The Groves Community Development District

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Question: Why so many Man-Made Ponds?

Homeowners new to Florida always ask this question. Outside of the fact that they are, by law, a mandatory part of a community's development plan, we offer you the following information.

Retention ponds have been constructed through out Florida to store excess water run-off from storms. Initially ponds were built to solve flooding problems. Flooding became a greater potential as buildings, streets, parking lots, etc., changed the type and distribution of vegetation and soil conditions. This tendency toward more impervious surface greatly increased the risk of localized flooding. Ponds however do more than just store water.

Florida has an amazing variety of ecosystems, ranging from upland forest in the northern part of the State, to mangrove swamps, which can be found in every stretch of Florida's vast coastal areas in the form of rivers, bays and lagoons. Mangrove swamps are one of the most effective ecosystems on earth. These areas however are very susceptible to pollutants. Storm water run-off is a major source of pollutants to our wetlands, lakes and bays. The first few minutes of a thunderstorm will wash 90% of the pollutants off the our streets, driveways, parking lots, including excess fertilizer from the community lawns and golf course into our ponds.

This creates a "shock loading" of pollutants into area waters. Storm water ponds are designed to accept and treat this "shock" before passing water to our wetlands. Our ponds have a "designed period" of time" for holding storm water. This holding time allows for more water to soak into the soil which adds a natural filtration to the water before it leeches into the aquifer and adds to our ground water supply. In addition edges of some of our ponds have plants purposely planted in "littoral shelf" areas. Littoral shelves provide the substrate for the attachment of microorganisms that breaks down and dissolve some of the organic material and behave like the trickling filters used by sewage treatment plants.

Ponds also unfortunately can be a source of nuisance vegetation, such as various forms of algae, cattails and hydrilla to name a few. These nuisance plants are usually controlled through chemical treatment by special aquatic maintenance companies. The need for treatment varies from pond to pond as these ponds actually become their own little ecosystem. In some cases ponds surrounded by large number of homes or golf course fairways are the most difficult to control. This is due in part to the excess amount of fertilizer that enters the pond water. This adds a tremendous amount of food and nourishment to the very plant material the aquatic company is trying to kill off. In addition there are environmental limits set to the amount of aquatic herbicide that may be used in a pond at any one time, so as to not have an adverse effect on the local environment.

All in all the issue of “why ponds” is certainly a complicated one. The proceeding information just scratches the surface of the intricacies of storm water ponds. However appreciation of their value can be attained by better understanding them, and of their function and purpose.

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