



## Detecting Swimming pool leaks

At NSPS we find that leaking pool problems seem to grow in magnitude. We attribute much of this to a lower ground water level. There are many causes of swimming pool leaks, but we will be discussing the most common causes here.

As the earth around your pool dries out, it allows more air to be sucked in by a broken suction line. When there is less groundwater, there is less resistance for leaking pipes and the ground is able to absorb more water.

There are two types of leaks. The first is a *suction* leak, found in the pool skimmers or the main drain or the front of the pump. The second is a *pressure* leak from the back of the pump to the inlets that return water to the pool.

Breaks in any of the pool lines can cause water loss, but suction lines generally draw air and lose small amounts of water compared to a leak in a pressure line, which can cause massive water loss.

As with most things, there are always exceptions to the rule. In the case of pool leaks, if a main drain breaks down low, it could actually empty the pool to the level of the break. Such a massive leak is not normally attributed to a break in the suction line.

Another place to look for air leaks is the top of the hair and lint trap, which needs a good gasket and a smooth surface for the gasket to seal on.

Or, a poorly operating chemical feeder can suck air when the filter is being backwashed. Or, it could be a loose nut around the stems of the main drain or skimmer valves.

Finding leaks is a tricky business, but you can often help us pinpoint them. When looking for a leak, we always measure how far the water level drops in 24 hours, first with the pump on, then with the pump off.

If a pool loses more water with the pump on, we suspect the return line, automatic cleaner line or the backwash valve leak. If the pool loses more with the pump off, we suspect the skimmer or main drain lines leak.

As you can see from these many possibilities, determining the causes of a swimming pool leak is not a cut a dry procedure.