

Making waves

The Winter River — Tracadie Bay Watershed Association is urging the City of Charlottetown to scale back its unsustainable water extraction rates to sustainable levels in order to preserve and protect the watershed and the water supply

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- BYMARYMACKAY

A local watershed group says the Winter River is tapped out when it comes to water withdrawal by the City of Charlottetown.

In fact, the Winter River- Tracadie Bay Watershed Association says it's the river that is overdrawn, sometimes by as much as twice the amount of the recommended standard for sustainable extraction.

And if there's a dry spring this year, there could be serious environmental consequences above and beyond exceedingly low water level events in previous years. "We have had times part of the river has actually dried up. In 2001 there was no water travelling over the spillway at Hardy's Pond, which is in the main branch of the river, and an area of the river below Hardy's completely dried up," says Don Mazer, who is cochair of the association.

"Last summer a main tributary of the river went dry. Fish that couldn't escape didn't survive" adds Bruce Smith, who works as co-ordinator for the group.

The Winter River- Tracadie Bay Watershed Association was formed in 2008 to protect and enhance the health and aesthetic qualities of the Winter River — Tracadie Bay watershed.

"What distinguishes our group (from others) is that we have water quantity issues to address in addition to the water quality issues, and those two issues are related to each other," Mazer says.

"Those quantity issues are related to the unique position that we have of supplying all of the water for the City of Charlottetown for more than 80 years."

At present there are three well fields with multiple wells in each from which Charlottetown draws its water: the first was dug in Brackley in 1930; the second in Union in 1949; followed by Suffolk in 1994.

The volume of water extracted by Charlottetown from the Winter River — Tracadie Bay watershed is 18 million litres of water every day.

"If you want to get a vision of how much that is; imagine that someone built a lap swimming pool a metre wide and a metre deep and ran it from Charlottetown 20 kilometres out to Brackley Beach," Mazer says.

"That would be a day's (withdrawal) of water for the city. That happens every day. The water needs in the city are continuous and the time of greatest need — when people use more water during the summer — is also the time of lower supply. Since all the water pumped out by (Charlottetown) is unavailable to recharge the (Winter River) water system, the main supply for the river is the precipitation that falls from the sky."

City councillors have expressed concern that the city's water extraction has been close to its permit level for a number of years: an average of 92.8 per cent.

A closer look at the numbers shows that while Suffolk is under the wire, permit levels for Brackley and Union have each been exceeded several times since 2000.

“The permit itself seems to be based upon more of an industry standard; it has more to do with what you can take, rather than what you need to leave in order to preserve the wellbeing of the watershed,” Mazer says.

“Fifty per cent of recharge is an accepted standard for safe, sustainable levels of extraction.”

At Brackley the average yearly withdrawal has been 102.7 per cent of recharge since 2000 — more than twice the recommended amount.

In Union the average is 71.3 per cent, which is 42 per cent above sustainable withdrawals.

The city is presenting looking at establishing a new well in a different watershed in the Miltonvale area.

“The problem is that even if Miltonvale came on it wouldn’t give the city much of a cushion, since much of that water would be needed to reduce the high extraction rates from the Winter River,” Smith says.

In addition to the impact on local residents’ well levels, less water means the temperature of the water rises and the level of oxygen drops, which can have profound effects on aquatic life.

“Such high extraction rates could jeopardize virtually all the fish within the river “Smith says.

The association wants to see a significant reductions from current levels of overall water use in the City of Charlottetown, requirements to consider water usage in all new city development permits, and clear provincial guidelines and policies that limit extraction to sustainable levels, which is 50 per cent of recharge at each well field.

“We’re concerned about the wellbeing of the river. If we’re speaking from the viewpoint of the river, as demanding as it sounds, what is required is a 26 per cent reduction in the amount of water use in order to protect and preserve the watershed,” Mazer says.

“(Charlottetown) has taken some major steps in water conservation and developed some excellent programs. We’d like to help them take the next steps, and we’re working on a challenge to the city, its residents, businesses, and institutions to reduce their water use to sustainable levels.”