

Cleanup of urban lakes can get messy



RICARDO RAMÍREZ BUXEDA/STAFF PHOTOGRAPHER

Winter Park employs a giant bag to dredge a pond in Mead Garden recently. Water dredged from the pond was pumped to a permeable bag, which traps the sediment.

By KEVIN SPEAR | Staff Writer

A black bag that resembles a gargantuan beached whale in Winter Park's Mead Garden. Slime that bubbles like "sick oatmeal" in downtown Orlando's Lake Lucerne.

These are two chapters from the same tale of how long-established local cities struggle to clean up the region's most urban bodies of water.

The work is expensive: Orlando and Winter Park both charge the owners of every house in their jurisdictions an annual fee to cover the cost of water filtration and treatment. It's an unrelenting task, the

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Lisa Lotti, Orlando's
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cities say, because the enemy is whatever the area's rains send roiling down street gutters, including decomposing flotsam such as leaves, grass clippings, lawn fertilizer and pet droppings.

Because of drainage patterns solidly established decades ago, before anybody knew better, those gutters lead directly to rivers and lakes that are treasured for their scenery while still being used as liquid trash heaps.

The monolithic slab of a bag in Mead Garden, made of coarse fabric, is so large it's impossible to see the other side of it when stand-

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ing next to it. The bag, 7 feet tall when pumped full of water and muck, is designed to bleed rivulets of clear water, trapping the bad stuff inside. So it is alternately growing and leaking, then shrinking and desiccating.

The super-strong bag, which measures 40 by 80 feet, is a receptacle for slippery slop pumped and dredged from a pond used to cleanse Howell Creek. The creek flows out of Orlando and threads its way through Winter Park's chain of lakes, which features some of the priciest waterfront real estate in the region.

For several weeks, C&M Dredging of Leesburg sucked away at the Mead Garden pond muck — so hydrologically thin and fluffy, you couldn't cup much of it in your hands — and sent it pulsing three times a day into the bag, swelling it with 150,000 gallons of organic soup and stretching its skin into a surface harder than a trampoline. The dredging of the acre-sized pond was completed late last month, and the bag will now be left alone for a few months.

Tim Egan, a Winter Park lake manager, looks at a giant bag that holds water dredged from a pond in Mead Garden. He said the dredging job was funded by an anonymous donor.

Christian Miller, C&M's owner, said the bag will ultimately shrink 30,000 cubic yards of watery muck into 200 to 300 cubic yards of something like moist, packed dirt that can be hauled off to a landfill. When the time comes, the bag will simply be sliced open so a loader can scoop up the stuff inside.

Tim Egan, a Winter Park lake manager, said the \$55,000 dredging job was

paid for by an anonymous donor — a friend of the botanical garden — to restore the pond's attractiveness. The city would have had to do it eventually, though, because the pond is part of a treatment system that uses a chemical — alum — to lock onto phosphorus pollution and sink, preventing the pollution from flowing farther downstream into Lake Virginia, where it would feed ex-

cessive algae growth.

Over at Lake Lucerne, the southern gateway to Orlando's city center, retiree Noreen Renier is disgusted and alarmed by the gooey mess smothering the lake's surface, which is bejeweled with a pair of fountains.

Renier, who looks down on the lake from an apartment tower, takes daily walks for exercise and in June noticed a contamination

spreading across Lucerne that consisted of slimy lumps of what biologists call filamentous, or stringy, algae. She called the mayor's office, disgusted by the obnoxious scenery and worried about the lake's ducks and turtles, and was thanked for being a helpful citizen.

Renier grew frustrated when it appeared that Orlando officials were doing little to rid the lake of the "sick oatmeal" that had spread to such an extent that her camera couldn't take it all in. "Why can't they rake it up?" she wondered.

But the city was actually responding with the tools it has learned how to use based on years of experience.

According to John Evertsen, an Orlando stormwater manager, this summer's heavy rains had washed a heavy dose of leaves, grass clippings and other sources of nitrogen and phosphorus pollution into Lucerne, triggering the algae's growth. In response, crews have doused the invaders with algacides, much as swimming-pool owners do. They also have applied blue and yellow dye to block sunlight from further nourishing the algae's growth.

Lucerne benefits from

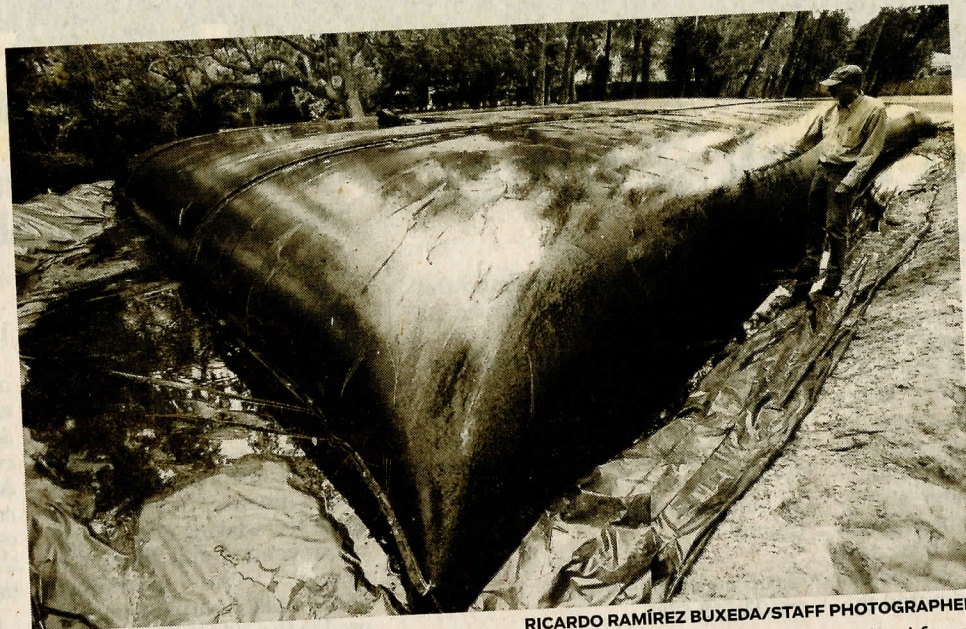
gutter screens that catch leaves before they reach the lake; alum treatments; and compressed air that bubbles up from the lake's bottom, bringing "dead," oxygen-starved water with it. The lake teems with fish, has a sandy bottom and is ringed with desirable eel grass. Its waters flow to lakes Cherokee and Davis, both focal points of downtown neighborhoods.

Thanks in part to state and federal pollution standards both Orlando and Winter Park can point to gradual improvements in the water quality of many of their lakes since they began charging annual stormwater fees.

Orlando's fee, first imposed in 1989, is now \$12 a typical home and raises \$24 million annually. Winter Park's fee, started in 1990, is \$140 for a typical home and raises \$3.1 million a year.

"In theory, lakes should be getting worse," said Lisa Lati, Orlando's stormwater compliance manager, "but the cause of continued growth in the neighborhoods has been steadily getting better by leaps and bounds."

kspear@tribune.com



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