

HARVEST FARMS HOMEOWNERS' ASSOCIATION

POND AERATION SYSTEM UPDATE

Earlier this year, Carroll County retrofitted our neighborhood storm water management retention pond on Cable Drive to eliminate invasive aquatic species and plants and to control algae. The County is not obligated to keep the water clean or healthy for wildlife. In the past, the HOA has stocked the pond with fish and maintained the landscaping in the common area surrounding the water. To ensure that the pond remains healthy and algae are kept to a minimum, the HOA board contacted several aquatic environment experts, who all recommended an aeration system to keep the water healthy.

The board will be discussing and potentially voting on the aeration system options at the October HOA meeting, scheduled for Tuesday, October 23 at 7:00 pm. Prior to the meeting, we wanted to provide some additional information on this issue.

WHY IS AN AERATION SYSTEM NECESSARY?

Homeowners that live near the pond have complained about the appearance and smell for several years. The HOA has taken several measures to improve it over the years, but no solution kept the pond completely healthy. The last time we received a series of complaints, the board contacted the County and they agreed to perform their retrofit ahead of schedule. This eliminated the accumulation of invasive aquatic species, but the problems began to return immediately. After contacting several aquatic environment experts, they all concurred that an aeration system was the best strategy to keep the water from becoming stagnant. As oxygen is the most important element of pond health, an aerator will improve water clarity, be healthier for fish and other animals, and keep mosquitoes from breeding.

WHAT IS THE COST OF THE AERATION SYSTEM?

There are several one-time and recurring costs. One-time costs include the following:

- Adding electrical service at the pond - \$8,803
- Installing the electric meter and connecting the electricity to the aeration system - \$3,858
- Aeration system - \$3,800

TOTAL ONE-TIME COSTS: approximately \$17,000

The recurring costs include the following:

- Monthly electric charges – to be determined but expected to be approximately \$300 annually
- Annual maintenance of the aeration system – approximately \$250

WILL THIS INCREASE HOA DUES OR REQUIRE A SPECIAL HOMEOWNER'S ASSESSMENT?

No. Because we have a significant amount of savings accumulated in our reserve fund for capital projects such as this, we will be able to pay for the one-time costs and still have money left in the reserve for other projects.

The aeration system proposals we received all estimated that the annual electricity costs for the system would be approximately \$300 and annual maintenance would be approximately \$250 so we do not anticipate an increase in the annual HOA dues.

We will analyze the operating costs of the system in 2013 as well as the status of our reserve fund and may recommend budget changes in future years.

WHAT WILL THE AERATION SYSTEM LOOK LIKE?

The aeration system consists of a small compressor at the shoreline, with underwater diffusers at the bottom of the pond. There would be no fountain or other above-surface apparatus so the environment would retain its natural appearance.

WHAT ARE THE DETAILS OF THE AERATION SYSTEM? HOW LOUD WILL THE PUMP OR SYSTEM BE?

The systems under consideration all use a ¾ HP rotary vane compressor to deliver air to multiple underwater diffusers via self-sinking air tubing. The system would be placed on the shore in the only viable location, at the north end of the pond. The diffusers would be placed at the pond bottom at locations determined by the aquatic experts chosen to install the system. The compressor would be housed in a sound-reducing steel cabinet. Diffusers are submerged and would make no noise.

CAN THE AERATION SYSTEM BE INSTALLED IN ANY OTHER LOCATION AROUND THE POND?

Our options for locating the aerating system are limited. The County prohibits plantings, equipment, or structures on the east side of the pond (the side furthest from Cable Drive). There is a natural spring on the northwest side of the pond that keeps that area swampy. Our pier is located on the west side. The compressor unit needs to be on a level piece of stable land on the shore, which leaves the NNW corner as the most viable location. The board will certainly consider suggestions for other possible locations before making a final decision. It is important to note that the location that BGE will bring the electricity to will not change regardless of where the system is located. Because the HOA is paying for an electrician to run the electricity from the meter to the compressor unit, the further away the compressor unit is located will increase the cost of this installation.

WHAT DOES THE ANNUAL MAINTENANCE INCLUDE?

Preventative maintenance includes annual air filter changes and biannual carbon vane replacement. Other measures that may be needed after five to 10 years of use would be cooling fan replacement and air stone replacement. Old tubing can also leak, but this repair is typically made after 10 years of use and is not costly. The cost of all this work is estimated at no more than \$2500 for the first 10 years of operation.

WHAT ARE THE NEXT STEPS AND THE APPROVAL PROCESS?

The board will review the final proposals and options at the regular monthly HOA meeting, scheduled for Tuesday, October 23 at 7:00 pm in the Eldersburg Library meeting room. The current BGE proposal for electrical service expires on November 18, so we plan on voting on the project at this meeting to avoid having to solicit another proposal. We encourage residents to attend this meeting to ask questions and participate in the discussion.

If you are unable to attend the meeting but would like to provide an opinion for the record or ask any additional questions, please email the HOA board president, Charles Lawson (chazlawson@comcast.net).