

Environmental Protection for Hazardous Conditions

DRAFT Objectives and Policies

Objectives

- Objective 1.1.1 Promote settlement patterns that minimize the risk associated with hazardous conditions to:
- protect against injury, suffering and the loss of life, and minimize loss of use, and property damage by prohibiting or regulating development on lands subject to hazardous conditions, and
 - identifying and alleviating hazardous conditions which restrict the use of land or pose a risk of injury or damage.
- Objective 1.1.2 Protect public infrastructure from hazardous conditions.
- Objective 1.1.3 Reduce or prevent negative impacts to air, soil, and water quality, the natural environment, its ecosystems and biological diversity that may result from hazardous conditions.
- Objective 1.1.4 Inform hazard mitigation and emergency preparedness efforts.
- Objective 1.1.5 Improve public awareness of hazardous conditions.

Policies

General

- Policy 1.1.1 The possibility of hazardous conditions should always be considered with the design and construction of any development.
- Policy 1.1.2 It is best to avoid developing in areas subject to hazardous conditions.
- Policy 1.1.3 Vulnerable development should be prohibited from hazardous condition areas, unless the applicable hazard can be practically alleviated, and until adequate risk reduction measures are in place.
- Policy 1.1.4 Concentrations of development density, whether or not the development is classified as vulnerable development, should be limited in hazardous condition areas to reduce overall long term risk.
- Policy 1.1.5 Development on lands within the hazardous condition areas will likely encounter hazardous conditions. A development approval applicant should be notified if the

subject property overlaps with one of these areas. Notification will include a determination whether a hazard assessment is necessary.

Policy 1.1.6 It is recommended that the Approving Officer require a landowner to provide a report in accordance with s. 86(1)(c)(v) of the *Land Title Act* if the development is in a floodplain hazardous condition area, erosion and sedimentation hazardous condition area or landslide hazardous condition area. It is further recommended that the Approving Officer consider that report, or any other relevant study or plan, when determining whether the land is subject to, or could reasonably be expected to be subject to, flooding, erosion, or landslide.

Policy 1.1.7 It is recommended that the Building Inspector require a landowner to provide the Building Inspector with a report in accordance with s. 56 of the *Community Charter* if the development is in a designated floodplain hazardous condition area or landslide hazardous condition area.

Policy 1.1.8 A relaxation to any hazardous condition provision of this Plan, or any other applicable City Bylaw, should only occur where a proven serious hardship exists and no other reasonable alternative is available to the landowner. Before consideration is given other options such as alternative sites, construction techniques and designs should be prepared by the landowner or their agent and provided to the City.

Policy 1.1.9 Where a proposed development is within a designated hazardous condition area the approval authority should consider whether a covenant is required, or in cases where it is not required seek the voluntary agreement from a landowner for a covenant that includes:

- restriction on use, buildings, subdivision and alienation;
- obligations that land, hazard protection works, or a specified amenity in relation to it be protected, preserved, conserved, maintained, enhanced, restored or kept to the extent provided in the covenant. Amenity includes any natural, historical, heritage, cultural, scientific, architectural, environmental, wildlife or plant value relating to the land that is subject to the covenant;
- Conditions respecting reimbursement by the land owner for any expenses that may be incurred by the City as a result of a breach of the terms of the covenant; and
- A waiver of claims against the City coupled with an indemnification against third party claims.

The covenant should apply to the property for as long as the risk exists for the development.

Policy 1.1.10 Where a development has the possibility of exacerbating a risk to an adjacent parcel or development, a higher level of diligence on the development should

apply. Thus risk reduction measures may be required to proceed or coincide with the construction and use of the development. However, where it is determined that the development does not have the possibility of exacerbating a risk to an adjacent parcel or development, security to guarantee the construction of risk reduction measures within a reasonable period may be acceptable.

Flood Hazard Area

Policy 1.1.11 Agricultural, park and open-land recreation uses are considered appropriate for designated flood hazard areas as the threat to life and property is low. Other uses may be considered within a designated flood hazard area subject to Provincial Regulations and Guidelines, Flood Plain Regulation Bylaw, any plan or program the City has developed, and any hazard assessment undertaken for that development.

Policy 1.1.12 Where development is presently located in flood plain hazardous condition areas, or current zoning permits new development in designated flood plain hazardous condition areas the future construction of, addition to, or alteration of a building or structure to be used for habitation, business, or the storage of goods damageable by floodwaters should be floodproofed in accordance with the applicable Provincial Guidelines defined within Section 910 of the *Local Government Act*.

Erosion and Sedimentation Hazard Area

Policy 1.1.13 Park and open-land recreation uses are considered appropriate for designated erosion and sedimentation hazard areas as the threat to life and property is low. All other development should be located a safe distance from the watercourse, water body, and steep slopes to avoid areas prone to erosion.

Policy 1.1.14 Erosion control should be provided on all construction sites including minimizing the amount of land disturbed and limiting damage cause by changes to water flow on the land. This may include:

- preserving existing grass and trees to the extent possible;
- replanting as soon as possible;
- using best management practices to control sediment;
- locating soil piles away from waterways and roads;
- constructing a access drive for all vehicles including a dry apron, or tire wash station, to avoid tracking of mud onto streets;
- immediately clean-up sediment carried off-site by rain water or vehicles;
- and
- control the runoff from roof, driveway and other hard-surfaces to reduce erosion.

Landslide Hazard Area

Policy 1.1.15 Park and open-land recreation uses are considered appropriate for designated landslide hazard areas as the threat to life and property is low. All other development should be located a safe distance from unstable slopes.

Policy 1.1.16 The following activities should be avoided in the landslide hazard area:

- excavation of slope or its toe;
- use of unstable earth fills for construction;
- loading of slope or its crest, such as placing earth fill at the top of a slope;
- deforestation – cutting down trees/logging and clearing land for crops; unstable logging roads;
- irrigation and lawn watering;
- mining/mine waste containment;
- artificial vibration such as pile driving, explosions, or other strong ground vibrations;
- water leakage from utilities, such as water or sewer lines;
- alteration of the natural drainage.

Wildfire Hazard Area

Policy 1.1.17 Resource extraction (including agriculture), park and open-land recreation uses are considered appropriate for designated wildfire hazardous condition areas as the threat to life and property is low. Other uses may be considered within a designated wildfire hazard area subject to Provincial Regulations and Guidelines, Tree Protection Bylaw, any plan or program the City has developed, and any hazard assessment undertaken for that development.

Policy 1.1.18 The following potential ignition sources should be avoided in the wildfire hazard area:

- standing dead trees;
- campfires;
- heavy industry;
- vehicle traffic;
- railways;
- homes and other residential structures;
- power lines; and
- unmonitored park and open spaces where historical or current nuisance activity occurs.

Policy 1.1.19 In order to mitigate wildfire risk, development in the wildfire hazard area should:

- change the fuel profile to reduce fire behaviour potential by changing the stand structure (e.g. fuel loading size and continuity, and species composition);

- improve access through the development of road and recreation trail system for fuel breaks and control lines for suppression efforts;
- increase water availability by ensuring adequate location and number hydrants with sufficient flow in urban settings, and identifying suitable natural water bodies in rural areas; and
- reduce the number of ignition sources.

Atmospheric Hazards

Policy 1.1.20 New power utilities should be installed underground to reduce the potential for service interruption due to atmospheric hazards.

Policy 1.1.21 New neighbourhoods should be planned with multiple access points to ensure that emergency responders can attend to all areas of the City even if certain roads become impassable due to an atmospheric event.

Hazardous Material Area

Policy 1.1.22 Vulnerable development (except hazardous material manufacturing, processing, storage and disposal sites themselves) should be setback a minimum of 150 m from hazardous material transportation routes and a minimum of 300 m from hazardous material manufacturing, processing, and disposal sites. A hazard assessment may recommend greater or lesser setbacks.

NOTES: