

Creation Sustainability Water Walkthrough

California is suffering a record-breaking drought. The California Bishops' Conference is calling for prayers, and wise water usage. Churches can lead the way to sustainable water practices. The 19 tips below will help to convey a respectful usage and water saving message to our parishioners. In addition to these also check with your local water utility provider for water saving guidelines, and possible money saving incentives.

Helpful Link: <http://wateruseitwisely.com/>

RESTROOMS

1. **Replace old toilets (Pre 1992) that use more than 1.6 Gallons per flush.** A constantly running toilet can add several hundred dollars to your monthly water bill. You can usually hear water running in a leaking toilet. Many water authorities are offering rebates on replacement toilets and other water-saving equipment. It is well worth the time to do a little on-line research.
2. **Install an EnergyStar® rated water heater.** Plan ahead for your water heater to fail. Pick out a good unit with a rebate and a qualified installer before you have an emergency situation. Note: In order to remove sediment, drain out a quart of water every month to extend your water heater's performance life.
3. **Install instant-hot water heaters for sinks far from your water heater.** In a typical restroom, it generally takes up to two minutes for hot water to travel from the water heater to the faucet. We throw away all the cooler water standing in the pipe every time we turn on the faucet. Instant hot equipment saves all the water that gets wasted waiting for warm water.
4. **Faucets:**
Note: Carefully locate all the faucets on the parish campus. These are usually found not just in restrooms, but also kitchens, and the sacristy.
 - a. **Install water-efficient faucets.** Toilets should use less than 1.6 gallons per flush. Often, the gallon per flush number is written on the outside of the toilet. Consider using automated or metered faucet valves.
 - b. **Install flow restrictors on all faucets.** Faucets should be retrofitted with flow restrictors (aerators). They are inexpensive and easy to install. In some jurisdictions, they are given away free by the water authority.

PARISH KITCHEN

5. **Repair all leaks.** One drip per second equals 3000 gallons per year. A dripping hot water faucet is even more important to fix because of the high cost of heating the water before it is accidentally thrown down the drain.

6. **Insulate the exposed section of your hot water pipe from your water heater and add a water heater blanket.** These upgrades are simple do-it-yourself type projects that pay for themselves very quickly especially if the unit is outside.
7. **Lower your water heater temperature to 120°.** Higher temperatures force your water heater to work harder and waste energy. 120° is the typical temperature required by the health department. Note: Over 120° water can scald you.
8. **Install water efficient commercial dish sprayers.** A new sprayer with a flow rate of 1.2 GPM (gallons per minute) instead of the typical 4 to 6 GPM units will pay for itself in water savings in just a few weeks. Note: Significant rebates may be available for these sprayers from your water authority.

OUTDOORS/LANDSCAPING

9. **Carefully review your water bill.** Verify and map out what area of your church/school campus each water meter covers. Pay particular attention to your irrigation meters. There should not be a sewer charge associated with this meter since irrigation water does not end up in the sewer. This is a common mistake in older facilities. Also make sure you are not being charged a monthly fee on inactive meters.
10. **Check all faucets, sprinklers and hoses for leaks.** Look for puddles, wet spots and green spots to find underground pipe leaks or sprinkler and faucet leaks. Underground sprinkler pipe leaks can waste thousands of gallons each month.
11. **Water in the morning.** Set timers to water your grounds early in the morning when there is the least amount of wind and the smallest probability of evaporation. Watering at night is the next best time, but may lead to mold on your plants.
12. **Install trigger nozzles on all hoses.** Trigger nozzles are inexpensive, easy to install and last for years. Leaving a hose running unattended for just an hour can waste over two thousand of gallons of water.
13. **Adjust your sprinkler heads to avoid over spraying your hardscape.** A typical sprinkler system is only 60% efficient because of runoff, overspray and evaporation. Watch carefully to see how much water doesn't actually get to your landscape. This is one of the easiest and most effective ways to save water.
14. **Install an efficient water-saving drip irrigation system.** These work great for planters, shrubs and trees. Properly installed and operated, they are over 90% efficient at getting water only where you want it.
15. **Rethink the size, shape and usefulness of your lawn.** Do you really need a large expansive lawn area in front of your buildings? Think about planting a cactus or succulent garden or even a rock garden to save more water.
16. **Plant water-saving Greenscaping or Xeriscaping.** Xeriscaping is a landscaping philosophy that uses as many native, drought-resistant plants as possible and arranges them in efficient, water-saving ways. This is the planting scheme of the future. It has already become city-mandated in many areas.
17. **Use a broom, not sprayed water to clean hardscape.** This is the easiest and most low-tech way to save water. And it works well every time.
18. **Review each area watering time.** Adjust the amount of time you water each separate landscaped area based on data, not just on a feeling. Check the website below for very inexpensive tips on how to measure how much water you are spraying on your greenscape. Create new watering times based on this new information.
19. **Check the California Green Code** guidelines when planning landscaping or outdoor projects.