

When is a Pond a Pond?

Most communities have some type of pond, although that term is not exactly correct. There are a number of terms that apply to areas of land that hold water. They are: storm water pond; retention pond; detention pond and then, of course, a man-made lake or natural lake or pond.

Generally those man-made will require some type of maintenance. They may require extensive maintenance over a period of time in order to cause a storm water pond or a retention pond to provide the service it was intended to provide. Storm water ponds are widely used in new development and are among the most effective storm water treatment practices. They remove pollutants by slowing the flow of fast moving storm water and holding it, long enough to allow sediment, nutrients and other pollutants to settle out of the water. Storm water ponds are essential in the filtration of these pollutants that would otherwise flow from our cities into our rivers, streams, bays and oceans. Storm water ponds may also help communities meet the "control measures" required by new federal and state regulations. In addition to removing pollutants, many ponds are designed to create an aesthetic site amenity, wildlife habitat and/or develop a focal point or recreational area. In order for these ponds to work properly, communities must facilitate proper pond management practices.

When ponds absorb the storm water run-off, the sediment left at the bottom, after the pond does its job, is loaded with large amounts of nutrients such as nitrogen and phosphorus from fertilized lawns or from organics such as grass clippings, fallen leaves, animal feces and more. The high nutrient levels created from such pollutants find a home in the sediment at the bottom of the pond. Over time, this sediment becomes a thick sludge that produces food and fuel for problematic algae and aquatic weed growth. Once this muck gains a foothold on your pond, controlling algae blooms and aquatic weeds becomes much more difficult.

Even if the waterbody that exists in your community is not part of a storm water system, the use of fertilizers by lake front lawns will seep into the soil and eventually runoff into the water creating the same type of problems.

With proper pond management practices, it is possible to extend your pond's life. Good buffer zones, known as berms and swales, will slow the influx of sediment and nutrients and aid in erosion and sediment control. Beneficial bacteria applications to the pond will help metabolize high nutrient levels and will breakdown organic matter and bottom muck. The use of genetically altered fish species, triploid grass carp introduced into the pond can help contain the growth of water plants and algae.

Aeration has also been found to be perhaps the most important element that will help break down the bottom muck, push poisons out and replenish the pond with oxygen. All of these practices, along with monthly monitoring and treatment by a qualified, lake or water specialist can help maintain and extend the life of your pond.

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