

The News of Orange County

TOWN ENVIRONMENT

Town to join trial treatment of invasive plant

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Hillsborough will face the battle against hydrilla in the Eno River head-on, partnering with other agencies to conduct a two-year trial treatment to eradicate the invasive plant.

The project will involve putting chemicals—approved for both water quality and environmental safety—in the river just downstream of the water treatment plant.

Town board members heard an update at their Monday, Jan. 26, work session, looking at the variety of possibilities a statewide task force had already ruled out to combat the hydrilla and walking through the different concerns involved with chemicals.

“It is kind of a monster out there,” Stormwater Manager Terry Hackett said. “It is an invasive aquatic weed that is regulated both at the state and federal level, so entities have to do something about it.”

Hydrilla originally came over from Asia as an accessory in fish tanks.

“It was brought over for aquariums,” Hackett said. “People liked it with aquariums, and flush your dead fish

down the toilet along with hydrilla, well guess what? It reproduces both from fragmentation stolens and tubers, and the tubers—little seedpods, if you will—can actually remain viable in the sediment up to six years. It’s a pretty hardy plant.”

Inspections first found hydrilla in the Eno River in 2005, but recordings of the plant in Lake Orange date back to the ’90s. Hydrilla showed up in Hillsborough’s reservoir in 2009.

“I know there’s a pond east of Lake Orange that has it, has several acres in it, so it’s a watershed-wide problem,” Hackett said. “But it’s relatively rare in moving systems. There’s not a lot of rivers that have hydrilla. The Eno is somewhat unique just because of the flashy nature; it gets low in the summer when the growing season for this stuff is at its peak.”

Kudzu of the river

Hydrilla has several ramifications for ecosystems, including a disease that can infect water fowl—and by extension other birds—that eat or come in contact with it. But the plant also out-competes native vegetation, which can endanger the habitats of a host of living things,

including the state-endangered panhandle pebble snail and the Roanoke bass, a species of concern.

“Recreation potentials, Eno River State Park considers this their No. 1 issue because you can’t swim in it,” Hackett said. “You can’t boat in it; you can’t wade in it. It’s just a mess, and it’s aesthetically unpleasing. And so it really hurts them. More importantly for the general populous, it can clog our water intake. That can become problematic, a lot of maintenance.”

The stormwater manger also said the patches of weed can cause issues for water quality.

“As the plant dies, that organic matter goes downstream, and it’s just additional organic matter in the system,” he said. “It really just throws the whole ecosystem out of balance, and so that’s how I tie it back to water quality—that and it does use a lot of oxygen as it grows.”

Trial and error

Knowing hydrilla had become a problem, various groups have tried different ways to combat the weed. Eno River State Park staff tackled the issue with manual labor, trying

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to remove it by hand a few years back.

"Not only was it way too much work, you just continue to break off the pieces," Hackett said. "And the pieces float down stream, and they can reattach and grow. So not the best."

Other areas—including Hillsborough's West Fork

GET INVOLVED

To learn more about the issue of hydrilla in the Eno River and the proposed plan to combat it with herbicides, come to a meeting in the Whitted Building on Wednesday, April 29, at 6 p.m. Experts will give a presentation and be available to answer questions.

Eno Reservoir—have used grass carp to get rid of hydrilla. But while that method has worked wonders in a lake-type environment, Hackett said it wouldn't work in the river.

"In a reservoir situation like West Fork, putting in the sterile grass carp is the best thing because we're managing it

as a water tank, if you will," he said. "... The truth is that in the river system where there's so many things going on, even a few grass carp—if they would stay put—they would eat everything, and we'd lose habitat that we're trying to protect. So not the best option for moving systems."

The Wildlife Resource Commission did test the idea last summer, putting 25 tagged grass carp into the river, but—as predicted—the fish moved too much to be effective.

Herbicide

The solution the statewide task force and state experts have settled on is herbicide, pumping chemicals into the river on an electronic pulse. The group decided to conduct a two-year trial first in Hillsborough with a close monitoring system before applying it to the rest of the watershed.

"I don't think anybody has tried these herbicide treatments in a moving system," Hackett said. "That's what's new about this and why we don't start rolling

it out watershed-wide. ... We're looking at putting chemicals in the river, and that's what it boils down to. But the good thing is we're going about this in the proper way."

An environmental assessment—which includes a toxicity study conducted by N.C. State University looking at the affects on both humans and plants and animals—is going through internal review at the N.C. Department of Natural Resources. Once through there, which Hackett estimated would be in three to four weeks, it will become a public document and the two-year trial will start. Monitoring will continue throughout the process.

Though the Hillsborough water plant conducted a jar study to test how the chemicals would affect drinking water—and the results came back clean—Hackett said the injection site would be downriver of the plant. The test will cost the town about \$5,000 a year, spreading the \$75,000 in annual costs among six other stakeholders.

"I think it's worth trying because the financial implications of not managing this could really mushroom," Hackett said.

Potential hazards

Hackett said that while the public perception of putting chemicals in the river will more than likely be a negative one, experts have said it won't have any real effect. The concentration is five parts per billion, a very small number, he said.

"At that concentration, it's safe for contact so for swimming, fishing, wading kids—that's not going to be a problem," he said. "The only thing that it does talk about at this concentration is irrigation for food crops."

Local soil and water staff have said that no farming operations in the area draw water from the Eno, but Hackett said they couldn't rule out potential families using the river for family gardens.

"That will be part of our outreach," he said.

Board members agreed that public education would be necessary going forward.

"I hope that we're prepared when the questions start arriving," board member Brian Lowen said. "When people start hearing about chemicals, we need to be prepared as elected officials to tell our residents that it's been proven that this is not going to adversely affect their drinking water."