

No quick fix for drainage

Consultant points out many challenges when dealing with water in the Eugenia area

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A consultant's report about surface water drainage in Markdale, Flesherton and Eugenia indicates that Eugenia will be the most costly of the three to fix.

Frank Vanderloo, an engineer with BM Ross Engineering, said in a recent report to council that Eugenia doesn't have a surface water drainage system except along Grey County Road 13 that can be upgraded or improved upon.

"There is no easy practical outlet to convey runoff to in Eugenia. Water just follows the natural flow path, with road culverts in some cases and sometimes they don't have road culverts, in some cases it has to spill over the road wherever the low points are and has to go from one person's property to another," Vanderloo said.

Vanderloo noted that the areas prone to flooding in Eugenia are fairly flat with low spots where water will pond before flowing to the next place and keep going down stream until it gets on the east side of Grey Road 13.

The main catchment area at the end of Napoleon Street has no outlet at all, so all the water there goes into a big depression and just ponds there, said Vanderloo.

Under certain conditions, such as severe storms, some property owners have had flooding of their

basements and other property damage.

There is an old gravel pit along the west side Grey Road 13 where the water eventually infiltrates but there are serious problems upstream of that.

The gravel pit starts at the 8th Concession and extends north for several blocks just passed Napoleon Street. There is no culvert across Grey Road 13 to the gravel pit so water has to infiltrate the pit underground.

The pit is on private property and any efforts to put a culvert under Grey Road 13 would result in a solution for one landowner, but everybody upstream would still have problems because the water doesn't flow, it just ponds.

Vanderloo said a suggestion by some councillors to keep drainage on municipal road allowances would require very large ditches, two or three metres deep, and the ditch would eventually get so wide it wouldn't fit in the road allowance.

"It's a safety issue when you get too deep a ditch. You would have to install a storm sewer and that's fairly expensive; and the big issue still is where do you direct that water?" Vanderloo said.

One option raised by other councillors is to go down Napoleon Street and swing north, through the conservation area and into a deep gorge on the Beaver River.

But Vanderloo said this option would involve an environmental assessment, consultation with the local conservation authority and might even involve the Niagara Escarpment Commission.

"You're going to be taking out trees in that ravine area down by

the river . . . it's going to cost millions of dollars if they want to fix those problems with a storm sewer system," he said.

"Right now a trunk storm sewer from Napoleon Street down to the Beaver River, you're looking at \$1.5 million and then there are other parts of the storm sewer you can build on after. It's really creating a new storm sewer system for Eugenia," Vanderloo said.

A third option suggested by some councillors involves installing a municipal drain through Eugenia, but Vanderloo was quick to point out that it would be located in a built up area of town and involve crossing private property to which many home owners might object.

"Because it's so flat that once you start to dig that kind of ditch (or drain) in there it starts getting so deep and so wide it takes up so much room. You're going to be ripping up trees going through people's property, it becomes difficult to do," he said.

Vanderloo said that Eugenia is considered a community and the way it is zoned it may not qualify under the provincial Drainage Act, which is designed for rural lands.

He said it would involve studies to ensure that people's property is not being adversely impacted downstream.

"As you change the drainage pattern you don't want to get into the situation where you start drying up somebody's pond or adding too much water and flooding out their pond," said Vanderloo, who noted those options are beyond the scope of the current study.

Another long-standing concern of Eugenia residents addressed

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by the study is the chronic wet conditions at the end of Pellisier Street next to the OPG dam on Lake Eugenia.

Vanderloo said his study was focused on surface water and if the dam is involved, it's a ground water issue involving seepage.

He said Grey Highlands is committed to finding an interim solution to this problem this fall, with a short section of ditch on the worst section of Pellisier Street close to the dam. It would involve a culvert under the road and a ditch out to the outlet of the dam.

Vanderloo noted there are safety issues in the winter when the seepage ices up there all the time.

"It's a very short-term solution and if that doesn't resolve it sufficiently, the next step would be to create a ditch all the way to Inkerman Street and go north and down to the Beaver River," said Vanderloo.

Vanderloo said Herb Lemon, Grey Highlands director of public works has been in contact with OPG and it looks like the utility is interested in working with the municipality on a solution even though they maintain their dam is not at fault.

Vanderloo said OPG's position is that their dam is not the cause of the problem, "but I guess they are looking at this as a measure of good faith that they want to assist," he said.

Lemon told council that OPG officials said they have never seen a similar problem at any other of their dams and described the situation in Eugenia as "weird."

Vanderloo said another answer might be that the lake is coming

around the dam and down the steep slope as ground water to a low point and up to the surface.

Vanderloo said he's planning to issue a report later this fall and part of the recommendations of the report might be to look further into Eugenia and how to outlet the water.

"All the options we looked at for outletting involve environmental issues . . . to ensure that you don't fix a problem in one area and create another one somewhere else," he said.

In the case of Markdale, proposed development lies outside the storm water system and the solutions sought by developers could alleviate any future pressure on the system.

The Flesherton storm water system requires little upgrading, Vanderloo said.

The next step is to summarize the findings in a draft report which will get circulated to municipal staff, the conservation authority and maybe to the Niagara Escarpment Commission.

It will include cost estimates for improvements to the Markdale and Flesherton system some of which might involve cost sharing with the county.

"Once that is circulated we expect to meet with the Grey Sauble Conservation Authority for Eugenia," Vanderloo said.

Once the conservation authority has made its comments Vanderloo said he will move to finalize the document by the end of November so that councillors have the document to start working on and how they want to proceed to deal with these challenges in the new year.