**In Response to an initiative of The Mary Lake Association on Sewage, Algae and other lake related issues the following report was prepared to address the Sewage Issue.**

**Our Initial job was to link the sewage spillages to increases in sewage in the surrounding lakes.**

**Part A Linking sewage spillages and increases in sewage in our lakes.**

The results of this study were that there were no direct links between sewage spills and increases in lake level sewage indicators. This may have been because the sewage may have been flushed out of the lakes  by the time that the lake level indicators occurred.

**A**  See - **Sewage Plant Data** – This lists the spillages in recent years. . including two major spills in 2016 and 2017

Sewage Plant Data

 <https://muskoka.civicweb.net/document/31196>

**Huntsville Wastewater Collection and Treatment 2017**

Bypasses

Sewage Plant Data

<https://muskoka.civicweb.net/document/31196>

Huntsville Wastewater Collection and Treatment 2017

Bypasses

Golden Pheasant no Bypasses in 2017

Mountview

Aug 22 – 252.3 m(3) 4 ½ hours Chlorine Treated

Sep 3 – 1500 m(3) 12 ½ hours no treatment
<https://muskoka.civicweb.net/document/29302>

**Huntsville Wastewater Collection and Treatment 2016**
Bypasses

Golden Pheasant

Early in spring 1 of 3 cells failedDuring Spring Feshet

Mar 28 - 317 m(3) bypasses for 5 hrs – partly treated by UV

Mar 31 -2161 m(3) bypasses for 29 hrs – Partly treated by UV

Mountview

Mar 31 - 2.17 m(3) 2 ½ hours partly treated by Chlorine

88.3 m(3) Partly treated by Chlorine

Sept 3 – 3m(3) Put back into the system

<https://muskoka.civicweb.net/document/28010>

**Huntsville Wastewater Collection and Treatment 2015**
Bypasses

Golden Pheasant – no bypasses

Mountview

Noy 27 – 3.3 m(3)

**B** See – **Lake Data Sheets for Mary Lake, and Fairy Lake**, , ….and Jane Earthy’s study reports

<http://www.muskokawaterweb.ca/images/lds/Mary.pdf>

<http://www.muskokawaterweb.ca/images/lds/FairyMain.pdf>

<http://www.muskokawaterweb.ca/images/lds/FairyNMRB.pdf>

Jane Earthy’s Lake Partner’s Report

<https://www.ontario.ca/environment-and-energy/total-phosphorus-report?id=30320002>

See - **Interpretation** of Water Quality Data

<http://www.muskokawaterweb.ca/images/lds/LakeDataSheetInfo.pdf>

See – **Perspective** P 16  of Lake System Health Water Quality Monitoring Program To get some perspective on Mary Lake compared with other Muskoka Lakes

<https://muskoka.civicweb.net/document/31102>

**C The Results of the comparison** The task was to look for decreases in the water quality indicators resulting from the two major spills in 2016 and 2017 in Mary Lake and in Fairy Lake charts. **We found no such decreases.** (Although as suggested above…the effects of the spills could well have been flushed away by the time the lakes were examined)

**Part B Are we going to have these Sewage Spills again in the future?**

See - Literature and Background

<https://www.muskokaregion.com/community-story/8335857-feds-chip-into-long-delayed-40m-sewage-plant-overhaul-in-huntsville/>

– This article outlines how there will be $40. Million dollars spent over the next three years to close the Mountview Plant and switch its operation to the Golden Pheasant Plant.

**Phase 1** included new ultraviolet disinfection system and alkalinity adjustment system installations for $6.5 million in March or April.

**Phase 2,** schedule for tender this spring, would include aeration system upgrades for roughly $18.3 million and the district awaited word on further federal and provincial funding for it.

And federal regulation on un-ionized ammonia and chlorine residual levels would make Mountview’s technology obsolete by 2021.

See – **Map** showing the location of the two plants.

<https://www.marylakeassociation.org/documents/Mapofthetwoplants.pdf>

**Conclusion** - It would seem that sewage spills will end by 2021 or so and given the results in (**Part A** - above)  this should end the problem.