

Drain and Backwash Pools Legally & Safely*

When you need to backwash your pool filter or drain the pool, try to use the water to irrigate landscaping. **Do not drain water into the street, alleyway or other right-of-way or drain near any structure (walls, houses etc.) or HOA common areas.** If irrigating your landscape with pool water be careful not to overwater outside your property boundary.

Take care when using pool water on landscaping since it contains more salt and chlorine than tap water. Bermuda grass and oleanders can be watered without much problem, but avoid using this water on citrus, hibiscus, or other salt-sensitive plants. Also, avoid spraying the water directly onto leaves or watering the same area repeatedly.

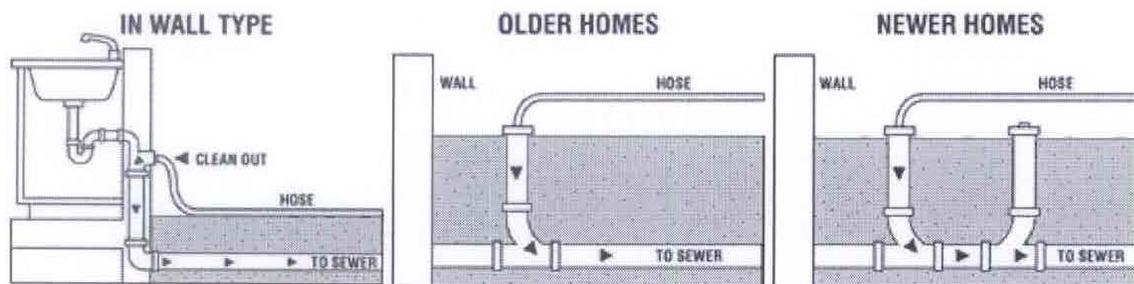
If you have to drain your pool completely, your best option is to empty it into your home's sewer clean-out pipe. The clean-out pipe is usually located next to the house at the point closest to the city sewer line usually outside a bathroom or the kitchen. On some older homes, the clean-out pipe is located in the wall or at ground level, but may be hidden by landscaping. Older homes usually have only one opening, while new ones have two clean-out pipes leading to the sewer line.



A threaded cap, usually black and 3 to 4 inches in diameter, covers the opening. If your neighborhood has alleys, your clean-out probably is in your back yard. If there is no alley, it may be in the front or side yard. If you cannot locate it, or a sidewalk or a patio has covered it, consult a plumber about installing one.

Caution: Using a clean-out pipe located in the wall is risky since the potential for water backing up into the home is high.

The maximum recommended discharge rate is 12 gallons per minute. Although a safe flow rate may be less, depending on the size of the drain line, distance to the sewer main, and the condition of the pipe. Most pool filter pumps will discharge too much water too fast and may cause water to backup into the yard or the house. A pump that operates at 700 gallons per hour is about the right size.



Note: Do not install the pool drain line as a permanent fixture. This may violate the city plumbing code or county health regulations and could contaminate the water when you refill the pool.

Procedure for using the sewer clean-out pipe:

- Locate the clean-out pipe. If there are two, use the one closest to the home.
- Remove the cap and insert the drain hose a few inches into the pipe.
- Secure the drain hose so it won't pop out.
- Turn on the pump.
- Immediately check to make sure no water is backing up into the house. Drains for showers and tubs are the first places to check.

This chart shows how long the draining process will take, using the volumes noted.

HOURS REQUIRED TO DRAIN A POOL							
Flow Rate		Pool Volume (Gallons)					
(gal/min)	(gal/hr)	10,000	11,000	12,000	13,000	14,000	15,000
6	360	28 hrs.	31	33	36	39	42
7	420	24	26	29	31	33	36
8	480	21	23	25	27	29	31
9	540	19	20	22	24	26	28
10	600	17	18	20	22	23	25
11	660	15	17	18	20	21	23
12	720	14	15	17	18	19	21

For questions regarding this process, please contact the Engineering Department at (623) 333-4219; Water Resources at (623) 333-4400 or seek professional assistance from a qualified individual specializing in pool drainage.

**Stormwater Quality Program/Drainage and Flood Control, Ordinance No. 1114-05 – Chapter 21, Article 1, Subsection e (21-2e), Violations, Ordinance No. 1215-1106 – Chapter 8, Article III, Section 56 (8-56)*

Best Management Practices For conserving pool water

- Cover the pool when not in use to control evaporation. Up to 95% of water loss from evaporation can be saved through the use of a pool cover. For the typical pool you can save an average of 16,000 gallons of water a year with a cover.
- If you have a pool heater, reduce the temperature - particularly when the pool is not in use.
- Limit the frequency of pool draining and refilling. Only drain and refill pool when required for water quality reasons.
- Backwash pool filters only when necessary. If the backwash cycle is controlled by a timer, check and adjust the frequency of the cycle to ensure optimal efficiency. Use head loss to determine backwash frequency (8 -10 psi loss). Backwash until the water is clear.
- Where feasible, use filter backwash for irrigating lawns or plants, or for cooling tower make-up.
- Lower the pool's water level as much as possible to reduce the amount of water that can be splashed out.
- Check the pool regularly for cracks and leaks and make repairs promptly. If water level drops more than 1 inch per day, investigate for problems or leaks.
- Replace showerheads in outdoor changing areas to low flow fixtures and post signs to encourage pool users to limit the time spent in the shower.
- Add a fence, trees or shrubs to provide a windbreak to reduce evaporation.
- Utilize a pool vacuum that recycles water when cleaning the pool. Remember, while working in and around your pool, be sure safety precautions are taken in regards to the supervision of children. Drowning prevention requires eye-to-eye supervision and working barriers of fences and self-closing, self-latching gates.