mulch heavily around plants and add additional mulch yearly. This will cut weeds as well as preserve water and add nutrients.
- Don't "rake" leaves from your lawn with the hose; use a regular rake.
- Sweep patio and walks rather than washing down. If you must wash down, use a hose with a pistol grip nozzle.

GENERAL

- When possible and economically justifiable, install water-saving devices.
- Try to avoid running water down the drain. Think "stopper".
- Wash cars with a bucket and a hose equipped with a pistol nozzle.
- If you own a swimming pool, consider purchasing a cover to cut evaporation, chemical and heating costs dramatically.
- Keep pool water at least 6 inches down from edge of pool to reduce splash loss.
- The foundation area under your house should remain powder dry. If it isn't, check for a pitted pipe or a leaky joint.
- When it comes to lawns and gardens, your nurseryman is normally a walking encyclopedia. Consult him regularly.
- Become familiar with how you use water. Check with your local water company for information on how much water is required for various household uses and for tips on how to save water.
- Realize that every drop of water you use in your home must be treated twice; first to a high degree of purity for consumption and second at your local sewage treatment plant before recycling or disposal to a lake or river or nearby ocean-water you undoubtedly also recreate near, in or on.
- Think of water as a valuable resource to be used wisely.

