

The 2008 Pond Committee has been composed of representatives from all Winslow Farm neighborhoods. They have been focusing on pond issues for two years.

The November 13 meeting is a way to share some of the information learned about ponds and pond management, explain the proposed pond standards and the proposed 2009 budget for ponds, and to present some ideas about changing our pond system.

### **Why do we have Ponds in Winslow Farm?**

Water detention/retention basins, or ponds, are not unusual in housing developments in Bloomington. The developer of Winslow Farm was required by the City of Bloomington to provide some way to handle rain water running off roofs and driveways when they started building Moss Creek, Olde Mill and Hickory Stick (now called Moss Creek Village). The purpose of a water detention device is to prevent flooding downstream during and, just after, a storm event. The pond closest to Winslow road, with a dam, spillway and overflow device, was engineered to detain water, and was required by the City of Bloomington. City engineers stated in 2007/2008 they do not require that pond, or any pond, to retain water. In other words, for the purpose of flood control, the ponds do not need to have water in them at all times. The developers chose to lay out Moss Creek and Moss Creek Village with amenity ponds and the city planning department approved this design.

### **How Many Ponds Are in Winslow Farm?**

There are seven “wet ponds” -- five within Moss Creek and two within Moss Creek Village -- and one “dry pond” located in the south west corner of Sweetbriar.

The dry pond in Sweetbriar has no flood control device. It is simply an area of undisturbed land through which the rain water run off, from the majority of homes in Winslow Farm, flows and is detained.

Rain water from Bayberry, Sweetbriar, New Bent Tree, Laurelwood and most of Bent Tree neighborhoods flows through the dry pond.

Rain water from Olde Mill, Moss Creek, Moss Creek Village and a few homes in Bent Tree flows from drains and creeks thru upper ponds into the detention pond with a dam and overflow device and exits the system into the ditch along Winslow Road and eventually to Lake Monroe.

### **Issues Related to the Ponds**

The aging of the pond system has created problems such as leaking weirs (waterfalls), torn liners, broken pipes, and sump pump failures. Some of the problems can be fixed within WF budget constraints; other problems are expensive to repair and may well require the use of reserve funds. For example, the area in pond three near the bridge across from Olde Mill. This area collects silt and there is little water circulation. One solution for this area, and possibly for other ponds, is to install a sediment trapping system and plant a water/rain garden

Other solutions suggested by residents range from poking holes in the liners and letting all the water out, to completely rebuilding the whole system, to converting the above ground pond system to underground storm sewers.

### **Pond Circulation**

The developers created a circulating system in the 7 wet ponds. There is a large pump in the last pond (pond # 7 closest to Winslow Road) which pumps water approximately 1,100 feet up hill to the first pond (pond # 1 closest to Highland). When the level of water in pond seven drops, the circulating pump must

be turned off or the operating time must be significantly reduced. When we have draught conditions, and additional water is required, water from an unknown source is pumped into the system by a sump pump adjacent to pond # 5. Circulating the water in the ponds requires electricity which contributes to global warming and draught conditions.

### **Pond Conditions & Chemical Treatments**

Ponds contain living plants and animals. They live together in the pond ecosystem and are dependant upon each other. The plants in the ponds provide food, shelter and oxygen for the fish and frogs. Chemical treatments are regularly scheduled in an effort to keep algae growth and noxious weeds under control without harming the animal life.

In the past two years, there have been changing physical conditions in the ponds which are affected by weather conditions, temperature, wind, rain – or lack of rain – . The Earth's climate has changed many times during the planet's history, with events ranging from ice ages to long periods of warmth. Historically, natural factors such as volcanic eruptions, changes in the Earth's orbit, and the amount of energy released from the Sun have affected the Earth's climate. Beginning late in the 18th century, human activities associated with the Industrial Revolution have also changed the composition of the atmosphere and therefore very likely are influencing the Earth's climate.

### **“We are now the weather makers ... and civilization hangs on our actions”**

The Earth's surface is currently warming at a rate of about 0.32°F/decade or 3.2°F/century. The eight warmest years on record have all occurred since 1998, with the warmest year being 2005. We now have reduced rainfall over continental interiors during summer due to the increases in evaporation.

### **Pond Maintenance Standards**

Ponds are living entities and have a life cycle in which they slowly fill with sediment and eventually no longer hold water. Maintenance is required to slow that natural process so that they can perform their retention purpose.

After much research, conversations with homeowners in other developments, and site-visits to view ponds, our committee developed *Pond Standards*. These standards can be used to give direction for general maintenance to the “protective fringe”, proper chemical care, and fertilizer application (none) on land adjoining the ponds. The pond standards have been given to the Board for review, revision and approval. They will be presented to the homeowners for approval.

### **Next Steps?? Pond Committee Recommend a Feasibility Study**

The Pond Committee emphasizes that it is time to stop doing piecemeal fixes and to develop short- and long-term pond maintenance goals based on a comprehensive feasibility study. The committee recommends that the Board seek the services of a qualified pond management firm to do this study. We feel it will be more cost effective to be proactive and that Winslow Farm residents must have proper management of this community owned property if the pond system is to be healthy and a neighborhood asset.