

Review of: **Municipal Class Environmental Assessment Study for Dayus Creek Subwatershed**

as prepared by Delcan; March 2013

Reviewers: F. Cirino, B. Maddeford, S. Sanford May 2013

### **Alternative Solutions**

From the three alternatives presented, EEPAC agrees with the conclusions of the EA that Alternative 2 presents the best of the three alternatives in regard to flow control in the anticipation of future development of the study area.

**Recommendation 1:** EEPAC agrees that Alternative 2, which includes private permanent systems for flow control in lands to be developed in addition to trunk storm sewer improvements, is the preferred alternative.

### **Runoff and Streamflow Modeling**

Extensive modeling of runoff and various streamflow parameters was performed under various scenarios including 1:5 year, 1:50 year and 1:100 year events for present and possible future land uses. However, this modeling did not take into account the potential increase in frequency, intensity, and duration of events that is likely to occur with climate change.

**Recommendation 2:** Rainfall/runoff and streamflow modeling should be performed to include both changes in land use **and** changes in intensity, frequency and duration of storm events with climate change.

**Recommendation 3:** The private permanent systems for water quantity control, as outlined in Alternative 2, should be built to detain the 1:100 year runoff volume calculated with climate change taken into account.

### **Water Quality and Quantity Control**

The EA recommends private permanent systems with oil-grit separators that would remove 70% TSS for areas that do not discharge to ESAs, with 80% removal of TSS for areas that do discharge to ESAs.

**Recommendation 4:** EEPAC recommends that private permanent systems meet the higher standard of 80% removal of TSS in all parts of the study area, not just those discharging to the ESA.

**Recommendation 5:** Continuous monitoring of pre and post development water quality and quantity in the PSW complex needs to be undertaken in order to ensure an adequate supply of clean water continues to be delivered to maintain the wetlands.

**Recommendation 6:** All proposed development in lands adjacent to the ESA must respect the buffer distances outlined in Provincial Policy in order to preserve the structure and function of the ESA and PSW complex.

**Recommendation 7:** Permanent Private System for stormwater management requires compliance and monitoring. There is very little in city practice in this area. The City should develop monitoring requirements for such systems. This work should be carried out by city staff in Stormwater Engineering and Environment and Parks Planning, with involvement of the local office of the Ministry of the Environment and the UTRCA. Consideration be given to contracting the UTRCA to do the monitoring.