

Water Saving Tips to . . .

Keep the Splash in your Pool

IS YOUR POOL LEAKING?

In our dry desert climate, the typical swimming pool can evaporate its equivalent water volume in one year – up to 25,000 gallons of water. Along with evaporation, you will also have water lost to ‘splash out’ and possibly for the backwash process. However, it is also estimated that up to 30 percent of all pools have a leak, wasting lots of water unnecessarily.

Since half of the pools out there have a fill valve (automatic pool refiller), leaks often go unnoticed. According to Rick Schmidt from National Leak Detection of Mesa, problems are not only occurring in aging pools but in new ones too. Leaks may occur due to a variety of reasons. Depending on the type of liner your pool has, there may be problems like holes, tears, or cracks allowing the water to leak undetected under the pool decking or the pool itself. But more often leaks are a result of plumbing problems or improper seals around fittings.

To determine if your pool is leaking or if it’s just the normal loss due to evaporation, use this neat trick. First, turn off your automatic pool refiller if you have one. Place a bucket of water on the top step of the pool and fill it with water to the pool’s water level (or just mark the level of water in the bucket and the water level of the pool with a wax marker and measure the loss). After a day, if the water level in the pool is lower than the bucket, there is probably a leak in the pool structure or plumbing system. To further detect the cause, repeat the test with the bucket. First, measure the water loss after 24 hours with the pump running, then measure the water lost again after 24 hours with the pump off. If more water is lost when the pump is running, the plumbing is probably the cause.

If you’re a do-it-yourselfer, check out www.poolcenter.com/leaks.htm for more ideas of possible problem areas that you can check. Or, if you need to, call a leak detection service or pool repair company for help. Check with the

company to see if they have high-tech leak detection equipment like sonar, infrared thermography and ultrasound. While repair costs can vary greatly depending on the severity of the problem, many repairs run in the range of \$200 to \$300. Once it’s repaired, think about all the water you’ll be saving.

Have you wondered just how much water does evaporate each month? Evaporation is affected by weather conditions such as sunlight intensity, air temperature, wind, and humidity, but the water temperature is also a factor. Because of that, the water volume, shading, and coloration of the pool interior may affect the amount of water that will evaporate. However, the chart below provides an estimate of inches of water lost and total gallons lost for a pool with a 400 square foot surface area. These figures are based on average weather conditions that we experience here in the Valley. Note: the table does not consider water gained by rainfall.

Water lost to evaporation each month from a 400 sq. ft. pool.

Month	Inches of water lost	Gallons of water lost
January	2.6	653
February	3.5	860
March	5.4	1,346
April	8.1	2,015
May	9.9	2,456
June	10.8	2,690
July	10.4	2,586
August	9	2,242
September	7.5	1,872
October	5.9	1,461
November	3.6	895
December	2.4	588
Totals	79 in. or 6.5 ft.	19,665

See page two for more water saving tips!



How do you know if your pool is leaking?

Clues to look for...

- Water level drops more than would occur through evaporation.
- Wet spots occur around the surrounding landscape.
- Air bubbles rise to the surface.
- Chlorine stabilizer is lost too soon after chemical treatment.
- Algae formation occurs too soon after chemical treatment.



Conservation 623.333.4422
www.smarthomewaterguide.org

Remember – It’s NEVER off-season to watch your kids around water!

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WATER SAVING TIPS FOR SWIMMING POOLS

Besides fixing leaks, try these other water saving ideas:

- Use a cover. This will reduce evaporation, increase safety, and keep summer monsoon dirt out of your pool, which will reduce your backwash frequency.
- Consider new chemical covers that produce a micro-thin layer on the water's surface.
- Do not overfill to minimize potential loss due to splashing.
- Check pool fill valves (automatic pool refillers). A fill valve can get stuck and overfill your pool. Turn them off or have someone check your pool when you are out of town.
- Maintain chemicals properly to reduce the frequency of draining the pool. Pools



seldom require draining, so consult a professional before doing so. See sidebar.

- Reuse pool water If you do need to drain your pool. Do not add new chemicals for up to 72 hours, then use the backwash on salt tolerant landscape plants (oleanders, Bermuda grass, natal plum).
 - Backwash pool filters only when necessary. Backwashing more frequently wastes water.
 - Monitor backwash. You only need to backwash until the water runs clear.
- Use pool companies that can do repairs without draining the pool if they are needed.
- Turn off waterfalls, water slides, or other water features when not in use.

Save water by not draining your pool!

Some of the latest technology includes portable water restoration systems that are brought onsite and eliminate the need to drain the pool. Consider two local companies who provide this service (using slightly different technologies).

• **Aqualabz (EcoKlear)**
480-894-8164
aqualabz.com

• **Calsaway Phoenix West**
602-741-2315
calsawayphoenixwest.com

TIPS FOR DRAINING AND REFILLING YOUR POOL

Sometimes, it is necessary to drain your pool. If so, pool water must be drained into the sewer clean-out. If your home or property does not have a sewer clean-out, you must drain it slowly enough so that it remains in your yard.

Pools MAY NOT be drained into the street, alley, or neighboring properties.

TIPS FOR RE-FILLING THE POOL

- Water used to fill the pool is not free. The charge for the water used is based on consumption, just like the water used to take a shower or to do the dishes. It is billed per thousand gallons based on the current City of Avondale rates.
- If you fill the pool between **April and November**, there will be no impact on your monthly wastewater (sewer) charge since the wastewater charge is calculated each May based on an average of the previous winter's usage.

- If you fill the pool between **December and March**, please remember that the monthly wastewater rates are based on an average of your monthly winter water usage (between December, January and February). So, filling the pool during these months may impact your monthly wastewater fee for the following year. Note: You can contact the Water Billing at 623.333.2005 and request a **Wastewater Fee Adjustment form**. This form would allow you to account for the higher usage that was a result of filling the pool. This keeps that usage from being calculated into the winter water average usage and negatively impacting your future wastewater charge.

- The City of Avondale does not rent fire hoses or hydrant wrenches for pool filling.
- In order to judge what the impact to your monthly water bill might be, you can read the water meter before you start filling the pool and read it again when the pool is filled.

- The difference between these reads can be multiplied by the current water rates to calculate the cost of the water used for budgeting purposes.



Reference to commercial companies and products in this document are for the purpose of educating our customers regarding new water-saving technology only and should not be interpreted as an endorsement by the City of Avondale.