Springwater Official Plan
Section 23 – Stormwater Management Policies

23.1. Objectives

23.1.1. To provide a sound environmental approach to land development considering that stormwater runoff is an important aspect of the ecosystem and the hydrologic cycle.

23.1.2. To identify appropriate environmental management policies targeted to the physical features of identified development areas considering both the upstream and downstream characteristics of the watershed.

23.1.3. To provide provisional guidance for the choice of best stormwater management practices in order to control flooding, erosion, sedimentation and water quality in any natural or manmade waterway.

23.1.4. To encourage and promote the appropriate integration of natural waterways, ponds and valleys to enhance and develop functional corridors for wildlife habitat, open space and parkland.

23.1.5. To protect and enhance, through both accepted and innovative stormwater management techniques and design, the water quality, environmental, aesthetic and recreational potential of the Township's waterways and water bodies.

23.1.6. To make provisions for consistent direction for the review and approval of developments with respect to drainage issues.

23.2. Policies

23.2.1. As a general rule the effects and impact of stormwater management and quality control form an integral and important part of the land use planning and construction aspects of development, redevelopment and public works. As such, the integration and coordination of stormwater management should be a continuing and important part of any growth and development consideration.

23.2.2. A Master Drainage Plan which addresses both quantity and quality control aspects of stormwater management may be required to be undertaken by the developer for the catchment area of the applicable subwatershed area in which the development is located in order to minimize erosion and ensure drainage structures have adequate capacity. The determination of the applicable subwatershed area to be reviewed will be established by the Municipality and/or the applicable government agency having jurisdiction. All

storm drainage works should be consistent with the guidelines as outlined in the Stormwater Management Practices and Design Planning Manual by the Ministry of Environment and Energy, 1994, or its successor. Agreements with the appropriate government agencies may be required regarding stormwater management for development abutting County roads and Provincial highways.

23.2.3. Water quality monitoring may be required to be undertaken by parties proposing development with respect to bodies of water receiving surface runoff. If a deterioration in water quality occurs, appropriate measures may be implemented or required by the Township or the appropriate authority including restrictions on development, treatment of surface runoff to improve the quality, or regulations for on-site disposal of surface water.

23.2.4. The Township may undertake public works, pass by-laws, acquire lands and impose development conditions to ensure appropriate stormwater control and management.

23.2.5. Stormwater management plans shall be undertaken for all new Plans of Subdivision, may be required for those developments placed under Site Plan Control by the Township and may be required for those developments which by their nature, magnitude or location present a potential for negative impact on the surrounding drainage area. The proposed stormwater management plan shall be acceptable to the relevant regulatory agencies and commenting bodies having jurisdiction and shall be designed in accordance with any Township design standards, and if applicable, the Master Drainage Plan for the subwatershed area in which the site is situated. In the absence of a Master Drainage Plan, the stormwater management plan should, as may be appropriate, address such matters as best management practices, consideration of watershed flow regimes and headwater areas, stormwater flow control, centralized facilities, erosion control during and after construction, impact on groundwater resources, maintenance of base flow and storage levels and effects on water quality including temperature, wildlife, fisheries and the implementation of any mitigating measures.

23.2.6. The retention of existing tree cover or natural vegetation **particularly along watercourses and water stream valleys [Mod. #60 - Jan.28/98][OMB Order #2575]** and the provision of significant grassed and natural areas shall be encouraged to facilitate the infiltrating of stormwater runoff into the ground where soil conditions permit. Lot level and conveyance stormwater quality controls should be addressed in any new development proposal.

23.2.7. **Channelization of natural watercourses should be minimized. Alteration of natural watercourses should only be undertaken as part**

of an approved re-naturalization/replacement plan. [Mod. #61 - Jan.28/98]

23.2.8. **Where as a result of the consideration of current and adopted guidance documents dealing with stormwater management practices [OMB Order #2575] and design and where end of pipe management facilities are required, such facilities shall be designed [Mod. #62 - Jan.28/98]** so as to retain surface runoff during peak flow periods, to permit settling of some pollutants contained in the surface runoff and to reduce the cost of storm sewers, related works and maintenance. End of pipe stormwater quality controls should include wet storm detention pond wetlands, oil/grit separators, buffer strips, or infiltration basins or trenches.

23.2.9. Developments which could have *an* impact on surface drainage shall provide comprehensive drainage plans detailing methods of **treating stormwater runoff and discharging it to a suitable receiving watercourse [Mod. #63 - Jan.28/98]** and any impact on adjacent or affected properties.

23.2.10. No Official Plan Amendment, Zoning By-law Amendment or Plan of Subdivision shall be approved in the Township if the proposed development would have a significant adverse impact on surface drainage.

23.2.11. It is the policy of this Plan that any required stormwater facility should not be considered as part of any parkland dedication areas as required by the Planning Act.

23.2.12. Whenever possible, the location of the required stormwater facility should be located adjacent to the areas of parkland dedication, where such parkland dedication areas have been requested by the Township to be dedicated by the developer. The design of the facility should preferably be curve linear in shape with gentle grades and slopes so as to present as natural a landscape effect as possible, as opposed to being square or rectangular in design with steep slopes.

23.2.13. In the development or redevelopment of any properties, the Township will acquire, as may be deemed appropriate, reasonable access to watercourses or easements along watercourses for the purpose of stream improvement works and maintenance.

23.2.14. Unless it can be demonstrated that flow attenuation is not required, post development peak stormwater runoff should be limited to predevelopment levels.

23.2.15. Stormwater management plans and practices should recognize the need to protect and possibly enhance aquifers and groundwater recharge areas

through best management practices. Such practices should strive to maintain groundwater quality and promote groundwater recharge by means of runoff retention, detention ponds or other appropriate methods.

23.2.16. Snow Valley: In addition to the policies of this section, Stormwater Management Section 23, the following policies shall apply to the settlement area of Snow Valley.

23.2.16.1. All plans of subdivision and/or plans of condominium shall be accompanied by a Stormwater Management Plan (SWM) prepared by a professional engineer. The SWM Plan shall fulfil the following:

a) identify all of the drainage area affected by the development;
b) indicate the methods of draining individual lots or blocks;
c) identify the methods of controlling on-site and in-stream erosion and sedimentation during and after construction;
d) identify the location and registration of easements for municipal drains; and,
e) identify the methods of minimizing the impacts on water quality and quantity as it relates to fish, fish habitat, wetland areas, and overall stream health.

23.2.16.2. Methods of Stormwater Management will be designed to preserve and enhance the hydrologic balance, minimize the need for on-site and downstream remedial work, and minimize the impact on provincially significant wetlands, fish habitat, and other wetlands, streams and riparian zones.

23.2.16.3. All storm drainage works should be consistent with the state-of-the-art in storm water management and should consider the following guidelines:

a) the final report titled “An Evaluation of Roadside Ditches and Other Related Stormwater Management Practices” prepared for the Metro Toronto and Region Conservation Authority (April 1997),and
b) all applicable Ministry of the Environment guidelines.

23.2.16.4. Infiltration trenches within the Municipal right-of-way in conjunction with the roadside ditches and the stormwater management pond(s) shall be capable of containing the 100 year post development flows, without relying on the infiltration pits on each individual residential lot.

23.2.16.5. Infiltration pits, located on each individual residential lot, shall be capable of containing the 25 year post development flow from each residential unit.

23.2.16.6. Stormwater management pond(s) shall be capable of independently containing, as a minimum, the 25 year post development flows. In addition,

the placement of stormwater management pond(s) shall adhere to the following locational criteria:

a) above 205 metres G.S.C.D.;
b) above the defined top-of-bank, except when used as a secondary means of quantity control and left in a natural state;
c) outside the designated erosion and access and slope stability setback of 15 metres, except when used as a secondary means of quantity control and left in a natural state;
d) outside the 30 metre buffer or development setback from watercourses; and
e) outside environmentally significant areas and lands designated Natural Heritage (Environmental Protection) Category 1.

23.2.16.7. Stormwater management will be addressed through the following means:

a) a Stormwater Management Strategy addressing storm water management, as identified in Section 23.2.16.1 to the satisfaction of the Township of Springwater, in consultation with the Nottawasaga Valley Conservation Authority, and other governing agencies including but not limited to the Ministry of the Environment;
b) Preliminary Stormwater Management Reports, in conformity with the approved Stormwater Management Strategy (a part of the Servicing Strategy), shall be prepared to the satisfaction of the Township of Springwater, in consultation with the Nottawasaga Valley Conservation Authority, and other governing agencies, prior to draft plan approval of any subdivision or condominium; and
c) detailed Stormwater Management Reports, in conformity with the Preliminary Stormwater Management Reports, shall be prepared to the satisfaction of the Township of Springwater, in consultation with the Nottawasaga Valley Conservation Authority, and other governing agencies, prior to final approval and registration of any plan of subdivision or plan of condominium. The Township acknowledges that the Ministry of the Environment is the legislated approval authority for storm water management works.

23.2.16.8. Stormwater management planning shall take into account the necessity for control of the quality and quantity of runoff, so that damage to habitats is avoided, and to achieve environmental objectives in accordance with the policies for the Snow Valley Settlement Area and in consideration of the following criteria:

a) The retention of existing tree cover or natural vegetation and the provision of significant grassed or natural areas shall be encouraged to facilitate the infiltrating of stormwater runoff into the ground where soil conditions permit. Clearing for roads, houses and leaching beds

shall be limited, where required. Lot grading to the house envelope shall be limited to encourage natural tree cover and vegetation. Storm water can and must be managed to achieve environmental objectives (as well as to minimize property owner inconvenience).

b) Lot levels and swales on lots shall be controlled to achieve, where possible, 1% grades to promote infiltration.
c) Shallow, grassed swales for roadside drainage shall be utilized to reduce runoff and lessen erosion.
d) Existing drainage patterns shall be maintained.
e) Watercourses will be managed as cold water streams and protected from extended duration flows and thermal impacts.
f) Source controls will be fully utilized.
g) Comprehensive erosion and sediment control plans shall be developed for all phases of construction.

23.2.16.9. Appropriate storm drainage facilities shall be installed and maintained to serve developments in all new areas of the Snow Valley Settlement Area. Detailed Storm Water Management Reports will include a comprehensive maintenance plan. **[OPA #13 OMB approved Jan. 27/03]**