

## Panel wants Horsetooth to clean up Commission recommends reservoir for impaired list

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The Colorado Water Quality Control Commission is recommending Horsetooth Reservoir for the state's impaired waters list, its second change-of-mind on the issue.

The commission joins the U.S. Environmental Protection Agency in its claim that dissolved oxygen levels at the reservoir haven't met standards for aquatic life half of the past decade and should be placed on the state's so-called 303d list.

Landing on the list could force water dischargers upstream of Horsetooth to more closely control the release of certain pollutants - upgrades that could be costly.

Northern Colorado Water Conservancy District, which operates the reservoir, says Horsetooth should be placed on a monitoring list instead because of "insufficient" information about dissolved oxygen in the reservoir.

"There's no evidence aquatic life is impaired," said Don Carlson, Northern's assistant general manager.

The commission could decide Horsetooth's fate at a Feb. 13 public hearing in Denver.

With a 156,785-acre-foot capacity and half-million recreational users a year, Horsetooth Reservoir would be the largest and perhaps most visible reservoir to make the 303d list because of dissolved oxygen.

Fruitgrowers Reservoir, a 4,540-acre-foot reservoir northeast of Delta on the Western Slope, is the only reservoir on the list for dissolved oxygen.

Dissolved oxygen is the amount of oxygen in water and is vital for fish and other aquatic life.

Regardless of where Horsetooth lands, the issue is likely to trigger a review and possible changes to the state's basic standards for dissolved oxygen.

Some wonder whether the measure should be used at all to diagnose health at the state's reservoirs, while others say the rules for violating the current standards aren't clear.

But few question whether the proliferation of nutrients that can lead to low dissolved oxygen levels is a problem, said Rob Buirgy, executive director of the Big Thompson Watershed Forum.

The nonprofit group, whose members include Fort Collins Utilities and Northern, is working on a plan to voluntarily manage nutrients in the watershed. The Colorado-Big Thompson Project, a federal water project managed by Northern that brings water to the East Slope and Horsetooth Reservoir from the West Slope, is in that watershed.

"The water we're transporting through all of these basins is declining in quality," Buirgy said.

Nitrogen and phosphorus, which can drive algae growth that saps oxygen from the water, are two possible culprits. Compared with nitrogen, the discharge of phosphorus — a key component in fertilizers, pesticides and detergents — is easier to control.

"Nutrients are a priority of concern right now," Buirgy said.

Estes Park Sanitation District, which manages a wastewater treatment plant in Estes Park, installed new equipment to monitor phosphorus discharges about three years ago, said Jim Duell, the district manager.

Discharge levels of the nutrient have been low, but if the state decided to get “real strict, we would have trouble with (meeting the standard),” Duell said.

Carlson said the district “has no idea” what could be causing low dissolved oxygen levels. But he said algae loading has been a problem “from time to time” in the Big Thompson system, including the 13-mile Alva B. Adams Tunnel that funnels water from Grand Lake through the mountains to an outlet near Estes Park.

Northern says there’s no evidence to suggest fish or other aquatic life have been harmed by the low levels of dissolved oxygen. The Colorado Division of Wildlife aquatic biologist who manages the reservoir’s fish told the Coloradoan last week that the low dissolved oxygen levels have not visibly harmed Horsetooth’s fish population.

That doesn’t mean aquatic life isn’t being affected by low dissolved oxygen levels, said Sarah Johnson, the assessment unit manager for the state’s Water Quality Control Division. Certain species could be suffering while game fish, for example, seem unaffected.

She said the state’s dissolved oxygen levels were set in the 1970s based on federal standards at the time and were meant to prevent any damage to aquatic life.

“Fish in the natural world don’t read (water quality) manuals, but we have to have standards and that’s our yard stick,” Johnson said.

Northern claims the monitoring data — provided by Fort Collins Utilities — doesn’t meet state muster because dissolved oxygen levels were only measured between about 5 a.m. and 8 p.m. The state requires 24-hour data, the district said.

“Such data — a single night time sample out of 6,500 samples — is simply and clearly not representative of (24-hour) variation in Horsetooth Reservoir,” Northern wrote in a rebuttal last week. The commission initially said Horsetooth belonged on the monitoring list based on limited monitoring data. But after the city of Fort Collins provided the commission with additional data from 1996 to 2005, the commission changed its mind, claiming Horsetooth did not meet state standards for dissolved oxygen at two of the reservoir’s three monitoring stations in five of the 10 years.