

Officials work to clean lake

System expected to rid pollutants

By John Laidler

GLOBE CORRESPONDENT

It's a cherished natural resource, a place for area residents to swim and boat, and a source of drinking water.

But increasing human activity in and around Lake Attitash is taking its toll on the natural 360-acre water body, which is located in Amesbury and Merrimac.

New development and a growing year-round population around the lake are increasing the volume of pollutants draining into the lake from nearby lawns and roads. The pollution encourages the growth of algae and aquatic plants that interfere with residents' enjoyment of the lake.

Now, with the help of state environmental officials, Amesbury and Merrimac are joining forces to make the lake cleaner.

This July, crews are expected to begin installing new systems to remove pollutants from stormwater that drains into the lake.

Lake Attitash is a popular attraction in the summer months both for the residents who live around it and other members of the public, who access it through a state boat ramp in Merrimac. The lake also feeds into the Powow River, a primary water supply for Amesbury.

"The lake has been showing signs of degradation for a number of years," said Bob Prokop, chairman of the Merrimac Conservation Commission and a year-round lake resident. He said of the project, "This is the first real attempt to address the problems of the past and the ongoing problems we are dealing with now."

The project is being funded with the help of two grants, according to Todd Campbell, president of the Lake Attitash Association. The group, which has a membership of about 160 households in the two communities, is working closely on the project with Amesbury and Merrimac officials.

Last year, the two communities



PHOTO COURTESY OF BOB PROKOP

Lake Attitash is popular with area residents and those who use its state boat ramp on the Merrimac side.

were awarded a \$271,650 grant by the state Department of Environmental Management under a program to demonstrate how improvements around lakes can make them cleaner. The grant required Amesbury and Merrimac to chip in a combined \$91,100 in matching funds.

At the same time, the state Department of Environmental Protection awarded Amesbury \$98,205 in federal money, with the requirement that the city match the grant with \$64,570.

Campbell said the project, which is being designed by Milford-based Comprehensive Environmental, Inc., includes the work being carried out under the DEM grant program and the work carried out with the DEP award.

According to Matthew Lundsted, project manager for Comprehensive Environmental, stormwater flows into the lake through 25-30 discharge pipes. The water enters those pipes through catch basins in the lake neighborhood.

Pollutants enter the lake with sediments that are washed in with the stormwater. Lundsted said a limited amount of sediment settles on the bottom of the catch basins, but that much of it ends up in the lake.

The project involves the construction of 18 deep sump catch basins to replace existing catch basins, and 11 underground baffle tanks.

Deep sump catch basins have a deeper floor area to trap sediments than do conventional catch basins, according to Lundsted. They also have a hooded, L-shaped outlet inside of the basin which slows the flow of the water out of the basin, allowing more time for sediments to settle. As a result, less sediment enters the lake.

Baffle tanks contain three partitions through which storm water flows prior to reaching the discharge pipe. As it moves through the partitions, the water is slowed, causing it to lose sediments. Like deep sump catch basins, baffle tanks also have L-shaped hooded outlets.

Lundsted said that the work being funded with the help of DEM dollars will include construction of three baffle tanks and 16 deep sump catch basins in Amesbury, and one baffle tank and two deep sump basins in Merrimac, in addition to minor repair work to existing drainage equipment. That work will be carried out by public works crews from the two communities.

The work funded with the help of federal funds will include the construction of seven baffle tanks in Amesbury. It will be carried out by a contractor to be chosen by the city.

The grant monies are also helping fund ongoing work by the association to monitor the water quality of the lake.