

## The Oregonian

# Parasite levels in Portland's drinking water surpass state limits, will cost city at least \$90M

By Jessica Floum

May 24, 2017

The Portland Water Bureau will have to spend upward of \$90 million to construct a water treatment plant the state previously excused the city from building after finding excessive levels of the cryptosporidium parasite between January and March.

The city knew that it would exceed state limits on the parasite as early as March, a fact it omitted from a March 22 press release reassuring the public. The city told the state in a [March 8 letter](#) that it expected to exceed the state's threshold for cryptosporidium in drinking water by the end of this year.

In February, water bureau Commissioner Nick Fish admonished The Oregonian/OregonLive that it was "irresponsible" to ask whether the city should start considering building a treatment facility.

"It is very unlikely that that is going to happen," Fish told The Oregonian/OregonLive, a month before the bureau informed the state of its inability to meet the requirements exempting the city from water treatment.

"The point I was making—and I stand by it—is we're the regulated and not the regulator," Fish told The Oregonian/OregonLive Thursday. "I thought it was irresponsible to get ahead of the process and start speculating."

The water bureau found the cryptosporidium parasite in the area's drinking water supply in at least 14 tests in 2017, more than they have in the last decade. Of those, twelve occurred in January and February.

The Portland water bureau provides drinking water from Oregon's Bull Run watershed, a source that Fish and others have touted as pristine and the magnet for Portland's booming local beer industry.

In 2012, the Oregon Health Authority gave Portland an exemption from federal rules requiring cities to treat their drinking water for parasites. It did so on the condition that regular tests for the parasite found less than .075 of an oocyst—a microscopic hard parasite structure—per 1,000 liters on average each year.

The state agency informed the Portland Water Bureau in a [May 19 letter](#) that it will revoke that exemption on September 22 or when the health authority signs a compliance schedule and agreement with the city, whichever comes first. [The Portland Tribune first reported](#) the state's decision to revoke Portland's exemption.

The water bureau detected 12 oocysts of the parasite in 2,200 liters of water from January 1 to March 8, according to the state's letter. On March 8, the water bureau notified the Oregon Health Authority that it was "not feasible" for the bureau to conduct further tests on a sufficient quantity of water to demonstrate that its annual average parasite concentration falls below the allowable threshold.

In response, the state wrote: "Without a cryptosporidium treatment variance, (the water bureau) is required to fully comply with the cryptosporidium treatment requirements."

This means building a treatment plant.

Getting one built and operating is expected to take about five years. In the meantime the bureau plans to continue to provide customers with water from the Bull Run watershed that was the source of the cryptosporidium.

County and state health officials and the city determined that the water is still safe to drink, they said. The state's epidemiologist and the Centers for Disease Control and Prevention also deemed the water safe, Oregon Health Authority spokesman Tony Andersen said.

The water bureau tested the genetic makeup of two of the positive samples and found they came from rodents and other unidentified wildlife.

Cryptosporidium found in animal feces rarely sicken humans, who usually only get ill from the microorganism if it comes from another human, said Multnomah County Health Officer Paul Lewis. There were fewer cases of illness caused by cryptosporidium this year than average, Lewis said.

Planning for the treatment plant will launch in the near term. By August 11, the city must provide the state with a description of the treatment technology it intends to use. The water bureau could either [build an ultraviolet treatment plant](#), projected in bureau planning documents to cost at least \$89 million, or a \$300 million filtration treatment system that would filter out sediment in addition to microorganisms.

The city must also submit a schedule showing when the treatment can be in place "as soon as practically possible." This plan must include specific dates and identify when "water that fully meets all requirements will be served to the public," the state's letter said.

Fish said he directed water bureau officials to hold a work session with the City Council in the end of June to explain why cryptosporidium detections increased and lay out the options for constructing a treatment plant.

Bureau director Mike Stuhr said he can't scientifically say why instances of the parasite increased, but noted that the area had a "terribly unseasonable rainfall."

Fish said he will try to find consensus within the council on the best treatment method going forward. An ultraviolet plant, he said, is less expensive but does less, while a filtration treatment plant could help the city address future issues as regulations get stricter.

"It's too early for me to advocate" for the best option, Fish said. "Last time, cost became a big part of the discussion...The least-cost option is going to carry a lot of weight at council."

Fish said this will not impact the charges to water users set in the coming year's budget. He said the water bureau might use rate stabilization dollars it has set aside over the years to offset any increased costs.

Mayoral spokesman Michael Cox confirmed the treatment facility construction costs will not affect the coming year's budget.

"In terms of future budgets, we don't want to get ahead of the work session," Cox wrote in a text to The Oregonian/OregonLive. "The council will decide this as a body."

The water bureau is still serving Portlanders Bull Run water. It served only groundwater from February 13 to March 15 after finding cryptosporidium in six tests. The bureau found cryptosporidium seven more times before it started decided to again serve Bull Run water.

"We had a couple of small hits that appeared to be tapering off," Stuhr said.

Even during the high-discovery period in winter, Lewis said concerns for public illness remained low.

Fish said the council will decide the details of how to finance the treatment plant.

## The Portland Tribune

### Treatment plant may be required at Bull Run reservoir

*By Jim Redden*

*May 23, 2017*

Portland may have to build an expensive treatment plant at the Bull Run reservoir to treat a potentially-deadly parasite after the Oregon Health Authority revoked the variance that prevented construction on May 19.

In a letter announcing the revocation to Portland Water Bureau Administrator Michael Stuhr, OHA Administrator Jere High said the city must establish a compliance schedule and interim control measures to prevent the spread of *Cryptosporidium* by Aug. 11, 2017. The City Council is expected to discuss its option at a June 27 work session.

The revocation of the variance followed a March 8 letter from the water bureau to OHA saying it could no longer meet the terms of the variance, which had been granted in 2011 because water from the Bull Run watershed — the city's primary source of drinking water — had historically been so clean.

But periodic testing required by the variance began detecting small amounts of crypto — as the parasite is commonly called — in January 2017, increasing the amount of water that must be tested. By the time the final positive sample drawn on March 12, the water bureau had exceeded its allowable level for the test period.

"Even if we detect no more crypto for the remainder of the demonstration monitoring period, we would not be able to meet the threshold for retaining the variance," says bureau spokesperson Jamie Cuti.

Crypto is transmitted through animal feces. It can cause cryptosporidiosis, a respiratory and gastrointestinal illness, which killed 104 people and sickened thousands of others in 1993 in Milwaukee, Wisconsin. That outbreak prompted the EPA to adopt a rule requiring all municipal water systems to treat for crypto. Portland was the exception until May 19.

In 2009, it estimated that a treatment plant that used ultraviolet light would cost \$100 million. A filtration plant that could treat additional contaminants was estimated at \$385 million. Water rates might have to be raised to pay for either option. Such an increase would be paid by both city and suburban wholesale customers.

You can read a previous Portland Tribune story on the issue at [tinyurl.com/mvqgdqp](http://tinyurl.com/mvqgdqp).

## Willamette Week

### Homer Williams Pitches the Portland Mayor on an Audacious Land Swap That Trades Golf for Affordable Housing

*By Rachel Monahan*

*May 24, 2017*

Real estate dealmaker Homer Williams is back at Portland City Hall, pushing another audacious plan.

Last year, Williams unsuccessfully [championed a project to build a 1,400-bed homeless shelter](#) on city-owned industrial property in Northwest Portland.

His ambitions for solving the city's homelessness problem have only grown since that setback.

During the past two months, Williams has described to Mayor Ted Wheeler and city commissioners a plan for building 12,000 to 14,000 units of affordable housing—more than 10 times the number to be built with the housing bond Portland voters approved last November.

"We need a big move in order to have any hope of controlling a problem that will grow out of control," says Williams. "I don't mean just chronic homelessness. I mean people who have worked all their lives."

His plan is complicated, and hinges on changing the city's zoning designation of large properties.

The key is the privately owned 120-acre Broadmoor Golf Course in Cully. He wants the city to change the course's zoning designation from open space to industrial land.

State law requires the city to maintain a 20-year supply of industrial land. Converting the golf course to industrial use would add to the industrial land supply. That could allow the city to take other, closer-in properties now zoned industrial and convert them to residential use.

The process of rezoning land from open space to industrial, and from industrial to residential, creates wealth for landholders, because permission to develop a property increases its value.

A request to zone Broadmoor as industrial land may be filed within the next 30 days, says Williams.

Williams says a group of civic-minded Portland business leaders are working to buy the course within the next two months. The new owners would donate their property to a nonprofit, presumably collecting a tax write-off in the process. Williams would fundraise to buy industrial land but also use the increased value from rezonings to finance development costs.

Williams won't say where he hopes the city rezones industrial land as residential, in part because he doesn't want to push the values of those properties up.

But there are big swaths of industrial land along the Willamette River in Southeast and Northwest Portland—including the massive ESCO foundry shuttered last year—that would be highly attractive for residential development.

The deal faces significant hurdles. Environmentalists previously defeated an effort by the current owners to rezone Broadmoor as industrial land.

Some environmentalists object to developing golf courses because it reduces green spaces and wildlife habitat.

"Why do we need to destroy natural environment to do that?" asks conservation director Bob Sallinger of the Audubon Society of Portland.

He says the city should focus instead on getting an exception to the state requirement for an inventory of industrial land.

"Portland is going to be the first city to [get an exception] eventually," Sallinger adds. "We're out of room to expand. We're now in a choice: today, tomorrow or the next day."

And Williams' project conflicts with the comprehensive plan the City Council approved last year, laying out a long-term vision for where in the city land should be developed.

Despite the obstacles, nobody at City Hall is dismissing Williams' idea.

That's because of the enormous need for new housing and because of Williams' track record for pulling off developments previously considered impossible. He envisioned what became the Pearl District and the South Waterfront when both were barren, contaminated industrial areas. He developed the Forest Heights neighborhood on land considered unbuildable.

Williams also has a history of not building all the affordable housing he promised in other projects, as *The Oregonian* has chronicled. He says that won't be problem this time because his

new project would include only affordable units, in four-story buildings for working people making 60 to 80 percent of median income.

Records show Williams has already pitched his land-swap concept to Mayor Wheeler and Commissioners Chloe Eudaly, Nick Fish and Dan Saltzman in the past two months. Wheeler, Eudaly and Saltzman's offices all tell WW the city leaders are intrigued by the idea.

"Dan believes in Homer's genuineness in helping to alleviate the problem," says Saltzman's chief of staff Brendan Finn. "He's seen his passion over the last year, year and a half."

The owners of the Broadmoor course are motivated, adds Wheeler spokesman Michael Cox. (Course manager Scott Krieger, who represented Broadmoor's owners at the meeting with the mayor, was unavailable for comment.)

Williams says the extraordinary challenges the city faces require bold thinking and action from City Hall.

"I've done three of the largest projects in the city," he says. "If they don't trust me by now, I don't know when they would."

## **Civic Leaders Say Portland Should Close Its City-Owned Golf Courses and Turn Them Into Apartments**

*By Rachel Monahan  
May 24, 2017*

Homer Williams isn't the only person eyeing golf courses as a way to free up more land for housing.

But several civic leaders suggest taking a far more direct approach: Close at least one of the five city-owned golf courses and build apartments on them.

The City Budget Office says the reserve fund that covers operation of the courses will run out of money by June 30.

The golf fund has been steadily depleting its reserves for at least the past five years, a reflection of the sport's waning popularity.

"The number of serious golfers has been in decline for some time, and new golfers are not taking up the sport at the same rate as in past generations," says Portland Parks and Recreation spokesman Mark Ross.

But parks officials say completed renovations at one course and, in the near term, an end to the rainy spring may turn things around. "Loss of the public golf facilities," Ross says, "would limit the sport largely to those with the financial means to belong to a country club."

Civic leaders say the Eastmoreland Golf Course, in particular, located adjacent to a MAX stop on the Orange Line, might have a better use.

"You've got 150 acres pretty close in, next to a major arterial roadway and an underutilized light-rail station, and your community center is already built," says Jeff Bachrach, a member of the city's Planning and Sustainability Commission.

"And, of course, more affordable housing is the city's top priority.

"On the other hand," Bachrach continues, "you have an empowered neighborhood that would fight it to death; you have environmental advocates that will oppose any development of public open space; and you've got a lot of golfers who probably enjoy playing on a really nice inner-city course at municipal rates."

Eastmoreland may be the most attractive for development, but unlike some of the city courses, it is still turning a profit.

And Eastmoreland Neighborhood Association treasurer Robert McCullough called the idea "odious," saying it would be "illegal" because the city is required to return the course to the original donor if it closes.

"Metro says we're not short on buildable land," he says. "We are short on oxygen and green things."

Former City Commissioner Steve Novick, however, says the housing crunch calls for giving the golf courses a careful look. "If there's a clear choice between golf and housing," Novick says, "housing should win."

## **The Portland Mercury**

### **Hall Monitor: Hall Pass Revoked**

*By Dirk VanderHart*

*May 24, 2017*

That old saw "You don't know what you've got until it's gone" is as true in water bills as it is in love.

Since 2012—during a period in which Portlanders considered a mutiny against the city over pricey quarterly water invoices—we've actually been getting off easy.

Federal rules finalized in 2006 require every unfiltered water system in the country to treat for a parasite known as *Cryptosporidium*, which likes to hang out in feces.

But Portland got a break. Based on the *Crypto*-free drink rushing with regularity down to our taps from the lovely Bull Run Watershed 26 miles to the east, ours became the only city to earn a pass on the federal rules.

For the last five years we've had a state-issued variance that let the Portland Water Bureau (PWB) escape spending tens of millions of dollars on a treatment plant to fry the microscopic parasite, which can cause diarrhea, vomiting, and worse when it finds its way into your body.

Now that's all over.

As unremitting rains drenched and depressed the citizenry earlier this year, trouble began brewing at Bull Run: In January, PWB samples began turning up *Crypto* in test after test.

When the bureau was still finding the parasite in mid-February, it temporarily shut off Bull Run water, opting to draw from a secondary source. And as the pest continued to emerge into March, the city arrived at a conclusion: It would have to turn in its hall pass.

On March 8, the PWB quietly informed the Oregon Health Authority that it didn't think it could prove *Cryptosporidium* wasn't a problem any longer.

City officials have grumbled that the record rains screwed with their sweet deal, washing an unnatural amount of animal feces into the watershed (at least one sample was tied to rodents) while not meaningfully decreasing overall safety. But the city doesn't get to plead weather as an excuse.

"We said that our water untreated was safer than systems that treated their water," says Commissioner Nick Fish, who oversees the PWB. "It became hard for us to say that this winter."

The water bureau ultimately decided it would have to stretch beyond its means—testing upwards of 12 times what it has been—to prove the parasite was sufficiently dilute in the water supply.

Which means Portland water customers will soon have to stretch a bit, too.

Portland's already considering spending millions on a new treatment plant that would help eliminate lead exposure in old homes. Now we might be looking at spending tens of millions on another new facility to kill Crypto.

According to a May 19 letter revoking Portland's variance from federal treatment rules, the city needs to tell the state by August 11 what it's going to do to kill the parasite.

The last time the city took a look at treatment, it was eyeing a \$100 million plant that treated water with ultraviolet light. The price tag for such a facility has probably grown since, which means your water bill's going to go up more than it would have without all that recent poop water.

As with all your past tattered relationships, you can cry because it's ending, or you can smile because it happened.

Either way, you're out of luck.

## **A Tiny Parasite Is Probably Going to Cost Water Customers Tens of Millions**

*By Dirk VanderHart  
May 23, 2017*

You've now got two new treatment plants potentially coming to your water bill, Portland.

The Portland Water Bureau (PWB) announced this morning it will finally need to treat the city's water supply for a microscopic, poop-loving organism called Cryptosporidium, at a price tag that could well exceed \$100 million.

Crypto [can cause violent stomach illness](#) if ingested, and can kill people with depleted immune systems. A particularly awful outbreak in Wisconsin in 1993 killed nearly 70 people.

Cities around the country already routinely fry Crypto in their water supplies—they're required to do so under a 2006 federal rule—but Portland's had something of a hall pass for the last five years. By showing the Oregon Health Authority that the Bull Run Watershed where the city sources much of its water maintains acceptably low levels of the parasite, Portland became the only city to get an official variance to the federal rules.

That string of good luck ended this winter, when the parasite popped up more than a dozen times between January 1 and early March. The repeated detections—often attributed to the ultra-hard rains washing more animal feces into the watershed—caused officials to temporarily draw water from a secondary source. But they also led the city to a conclusion: It could no longer qualify for the waiver.

Officials revealed today that the PWB [sent a letter to the state on March 8](#), saying that the repeat detections of Crypto had made it "infeasible" that the city could prove the parasite was no longer a problem.

"We said that our water untreated was safer than systems that treated their water," says City Commissioner Nick Fish, who oversees the PWB. "It became hard for us to say that this winter. That's what changed."

In order to even try to prove by January 2018 that the parasite was sufficiently dilute in the water supply, the PWB letter said, officials would need to test thousands of more liters of water per week than they already were. "This volume is infeasible to sample and test over the remaining period of demonstration monitoring due to logistics, personnel resources and laboratory capacities," the letter read.

Fish wasn't clear on what such testing might cost. The upshot is that, instead of trying to beat the rule, the city's now facing down a treatment project that will cost tens of millions. On May 19, the Oregon Health Authority [sent formal word](#) that the city's variance to the Crypto rule had been revoked. The city has until August 11 to come up with a plan for how to treat its water and eliminate the threat.

Officials have had that conversation before. Prior to applying for a variance in 2011, the city [had extensive conversations](#) about how to treat for Crypto. It's preferred option at the time: A treatment facility that would use ultraviolet light to kill the parasite, and might cost up to \$100 million. That price tag has likely increased in the years since.

"I was on the council when we fought for that variance," says Fish. "I oppose spending money unnecessarily."

But he notes: "If we were to have Crypto health outbreak that resulted in significant health problems like death, people would wonder why we were slicing this so thin."

It's not clear that the current city council will decide ultraviolet treatment is the way to go again—or even that a majority of council won't just opt to flout federal rules. Expect that conversation to play out in relatively rapid fashion in order to satisfy state deadlines.

And also count on your water bill increasing. The city is already talking about spending something like \$15 million on a water treatment facility to [help contain lead exposure](#) in the city. Any plant to treat for Crypto would be separate.