

**The following is the 3<sup>rd</sup> Article  
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KATEPWA BEACH — While growing up at the lake, Rick Vigrass remembers being told to stay out of the water late in the summer, especially when it was hot.

“You swam in July, but not in August. That’s kind of what it was,” Vigrass said from his home at Katepwa Beach earlier this summer. “You just didn’t go swimming and that was fine.”

While he can’t be certain, Vigrass now wonders if that itchy water had been caused by toxic blue-green algae blooms.

While lakes in the Qu’Appelle have always been green and rich in nutrients, making it susceptible to such blooms, local research shows the bacteria outbreaks **are lasting longer and showing up in more intense concentrations.**

It puts the already green Qu’Appelle lakes into a vulnerable spot, leaving downstream users, like Vigrass, worried about the water quality, now and into the future.

“It (the blue-green algae) is toxic,” said Vigrass, who’s also a member of the Calling Lakes Ecomuseum (CLEM), which is an advocacy group for the watershed. “We get our fish kills, it’s bad for dogs and it’s bad for people. And that’s our main concern.”

In Part 3 of Drained, the Leader-Post explores the degradation of water quality, particularly in the Qu’Appelle, and how future plans to move more water have heightened concerns as the climate changes.

Peter Leavitt, co-chair at the University of Regina Institute of Environmental Change and Society, said many of the province’s Prairie lakes have deteriorated over the past 150 years.

**Leavitt, who has studied the Qu’Appelle watershed for decades,** explained agriculture and urbanization are among the top contributors to its current nutrient-heavy state.

The blooms in the Qu’Appelle feed off nitrates and phosphorous released from Regina’s wastewater plant, farm runoff and locals in the area.

“Even though the systems are naturally green, they’re greener than they should be,” Leavitt said.

During a mid-summer survey two years ago, he said **45 per cent of the 100 lakes his team surveyed had significant toxic algae issues.**

It meant the province had to send an advisory, telling people to avoid the water.

“In other words, that’s an acute health problem if the water were consumed or if somebody went swimming,” Leavitt said. “Those are not good numbers.”

The city has said upgrades to the wastewater plant have meant a reduction of nutrients being released into the watershed.

### **DISCHARGE OF HYDROCARBONS**

Sitting at his computer, Vigrass regularly goes through monthly Water Security Agency (WSA) reports to see what’s coming out of Regina’s wastewater.

Among the offloading of nutrients, reports have shown the discharge of hydrocarbons, which has alarmed people downstream.

The city has sued Consumers’ Co-operative Refineries Limited (CCRL) for \$4.5 million in damages connected to a 2020 event where oily effluent was released into public sewage systems.

In its lawsuit, the city identified “numerous incidents” in 2019 and 2020 where the CCRL released wastewater containing hydrocarbons.

As of Aug. 25, no statement of defence had been filed, though a spokesperson has previously said that, during the 2020 event, waves kicked up sediment at the bottom of ponds, which then entered the pump.

In a separate report, the city stated there were four hydrocarbon incidents connected to the Co-op Refinery Complex in 2021, though it noted levels didn’t exceed the limit when samples were taken downstream.

That same year, the city stated the refinery had issues with their wastewater treatment process. In a separate report from EPCOR, which operates the wastewater plant, it stated it was notified in February of equipment failure at the refinery. As a result, the treatment plant was told to brace for elevated hydrocarbons.

It appears the plant began to stabilize from the incident sometime in April, according to the EPCOR report. The Leader-Post reached out to CCRL to ask about the equipment failure but didn't receive a response by deadline.

For Vigrass, the issue has become somewhat of a pattern.

"I spent 40 years in the oil business and anytime we have an oil spill, we would take steps to rectify it," Vigrass said. "We would take steps to ensure that it didn't happen again, and I'm not seeing that kind of response."

He said he values the jobs created at the refinery, and isn't advocating for it to be shut down, but would like it to operate more responsibly.

"We all use each other's discharge water," he said. "For that reason, we need to respect discharge water and remember that it is used by others."

Leavitt said while toxins are naturally diluted as they work their way downstream, those at the receiving end still have a right to be concerned.

"There's no justification for polluting water for downstream users just because they are downstream," he said. "If the toxins were going into the Buffalo Pound Lake, which is our drinking water source, you can bet people would be uptight about it."

Coun. Andrew Stevens (Ward 3), who has advocated for more transparency on industrial spills, said the issue is about taking the water system and infrastructure seriously.

He also wants to ensure environmental hazards are mitigated and offenders held accountable.

"We need to make sure that it doesn't happen again. And that means proper source control, education, investments in technology and other mitigation efforts," Stevens said. "Water is precious in an arid climate like ours, and we don't have the luxury that they had decades ago around the Great Lakes, where you could solve pollution with dilution."

## **A FUTURE WHERE WATER MATTERS MORE**

As the climate becomes hotter and dryer, researchers say water, including its quality, will become ever more important.

The province is aiming to divert enormous amounts of water to expand agricultural production, whether that's through current drainage projects or the \$4 billion irrigation project.

The multi-billion dollar project will be centred around Lake Diefenbaker and, at a later stage, Buffalo Pound Lake.

Should it be built, it's believed it will have huge ramifications for the economy, environment and people.

For instance, the water supplies in and around Lake Diefenbaker greatly affect flows into the Qu'Appelle watershed.

The big question for Vigrass is, who gets first priority?

"We've asked them (the government) what their management plan is, what do you do in a drought, and who gets the water and how much," he said. "We didn't get a lot of detail to those questions."

Should irrigation be heavily prioritized, some worry water levels in the Qu'Appelle will drop. That would mean further degradation, threatening the ecosystem and the people who rely on it.

First Nations in the Qu'Appelle area have asked the federal government's Impact Assessment Agency to take a look at the project. Along with environmental concerns, the File Hills Qu'Appelle Tribal Council has sent a letter expressing worries the project could violate treaty rights by affecting river flows and the ability to fish.

In a July 2021 letter to the Impact Assessment Agency, the WSA stated it's aware of concerns and is committed to undertake a "robust engagement process" with all stakeholders.

The province has said the project will go under a provincial environmental assessment, though it's unclear when that will be completed. The WSA noted it is aware that federal legislation also has requirements.

John Pomeroy, the director of the University of Saskatchewan Centre for Hydrology, indicated the project will have to undergo a great balancing act.

It's about ensuring there's a sustainable level of water over time, particularly during droughts, while also understanding there's an opportunity to improve crop outputs, he said.

"We need to look at that all as a package and say, 'Alright, how do we ensure the growth of the province economically and preserve it ecologically?'" Pomeroy said. "And then, we need to make sure that people's water supplies are still good or even improved over time."

**Leavitt has stressed it's important the government get it right.**

He and other advocates say the project needs to be looked at in its entirety and comprehensively rather than in three separate phases.

Otherwise, he suspects the project will go sideways.

"There's one pot of water," he said. "You're going to extract from the same source, and you're going to put it onto the landscape, so saying that these are three separate things, to me, is nonsense."

## **WETLANDS STRATEGY**

Vigrass has spent the last two summers cleaning debris from a bushed shoreline along Katepwa Lake.

Using his red kayak, he's retrieved multiple old tires, a busted lawn chair, preserved lumber and all kinds of litter.

He's doing his part, but he says the provincial government — and many others — need to do theirs.

Groups like CLEM have asked the province to create a comprehensive wetlands strategy to ensure they are preserved. [Wetlands can recharge groundwater and filter contaminants.](#)

However, **Saskatchewan is the only province that doesn't have a comprehensive plan**, said Aura Lee MacPherson, the chair of CLEM.

"Without a policy, it becomes lawlessness," she said. "There's all these farmers out there by themselves, affected by illegal drainage, and they become collateral damage."

The WSA has been working on an agricultural water management strategy that it says will address impacts to wildlife and wetlands. A broader protection policy will be considered after that.

MacPherson said wetlands should be looked at as "natural infrastructure" that will help mitigate the impacts of climate change.

"They are just being butchered," she said. "And they are the very thing that's going to save us."

This past summer, Vigrass rallied the village to dispose of any unused tires. They collected more than 100.

Going forward, he may kayak to other shorelines along the lake to collect debris. He'll also remind his neighbours that the water matters.

"You can't drink it, but it's valuable," he says, pointing to a glass of relatively clear lake water he collected earlier this year. "We need to take some responsibility, value the water and think about the downstream. Right now, we operate as if it's out of sight, then it's out of mind. That needs to change."

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