

## News from the Watershed

### Water treatment ponds; why they're important.

You see them along the roads, in the mall parking lots, and even in your neighborhoods. Water treatment ponds, also known as storm water ponds, retention ponds and detention ponds are popping up all over. As more and more development occurs, we will see even more of these ponds dotting our landscape.

These ponds are designed to collect storm water runoff in an effort to filtrate pollutants, control flooding issues and control flow. As with all water, the water that goes through these ponds will eventually end up in the ocean. These ponds help to “clean” or filter the water before it gets there. In addition, because of their water holding capacity, they help to reduce the possibility of flooding. If these ponds were not installed, think about where all of that runoff would flow.

As you have seen, these ponds are put in when new development occurs. When a land use changes, the way the water runoff would normally flow is usually affected. For example, if a mall is constructed and a parking lot is put in, when it rains the water will not soak into the ground since it is paved. Before the mall was there, chances are the rain percolated into the ground and went on its merry way into our ground water, which eventually made its way into our lakes. Now, with the asphalt, it certainly doesn't go into the ground. That water is called runoff; but where does it go?

That is the question and that is why we have these water treatment ponds. These ponds are designed in such a way that the runoff will go into the constructed basin (water treatment pond). Once the run-off makes its way to the pond, it is “filtered” so that the bulk of the pollutants are removed before they reach our groundwater. This pollutant removal process can occur in a number of ways. The majority of pollutants are removed through the gravitational process. They simply settle to the bottom of the pond. In addition, aquatic plants and microorganisms that reside in the pond can also assist in removal of pollutants. The aquatic plants serve as a filter and assist in the sediment filtration process and can remove metals and nutrients through biological uptake and degradation of organic contaminants.

Did you know that the most common major cause of pollution of streams, rivers and oceans is surface water running off yards, streets, paved lots and farm fields? Pollutants such as gasoline and oil from our vehicles and pesticides and fertilizers from our lawns will, hopefully, pass through a water treatment pond or natural wetland before it reaches our groundwater, lakes and eventually our ocean. These wet areas serve as a “cleaning area” for the polluted water.

So next time you see one of these ponds, you will understand how important they are. Without them and natural wetlands, our water would not have a place to go to be filtered and held before it reaches its destination.

We are fortunate in Florida to be blessed with so many wetlands, both natural and manmade. We need to make sure the water that runs off, gets filtered before it reaches our oceans.

On January 20, 2008, a group of 4-H kids ( the Heartlanders) ranging from ages 7 – 15 got together and did something positive for the environment. They installed signage on the storm drains around Lake Jackson. The Highlands Soil and Water Conservation District sponsored the group and provided the signs and glue. Safety vests were provided by Keep Highlands

County Beautiful. By installing these signs on the storm drains, it is our hope that people will think about what is going into the lakes before they dump anything into these drains. This is just one way that a group of environmentally minded people have helped the environment. To find out more about things you can do to help reduce pollutants in the water runoff, please contact our office at 402-6545 or visit our website at <http://www.highlandsswcd.org/>.