Conserving Water in California: Liquid Pool Covers

California is currently experiencing one of the worst droughts in recorded history, and a dedication to water conservation is required by every person and business in the state. We all need to make changes to the way we use our water supply, whether that means restricting your garden watering schedule, reducing the number of times you wash your car annually, or simply using a swimming pool cover.

The Problem with Water Evaporation

Recent research has identified that there are 43,123 swimming pools in the Los Angeles basin between Hollywood Hills and San Pedro, "from pools shaded by leaf-covered pergolas in Santa Monica to ones surrounded by chain-link fences in Alhambra[1]". The same researcher identified that the average size pool in California is about 430 sq ft; at an average depth of 5.5 ft, the total average volume equates to 18,000 gallons of pool water. Using these numbers it is estimated that in the swimming pools in Los Angeles alone there is over 775 million gallons of water being stored in those swimming pools.

In similar findings, the California Spa and Pool Industry Education Council estimates that a pool evaporates a 1/2 inch to 2 inches of water per week[2]. By those calculations, the average swimming pool in California is losing around 19,500 gallons of water per year to evaporation alone.

Calculating Pool Volume

Calculating the volume of your swimming pool can be difficult, especially with a rounded or irregular shaped pool. SwimmingPool.com shares simple Pool Volume Calculator[3] that any pool owner can use as to make calculation quick and easy, or follow the following formula:

Square or Rectangular Pool

Length x Width x Average Depth x 7.5 = Volume in Gallons

Circular Pool

3.14 x Radius squared x Average Depth x 7.5 = Volume in Gallons

The Solution to Pool Water Evaporation

It is a well-known and proven fact that pool covers dramatically reduce water evaporation from swimming pools, very effectively conserving water. This one simple addition to every swimming pool in the state has the potential to save millions of gallons of water that is currently being needlessly wasted. As an added benefit, pool owners can save themselves much of the time and energy committed to maintaining adequate water levels required to ensure safe and effective pool equipment operation.

The US Department of Energy shows that savings of 50% - 70% of evaporation can be achieved by

1 http://www.latimes.com/local/la-me-c1-swimming-pools-20131202-dto,0,198951.htmlstory#axzz2mKp1Jn8I

2 http://www.olivenhain.com/files/docs/education_conservation/Pool%20FAQ.pdf

3 http://www.swimmingpool.com/maintenance/testing-your-water/pool-volume-calculator

using a pool cover[4]. There are three main varieties currently available: plastic or bubble blankets, safety covers and liquid solar covers. Traditional plastic blankets can be difficult and time-consuming to apply, and safety covers are often considerable financial investments to properly customize to each swimming pool. Liquid pool covers were developed by Flexible Solutions over 20 years ago and offer a safe, inexpensive and convenient alternative. Their products are offered under the brands of Heatsavr™ and Ecosavr™ – the original liquid solar pool covers[5].

Liquid pool covers have been proven to reduce water evaporation by 30% - 50%[6]. Based on the previously noted studies, swimming pools lose the equivalent to their entire volume in water evaporation each year. To estimate the potential for water savings on any pool, use the following formula:

30% Annual Water Conservation

Pool Volume x 0.30 = Average Water Conserved Annually in Gallons

50% Annual Water Conservation

Pool Volume x 0.50 = Average Water Conserved Annually in Gallons

If we base our estimations on the projections noted within the studies, the average 18,000 gallon pool in California has the potential to save up to 9,000 gallons of water annually simply by using a liquid pool cover.

Using a Liquid Pool Cover

Heatsavr™ is biodegradable and completely safe for all swimmers. It was approved by the California Conference of Directors of Environmental Health in 2001. When a liquid pool cover is dosed to a swimming pool it forms a single molecular layer on the surface of the water. It is completely transparent, odorless and otherwise undetectable by pool owners, but it can effectively reduce water evaporation by 30%-50%.

The products only require either a simple weekly dose from a bottle of Heatsavr™, or the addition of 1 Ecosavr™ fish per month. Ecosavr™ is a patented delivery device for dispensing the Heatsavr™.

If every pool in Los Angeles began using a Heatsavr™ or Ecosavr™ in their pool right now, the annual savings could be as high as 375 million gallons of water in the L.A. Basin alone. Just imagine the savings potential across all of California.

4 http://energy.gov/energysaver/articles/swimming-pool-covers
5 http://www.liquidpoolcovers.com/
6 http://www.liquidpoolcovers.com/reduce-water-loss-in-swimming-pools