## Winter Park puts algae to test as way to clean a polluted lake

By Karen Pankowski

OF THE SENTINEL STAFF

WINTER PARK — Winter Park plans to get into the business of growing and harvesting algae in an innovative lakes restoration project.

The idea is to try a new technique called algal turf scrubbing in Lake Chelton. If it's successful, the project could make the water in the three-acre lake in south Winter Park visibly clearer, city stormwater engineer David Pearce said.

Algal turf scrubbing works by anchoring a floating disk in the lake to give algae a place to grow. A small, motorized pump creates ripples of water across the disk.

The algae soak up excess phosphorus and nitrogen — nutrients that wash off roads and lawns. In excess, the nutrients can basically over-fertilize a lake.

By concentrating algae growth on the disk, which will be about 25 feet in diameter, less algae would be spread throughout the lake.

Crews could then collect the algae by raking or possibly vacuuming it off the disk each week.

"If it works, we are helping to promote a new technology," said Pearce, who hopes to have the project in place by early spring.

Dr. James Madison, who chairs

the city's lakes and waterways board, said money for the estimated \$50,000 project will come from private donations. He said he also intends to approach the state for matching funds.

Last week, city commissioners gave the Winter Park Lakes and Waterways Board the go-ahead to start work on the feasibility and engineering study, which is expected to be finished in 60 days. Residents around Lake Chelton also agreed to the plan after meeting with city officials on Monday.

The concept of growing a plant that absorbs excess nutrients and metals from water has been tried with other plants in Florida but without much success, Pearce said.

City officials said this is believed to be the first time algal turf scrubbing will be tried in a lake, although it is being used in some large aquariums.

Madison said Walter Adey, director of the Marine Systems Laboratory associated with the Museum of Natural History at the Smithsonian Institution in Washington, will be working with Winter Park.

He said city officials will send Adey, a pioneer in the algal turf scrubbing technique, water samples for study. Adey was out of town and could not be reached.

Kyle Jensen of Jensen Aquatic

Design in Altamonte Springs will handle the feasibility study, Madison said. Jensen said he patented the idea for the pulsating pump and has teamed up with Adey on work involving algal turf scrubbing.

Madison said he is excited about the project because it uses little energy, relying on the sun to stimulate the algae growth.

"We're using part of the problem, the algae proliferation, as part of the solution," he said, stressing the city's aggressive approach to restoring and maintaining its lakes.

Other projects include:

■ The \$600,000 urban wetlands project behind the Winter Park Ninth Grade Center. Construction of the retention pond is nearly complete. Planting cypress trees and aquatic plants, both of which will help suck up excess nutrients from stormwater runoff before it reaches Lake Virginia, will be done in stages over six months.

The city's \$240,000 alum dosing project in Lake Osceola. The design is being reviewed with construction expected to start by Jan.

The project will use a supercleaning chemical to settle out phosphorus and other pollutants and heavy metals from stormwater runoff. City officials expect to start talking to residents about the project beginning this week.

## Longwood budget needs some repairs