Chapter
20

# STORMWATER MANAGEMENT

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## 20.1 GOAL

20.1.1 To manage *development* impacts on streams to maintain and enhance water quality, protect *fish habitat* and prevent erosion.

## 20.2 POLICIES

20.2.1 The Municipality supports and will participate in the preparation of multi-stakeholder *watershed* planning studies in accordance with Section 4.3.1.

20.2.2 Unless otherwise approved by the Ministry of Natural Resources, the Conservation Authority or the Municipality, direct stormwater discharge into any watercourse as a result of *development* is strictly prohibited.

20.2.3 Prior to municipal approval of any draft plan of subdivision, the Municipality will prepare a *subwatershed* plan in consultation with the Ministry of Natural Resources, the Conservation Authority and other agencies, and shall be subject to satisfactory cost-sharing arrangements with the benefiting property owner or owners. Where a master drainage plan has been approved prior to the adoption of this Plan, the master drainage plan will substitute for the requirement for a *subwatershed* plan.

20.2.4 Any *development* application for a plan of subdivision or *site* plan shall be accompanied by a stormwater implementation report. The report will indicate how the approved *subwatershed* plan or master drainage plan will be implemented on the *site* of the proposed *development* in accordance with Best Management Practices and will address the following:

- pre-*development* and post-*development* discharge
- groundwater infiltration and baseflow maintenance
- stormwater management facilities required
- erosion and sedimentation controls
- proposals for mitigating any water pollution
- *site* grading

20.2.5 Stormwater management facilities may be located in any land use designation, but generally shall not be permitted on lands identified as Regulatory Shoreline or designated as Environmental Protection Area. However, the exact location of stormwater management facilities shall be approved by the Municipality in consultation with the Province and the Conservation Authority.

20.2.6 The design of stormwater management facilities, including ponds and channels, shall ensure:

- appropriate access for maintenance purposes
- adequate setbacks from *adjacent* property lines
- no threat to public safety
- high quality landscaping including, where possible, enhancement of natural features and the use of natural designs
- possibility for *habitat* enhancement
- opportunities for *passive recreation*

20.2.7 The objectives of a stormwater management plan are to:

a) maintain groundwater quantity and flow and stream baseflow;

b) protect water quality;

c) protect aquatic species and their *habitat*;

d) prevent increases in stream channel erosion; and

e) prevent any increase in flood risk.

## 20.3 Stormwater Management Within the Oak Ridges Moraine

20.3.1 In addition to the policies set out below, stormwater management facilities within the Oak Ridges Moraine shall also be subject to the policies of Sections 19.3.11 to 19.3.15 of this Plan.

20.3.2 Within the Oak Ridges Moraine, the following objectives shall be maintained:

a) a minimum of 30% of the area in a *subwatershed* has *self-sustaining vegetation*; and

b) 80% of suspended solids shall be removed from stormwater runoff as a long-term average for water quality.

20.3.3 All *development* and *site alteration* within a *subwatershed* in the Oak Ridges Moraine shall be prohibited if the total percentage of the area of the *subwatershed* to have *impervious surfaces* would exceed:

a) 10%; or

b) any lower percentage as specified in the applicable *watershed* plan as a result of the *development* application.

20.3.4 Stormwater management plans for lands within the Oak Ridges Moraine shall be prepared in accordance with the applicable *watershed* plan and shall provide for an integrated treatment train approach that uses a planned sequence of methods of controlling stormwater and keeping its impact to a minimum, using techniques such as:

a) devices and designs that direct roof discharge to rear yard ponding areas;

b) conveyance controls such as grassed swales; and

c) end-of-pipe controls such as wet ponds at the final discharge stage.

20.3.5 To minimize stormwater volumes and contaminant loads, applications for *development* or *site alteration* within the Oak Ridges Moraine shall reduce *impervious surfaces* and limit disruption to naturalized areas. Applicants shall seek methods to increase the amount of area to be retained in a natural undisturbed state.

20.3.6 Within the Oak Ridges Moraine, every application for *development* or *site alteration* excepting *Aggregate* Extraction Areas, shall demonstrate that planning, design and construction practices that protect water resources will be used, including:

a) keeping the removal of vegetation, grading and soil compaction to a minimum;

b) keeping all sediment that is eroded during construction within the *site*;

c) seeding or sodding exposed soils as soon as possible after construction; and

d) keeping chemical applications to suppress dust and control pests and vegetation to a minimum.

20.3.7 Within the Oak Ridges Moraine, municipal *development* standards shall incorporate planning, design and construction practices that will,

a) reduce the portions of *lots* and *sites* that have *impervious surfaces*; and

b) provide the flexibility to use alternative stormwater management techniques such as directing roof discharge to rear yard ponding areas and using grassed swales.

20.3.8 Despite anything else in this Plan, within the Oak Ridges Moraine, new *stormwater management ponds* are prohibited with respect to land in *natural heritage features* and hydrologically sensitive features, and shall be subject to Section 4.4.4 of this Plan. Also, new *rapid infiltration basins* and new *rapid infiltration columns* are prohibited within the Oak Ridges Moraine.