

WATER CONSERVATION KIT

2021

Courtesy of City of Lathrop's Public Works Department 390 Towne Centre Drive. Lathrop, CA 95330 Phone: 209-941-7430 Email: pw_admin@ci.lathrop.ca.us





City of Lathrop Public Works Dept. provides residents with two different water conservation kit options:

INDOOR KIT includes the following:

- Low flow Shower Head
- Faucet Aerator
- Toilet Tank Bank
- Fill Cycle Diverter
- Leak Detection Tablets
- Shower Timers

OUTDOOR KIT includes the following:

- Soil Moisture Probe
- 7-Spray Garden Hose Nozzle





SHOWER HEAD

Current showerhead flow rates are at 2.08 gallons per minute.

This kit includes a shower head that delivers 1.5 gallons per minute and still delivers good water pressure.

- 1. Remove old showerhead from the shower arm. If you need to use a wrench
- 2. Before installing the showerhead, turn on the water to flush out the pipe.
- 3. Turn the water off.
- 4. Apply two or three turns of Teflon tape (provided with kit) in a clockwise motion to the threads of the new shower arm before installing the new showerhead. This may help prevent leaks.
- 5. Screw on the new showerhead and hand tighten.
- 6. Test showerhead. If it leaks, tighten by using one wrench on the shower arm and another wrench on the showerhead. Tighten until snug. Do NOT over tighten.



SOIL MOISTURE METER PROBE

Use this analog-style moisture meter to determine if plants require water. Simply insert into ground and read meter.

Great for monitoring indoor plants too!





DUAL FAUCET AERATOR

Current bathroom faucet flow rates are at 1.88 gallons per minute.

This kit includes aerators that cut flow rates to 1.0 gallon per minute!

- 1. Remove old aerator. A wrench may be needed to loosen it.
- 2. Run water to flush the faucet. Be sure the old aerator washer is not left inside the faucet, and that faucet threads are clear of debris.
- 3. Turn off water and install new aerator by hand tightening.
- 4. Turn on water. If aerator leaks, use a wrench to tighten, ONLY until snug. Use a cloth to protect the finish.



TOILET TANK BANK

This item helps toilets that use 3 - 3.5 gallons or more per flush, to be more efficient, by taking up space in your reserve tank leaving less water needed to refill after each flush.

Estimated savings are 1/2 gallon per flush.

- 1. Fill the Toilet Tank Bank with water and lower it into your toilet tank.
- 2. Make sure you place the bag away from the toilet's moving parts.





FILL CYCLE DIVERTER

This item directs more water to your toilet tank and less to the bowl during refill.

The goal is for the tank and bowl to finish filling in the same amount of time (or as close as possible).

The Fill Cycle Diverter saves 0.5 to 1.5 gallons of water per flush.

- 1. Remove toilet lid
- 2. Pull hose out of overflow tube.
- 3. Remove clip or holder, if any.
- 4. Insert long end of Diverter into hose end.
- 5. Push Diverter onto overflow tube with one of its arms inside and one arm outside overflow tube.
- 6. In some cases, the hose may need to be cut shorter to reduce buckling or tipping.



LEAK DETECTION TABLETS

Worn out, old, or poorly made toilet flappers can leak undetected allowing water to continuously flow from your toilet.



- 1. Lift off the toilet tank lid.
- 2. Without flushing, place 2 dye tablets (or 10 drops of food coloring) in the toilet tank.
- 3. Wait 10 minutes. If color appears in the bowl, the toilet has a leak.



Did you know?

- Running a faucet uses 2-5 gallons of water per minute.
- Watering 1,000 square feet of grass in the Summer uses 850 gallons of water.
- Landscaping accounts for about half the water Californians use at home.
- Showers account for another 18 percent, while toilets use about 20 percent.
- Never put water down the drain when there may be another use. Water house or garden plants, or cleaning are good options!
- A toilet that runs continuously can use as much as 4,000 gallons of water per day! Even a slow, silent leak can add gallons to your bill.
- Flushing the toilet alone uses 1.5 7 gallons per flush.
- An average bath requires 37 gallons of water.
- Water your lawn only when it is necessary.
- If you step on the grass and it springs back up when you move, it does not need water. If it stays flat, it does need water.
- Taking a shower uses 2 7 gallons PER MINUTE.
- Use bowl of water to clean fruits & vegetables rather than under running water.



Leak Detection Method

The following leak detection methods are usually "point-in-time" tests. They only indicate if water went through the meter during the test period. If you have unexplained high water bills and the first test did not indicate a leak, continue to check for leaks by monitoring the meter. There is a Meter Monitoring Log (page 6) and Trouble-shooting List (page 5) that will help you track leaks.

- 1. Locate the water meter. It should be near the street under a metal, plastic, or concrete lid. When water is not being used, none of the indicators on the meter should be moving. Water meters have numbers of spinning dials, which record usage. Most meters also have a small "leak detector" arrow, which senses the lower volumes of water common with leaks. Turn off every water-using item inside and outside the home.
- 2. Check the meter. The best time to take the first reading is at night right before everyone has gone to bed. Write down the date, time, meter reading, and if the red triangle is moving. Use the Meter Reading Log to record your readings. Make sure to write down all of the numbers starting from the left. If the triangle is moving, you may have a leak. In some cases, it may move back and forth very slightly, as water pressure in the street fluctuates. If it moves forward continually, even at a slow rate, you have a leak. In the morning, before anyone uses water, take another meter reading. The evening and morning readings should be approximately the same. The reading should be the same, or higher, than the last reading indicated on your most recent water bill. If the current read is lower than what is indicated on the most recent bill, the meter could have been read incorrectly. Contact the Finance Department at (209) 941-7320 with any questions.

DO NOT TURN OFF THE ANGLE STOP VALVE LOCATED INSIDE YOUR METER BOX. CITY OF LATHROP EMPLOYEES ARE THE ONLY PERSONNEL ALLOWED TO DO ANY MAINTENANCE WITHIN METER BOX.

Use the Troubleshooting List as a guide to help you inspect all water-using devices and appliances.

- 3. If you still can't locate the leak, find the main shut off valve for your home. The main water valve will stop all water flow into your home. It can be located indoors or outdoors but should be near the location where the water line enters the home. Normally it is located on the side of the home where a water hose can be hooked up. There are always two sets of valves: a water hose valve, and a main water shut off valve. If you don't know where the shut off valve is, follow a straight line from the water meter to your home, and look for it there.
- 4. Confirm the location of the leak. If the main shut off valve is closed and the meter has stopped, the leak is not between the meter and the home. If the meter still runs with the main shut off valve closed, your leak is between the meter and the home. Since outdoor leaks are relatively rare, be sure to double check that all indoor fixtures and outdoor hose and irrigation lines are off. Please call a plumber for all domestic leaks.



Leak Troubleshooting List

The following information is a list of household areas where water is consumed. Inspect every water-using device and appliance in your home, including any rarely used or broken devices. Use checkboxes to mark off items you have inspected.



Throughout the House	Kitchen	
Hot water heater	Sink faucet and fixtures	
□ Hot water heating system	Automatic icemaker	
Humidifier	Automatic dishwasher	
□ Water softener		
Medical equipment		
Hot tub or spa	Bathroom Area 1	
	Toilet	
Basement or Laundry Room	Sink faucet and fixtures	
Washing machine	Shower faucet and fixtures	
Clothes Steamer		
□ Sink faucet and fixtures	Bathroom Area 2	
	Sink faucet and fixtures	
Outside the House	Bathtub faucet and fixtures	
Spigots	Shower faucet and fixtures	
□ Irrigation/sprinklers		
Garden hoses		
Pool, hot tub, spa	Other Appliances and Devices	
Fountain or pond		

Think you have a leak? Check Your Water Meter!



Water Meter Monitoring Log

Keep track of your water meter readings here. If you do notice a leak, call your local plumber for inspection and/or repair.

Resident Name:_____

Resident Address:_____

Daytime Phone:_____

Date	Time	Reading	Usage	Is Red Triangle Moving? (circle one)
				Yes No





Looks like you've got a leak!

How to detect leaks in and outside of your home

OUTDOORS

Leaks can occur outdoors in your supply system or irrigation system and they can occur indoors in your plumbing system or from fixtures.

TO DETECT POSSIBLE LEAKS IN IRRIGATION LINES:

- 1. Look for wet spots in the lawn.
- 2. Look for obvious patches of greener sections of lawn, in comparison to the overall lawn color.
- 3. There may also be small growths of mushrooms in and/or around wet spots.

Your irrigation system may have a broken emitter or the timer may be off schedule or malfunctioning. There could also be a crack or break in your service line between the meter and the house.

If your home is a newer home, check your home warranty or contact your home developer regarding repair or replacement for irrigation lines. For older homes, please seek a professional contractor for further consultation.

INDOORS

At night, when there is the least amount of noise within your home, listen to the toilet bowl. You will hear a distinctive noise of continuous running water, if there is a leak. Your toilet should stop running after you flush it, and normally there should be NO NOISE.

Make sure that all faucets are not dripping water when they are securely shut.

The Water Conservation Kit you picked up today from the City of Lathrop Public Works Department, if used properly, will help reduce wasted water and will also help you and your family keep water usage low.





- Some refrigerators, air conditioners, and ice-makers are cooled with wasted flows of water. Consider upgrading with air-cooled appliances instead.
- Adjust sprinklers so that only your lawn is watered moderately; and water does not run onto the sidewalk and street.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Use the garbage disposal sparingly. Compost vegetable foodwaste instead.
- Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
- If you have an automatic refilling device on a residential pool, check your pool periodically for leaks.
- By using food coloring or dye tables in your toilet tank, you can detect possible leaks. Fixing a leaking toilet can save up to 1,000 gallons a month.
- Should you need to shut it off, know where your main water shut-off valve is located. This could save water and prevent damage to your home in the event of a leak.
- Rather than following a set watering schedule, check for soil moisture two to three inches below the surface before watering.
- Use a commercial car wash that recycles water.
- Plant in the fall when conditions are cooler and rainfall is more plentiful.
- For cold drinks, keep a pitcher of water in the refrigerator instead of running the tap.
- Replace your showerhead with a water-efficient model.
- Use a rain gauge, or empty tuna can, to track rainfall on your lawn.
- Use water-saving aerators on all of your faucets.



Internet Resources

Below are a few websites with information on recycling, reducing, reusing, State laws, county ordinances, and Lathrop ordinances which you may find helpful.





City of Lathrop Water Conservation Ordinance

LMC 13.08.030.1 Definition of Water Waste

Any of the following acts or omissions, whether willful or negligent, shall constitute the waste of water:



- A. Causing or permitting water to leak, discharge, flow or run to waste into any gutter, sanitary sewer, watercourse or public storm drain, or to any adjacent property, from any tap, hose, faucet, pipe, sprinkler, pond, pool, waterway, fountain or nozzle. In the case of irrigation, "discharge", "flow", or "run to waste" means that the earth intended to be irrigated has been saturated with water to the point that excess water flows over or through the earth to waste. In the case of washing, "discharge", "flow", or "run to waste" means that water in excess of that necessary to wash, wet or clean the dirty or dusty object, such as an automobile, sidewalk, or parking area, flows to waste.
- B. Allowing water fixtures (including but not limited to toilets, faucets, shower heads) or heating or cooling devices to leak or run to waste.
- C. Maintaining ponds, waterways, decorative basins or swimming pools without water circulation devices.
- D. Backwashing so as to discharge to waste swimming pools, decorative basins or ponds in excess of the frequency necessary to ensure the healthful condition of the water or in excess of that required by standards for professionally administered maintenance or to address structural considerations, as determined by the city manager, or designee.
- E. Operation of an irrigation system that applies water to an impervious surface or that is in disrepair.
- F. Use of a water hose not equipped with a control nozzle capable of completely shutting off the flow of water except when positive pressure is applied.
- G. Irrigation of landscaping during rainfall or 48 hours after a measurable rain event.
- H. Overfilling of any pond, pool or fountain, which results in water discharging to waste.

LMC 13.08.120 Mandatory Requirements in Promotion of Water Conservation

- A. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses (as defined in LMC Section 13.08.030.1) are prohibited.
- B. Water shall be confined to the user's property and shall not be allowed to run off to adjoining properties, or to the roadside or to the gutter. Care shall be taken not to water past the point of saturation.
- C. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
- D. All leaks (including irrigation systems, pipes, fixtures, pools, ponds, fountains and waterways) shall be repaired within five calendar days or less if warranted by the severity of the problem as determined in the discretion of the city manager, or designee.
- E. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be allowed only to the extent required for health, maintenance, or structural considerations, and must otherwise comply with all applicable federal, state and local storm water management program requirements, including, but not limited to the urban storm water quality management and discharge control ordinance set forth in Chapter 13.28 of Title 13 of the City of Lathrop Municipal Code.
- F. Landscaping
 - 1. All landscaping installed in the City of Lathrop shall comply with the current Model Water Efficient Landscape Ordinance (MWELO) established by the State Department of Water Resources and landscape requirements adopted by resolution of the city council.
 - 2. Irrigation of new landscaping shall be allowed on any day of the week for a period of 30 days after the new landscaping is planted, unless the city manager, or designee, provide prior written consent to extend this time period based on plant type and the season when landscaping is planted. After 30 days, irrigation days and run times should be decreased to settings appropriate for an established landscape.
 - 3. Upon city declaration of a water shortage, the city manager may impose revised and/or additional limitations on the irrigation of new landscaping as specified in the City's WSCP set forth in Section 13.08.130, and no person shall use, or cause to be used, city water violation of such limitations while the water shortage remains in effect. A Waiver may be granted to irrigate during an established period for actively used turf areas and /or sports field. Allowance shall also be made for irrigation testing and repairs.



City of Lathrop Department of Public Works

Please contact us for any questions or to request your water conservation kits below:

C/O Water Conservation Kits 390 Towne Centre Drive Lathrop, CA 95330 Phone: 209-941-7430 Email: pw_admin@ci.lathrop.ca.us