

## Study reveals diminishing quality of river

*Development is causing problems in the Olentangy River, an EPA study says.*

By JENNIFER NOBLIT

A recent Ohio Environmental Protection Agency study of the Olentangy River shows that speedy expansion in Delaware County may be taking its toll on the environment.

Areas of the Olentangy River in Liberty Township that have been designated exceptional warm-water habitats by the Ohio EPA have been performing at low levels, due to river pollutants such as silt and storm-water runoff, according to a recent Ohio EPA study. Many of the problems found in the study take root in development.

A 2001 study of the lower Olentangy River showed water quality below expectations. While the EPA hoped that drought conditions caused the low scores, the most recent study confirmed its fears, said Friends of the Lower Olentangy Watershed Executive Director Kathy Remias.

"It solidifies what was suspected," Remias said. "There were many of the same issues from the last report."

A Hyatts Road testing site showed trouble.

"The Olentangy River site at Hyatts Road ... had the lowest score of any exceptional warm-water habitat mainstem site in the (lower Olentangy). The surrounding area is undergoing rapid development, causing increased siltation in surrounding waterways," according to the EPA report.

This site previously was considered a good fish community, but silt now clouds the clean water the fish need.

The conditions at a downstream testing site at state Route 750 "decreased significantly." The report said the exceptional warm-water habitat fell "below expectations."

Mussels also have been affected by the southern Delaware County development. A 1989 study found 21 different species of mussels; the most

recent study found just seven species.

Holly Tucker, who wrote the study, said it's a big deal to lose 14 species.

"We use fish and bugs to tell us what's going on in the river," she said. "By using fish and bugs, we get an idea of what's going on year-round."

Bugs and fish are not the only entities affected by a decline in water quality. Local residents can feel the effects as well.

"Don't they like to have water come from their faucets at home?" Tucker said. "Delaware (County) draws water from the Olentangy. ... Water-treatment plants will have to do more (water purification) and that will increase water and sewer rates."

River pollutants stem from development, according to the study. An increase in pavement, such as roads or driveways, causes more storm-water runoff, and construction can increase the amount of sediment and silt in the river.

"It is likely a reflection of the increased development occurring throughout northern Franklin County and Delaware County," the study said. "Increased impervious surfaces from development result in changes of flow regimes, increased urban runoff, increased siltation and nutrient enrichment. Steps should be taken now to reduce the effects of urbanization throughout this area."

"Delaware County is seeing the expansion of urban environment. ... The changing land use has increased rates of storm water (in the river)," Tucker said.

Other forms of development also can cause problems. Projects that drill under the river do not often cause direct pollution, but can, Tucker said. Boring could bring about the "potential issue of fracturing bedrock" and interrupting river flow. Projects such as the county's Perry-Taggart sewer line or the Columbia Gas extension also bring more development to the area and indirectly cause more pollution to the river, Tucker said.

Tucker's study will be used to develop solutions for a growing area. The Ohio EPA will work with groups, such as the Friends of the Lower Olentangy Watershed, to find ways to decrease pollutants in the river. A "total maximum daily load" report, or TMDL, which measures how much pollution the river can handle and still maintain good water quality, also will be written.

"The report I wrote tells where the problems are. The TMDL says now we know where are problems are -- here's how we will fix them," Tucker said.

Email Story

All information contained Copyright © Suburban News Publications, 2006