

Bayfield Sewage Treatment Plant Expansion Update

-December, 2016

Work on the Class Environmental Assessment (EA) for the expansion of the Bayfield Sewage Treatment Plant (STP) is continuing.

At the last Update, Bluewater was waiting for the Municipality of Central Huron to indicate whether or not they wished to participate in the EA process. In July, Central Huron formally advised Bluewater that they were no longer interested in being involved. The other major initiative at the time was an investigation regarding Infiltration & Inflow (I-I), typically referred to as “extraneous flows”, into the sewer collection system. The I-I investigations consisted of smoke testing and CCTV inspection of about 10% of the existing sewers and temporary flow metering at one of the larger sewage pumping stations.

In October, B.M. Ross and Associates presented to Council their review of the existing flow situation including the results of the I-I investigations. A detailed review of available sewage flow and precipitation information from Environment Canada and the Ausable Bayfield Conservation Authority established that almost 60% of the total flow being treated at the STP is extraneous flow, most of which is groundwater infiltration into the sewers. The smoke testing identified two locations where rainfall could enter from private property and the CCTV work identified two others, one for the main sewer and another from a private service connection.

Given the findings of the I-I work in 2016, additional more extensive work is proposed for 2017. To help fund the investigations Council authorized an application to the Clean Water and Wastewater Fund. The application was submitted at the end of October and a response is expected in January. If approved, the work would take place as soon as conditions permit in the spring.

BMROSS also reported existing sewage flows were very near the rated capacity of the STP. Even allowing for a 25% reduction in the existing extraneous flows, there would have to be an expansion of the Plant capacity to accommodate existing commitments and allow further growth. Current thinking is that the best solution is to retain the existing treatment facilities in service and build a second, smaller STP on the same site. The smaller Plant would be designed to accommodate additional flows generated by growth and also allow an effluent discharge during the winter months, something that the current facility cannot do. Tentative sizing and costs for the new facilities were presented. These will be confirmed when the results of the 2017 I-I investigations are complete and a more accurate estimate of possible flow reductions can be made.

The next steps in the EA process are to contact stakeholder agencies such as the Ministry of the Environment and Climate Change, the Ministry of Natural Resources and Forestry, and the Ausable Bayfield Conservation Authority. Also, further investigation is proceeding to establish the type of physical facilities that would best provide the additional capacity. As soon as the I-I investigations are complete in the spring a final decision regarding capacity will be made and cost estimates prepared. At that point a financing strategy will be developed and a second Public Information Session will be held.