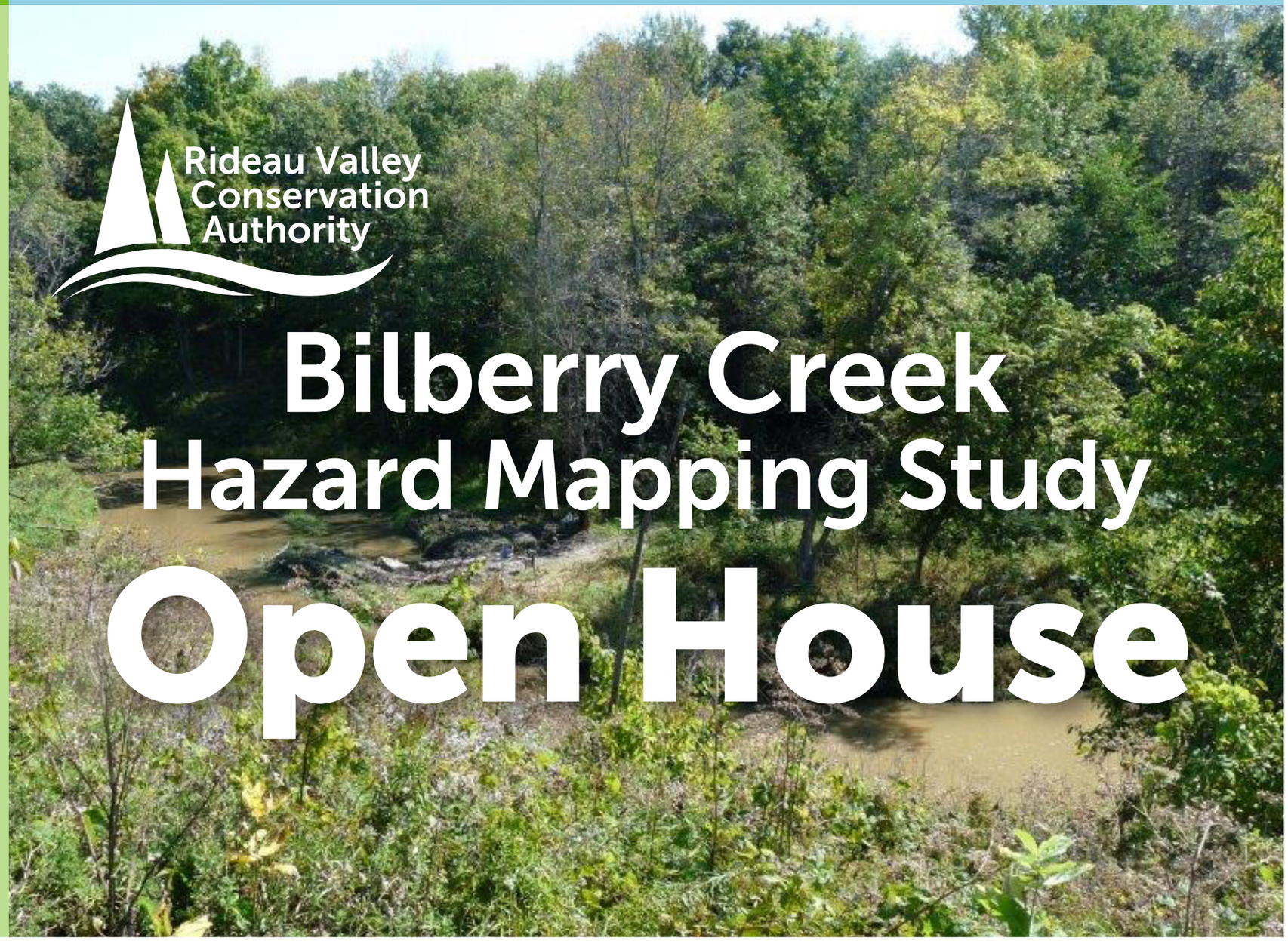
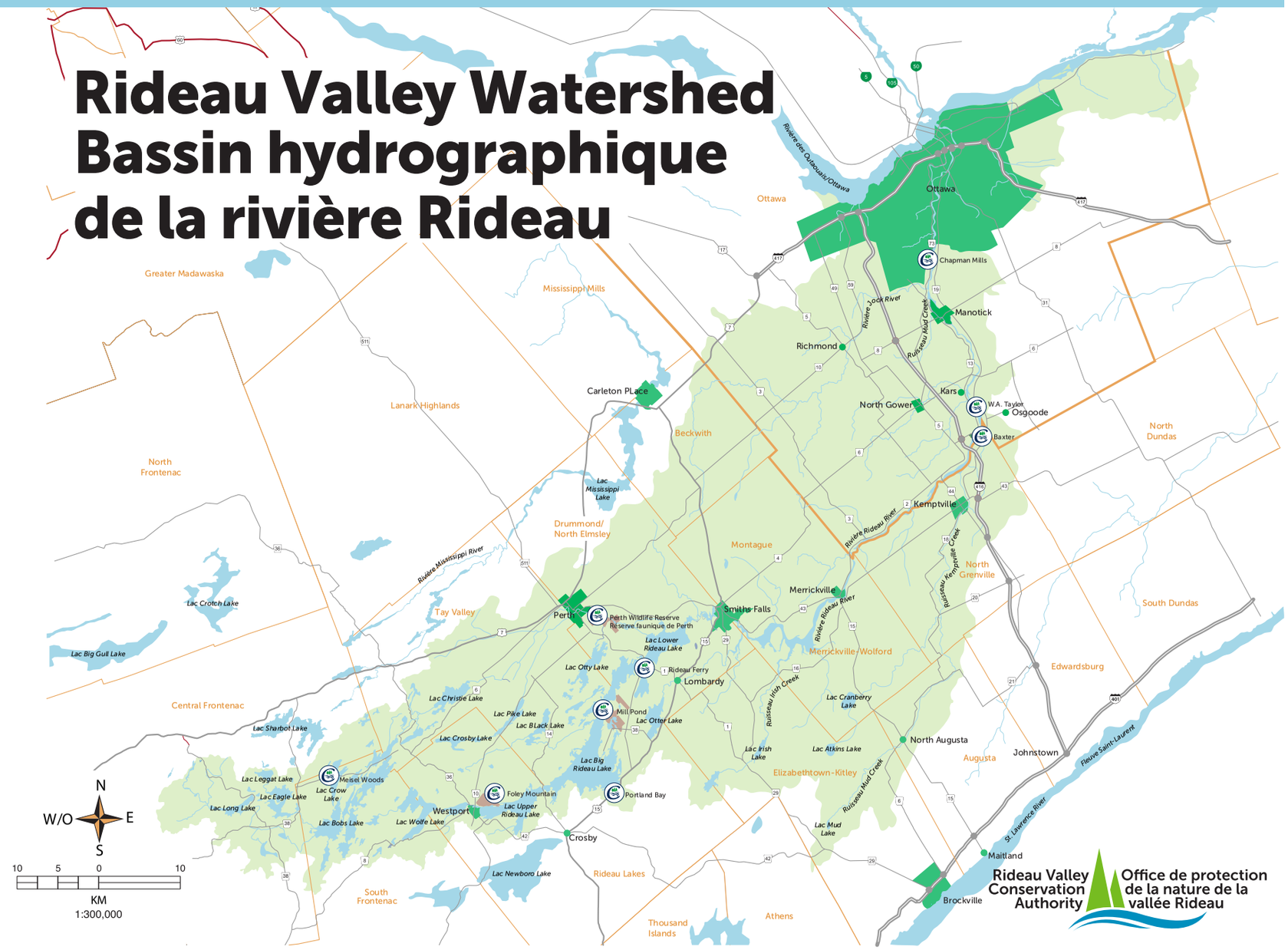

Rideau Valley
Conservation
Authority
Bilberry Creek
Hazard Mapping Study
Open House

Rideau Valley Watershed
Bassin hydrographique de la rivière Rideau



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Hazard Mapping Includes:

- Flood Risk
- Slope Stability
- Wetland (not applicable in Bilberry Creek)

Rideau Valley Conservation Authority

Flood Risk Mapping: How we do it?

Acquire data: topography, river cross-sections, bridge, culvert, dams, stream flow, water level, etc.

Estimate flow: estimate 1:100 year and other flows in the river based on available information such as stream flow data and hydrologic modeling

Compute water level: using hydraulic modeling, calculate water level in the river corresponding to 1:100 year and other flow

Plot flood risk lines: using the lay of the land (topography) and the computed water level, plot the extent to which flood water is expected to spread

Reporting: write a technical report describing the work done for the project

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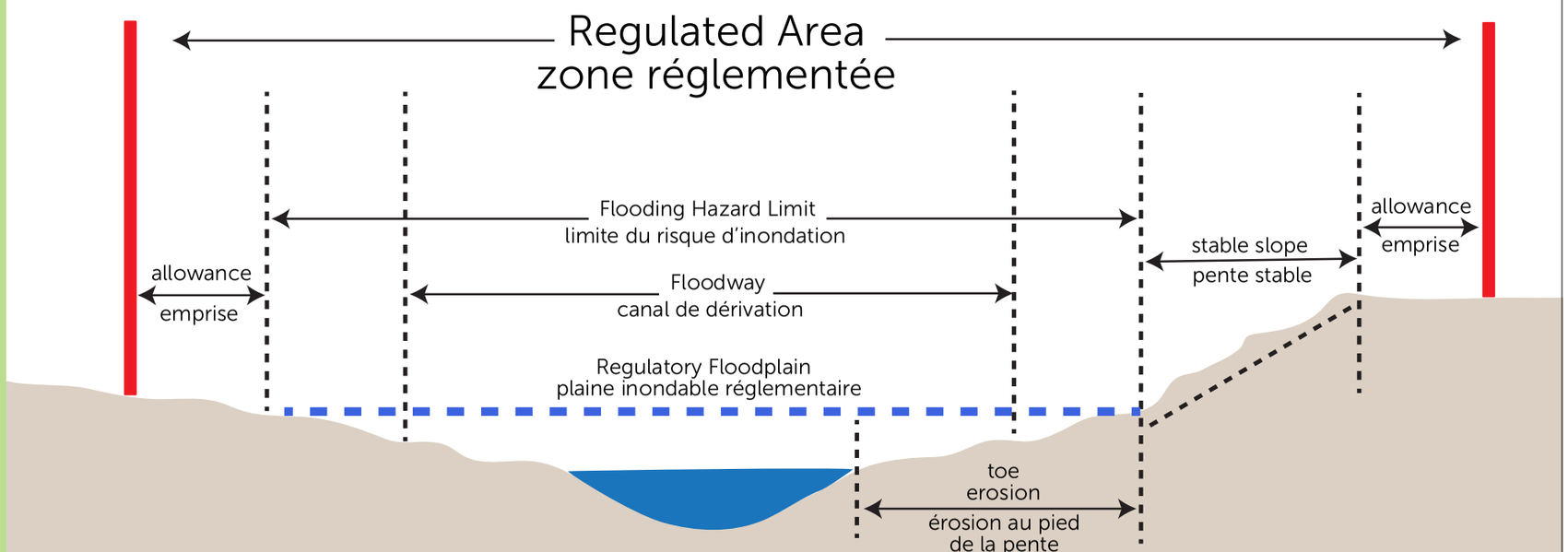
Hazard Mapping
Cartographie des risques



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Next Steps

Consultants will conduct geo-technical studies in public areas of Bilberry Creek to better understand slope stability.

Do we have?

- Sensitive marine clay
- Organic soil
- Karst

Rideau Valley Conservation Authority

What do we regulate?

Development, Interference with Wetlands and Alterations to Shorelinesand Watercourses Regulation O. Reg. 174/06

Conservation Authorities Act, Section 28

1. Subject to the approval of the Minister, an authority may make regulations applicable in the area under its jurisdiction,

   (i) restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands, and natural or artificially constructed depressions in rivers or streams;

   (ii) prohibiting, regulating or requiring the permission of the Authority for straightening, changing, diverting or interfering in any way with the existing channel or a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;

   (iii) prohibiting, regulating or requiring the permission of the Authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation land may be affected by the development;

   "Development" means:

   (a) the construction, reconstruction, erection or placing of a building or structure of any kind,

   (b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,

   (c) site grading, or

   (d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere;


OFFICE CONSOLIDATION

Conservation Authorities Act

CODIFICATION ADMINISTRATIVE

Loi sur les offices de protection de la nature

Rideau Valley Conservation Authority

Why do we regulate?

A principal mandate of Conservation Authorities is to prevent loss of life and property due to flood and erosion hazards and to protect the hydrologic function of wetlands.

What types of lands do we regulate?

River and stream valley systems — depressional features associated with a river or stream, whether or not they contain a watercourse: floodplains, stable valley slopes.

Watercourses — depressions in the ground in which a flow of water regularly or continuously occurs regardless of upstream drainage area. All watercourses are subject to the Regulation.

Wetlands — land that is seasonally or permanently covered by shallow water or has a water table close to or at the surface and directly contributes to the hydrolocial function of a watershed through connection with a surface watercourse, has hydric soil caused by the presence of abundant water; and has vegetation dominated by hydrophytic or water tolerant plants but does not include periodically soaked or wet land that is currently used for agricultural purposes and no longer exhibits wetland characteristics.

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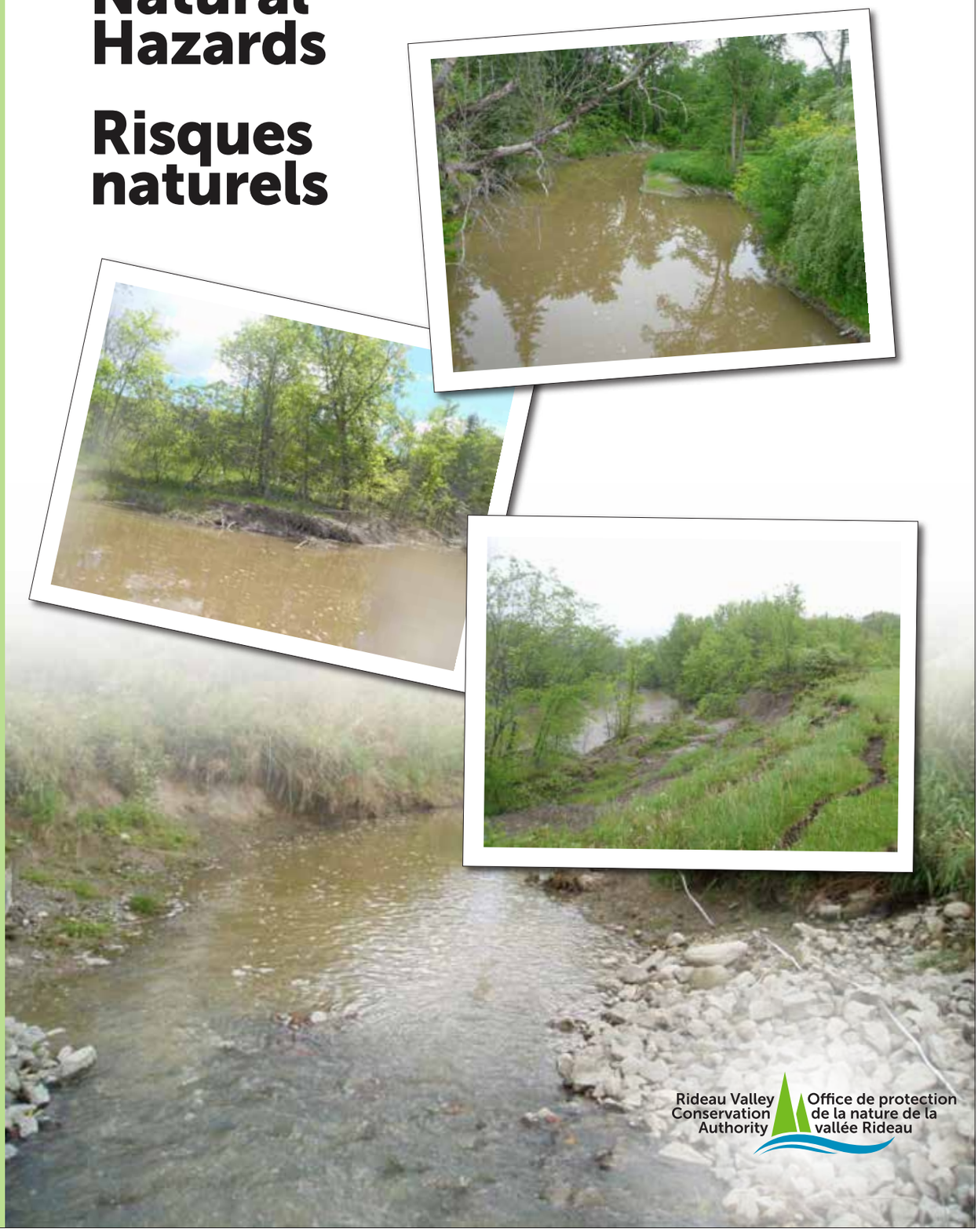
Natural Hazards

Risques naturels



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How are hazard maps used?

1. Municipal Land Use Planning and Development Approvals
2. Conservation Authority Regulations

   Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation O. Reg. 174/06

3. Flood Forecasting and Warning

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