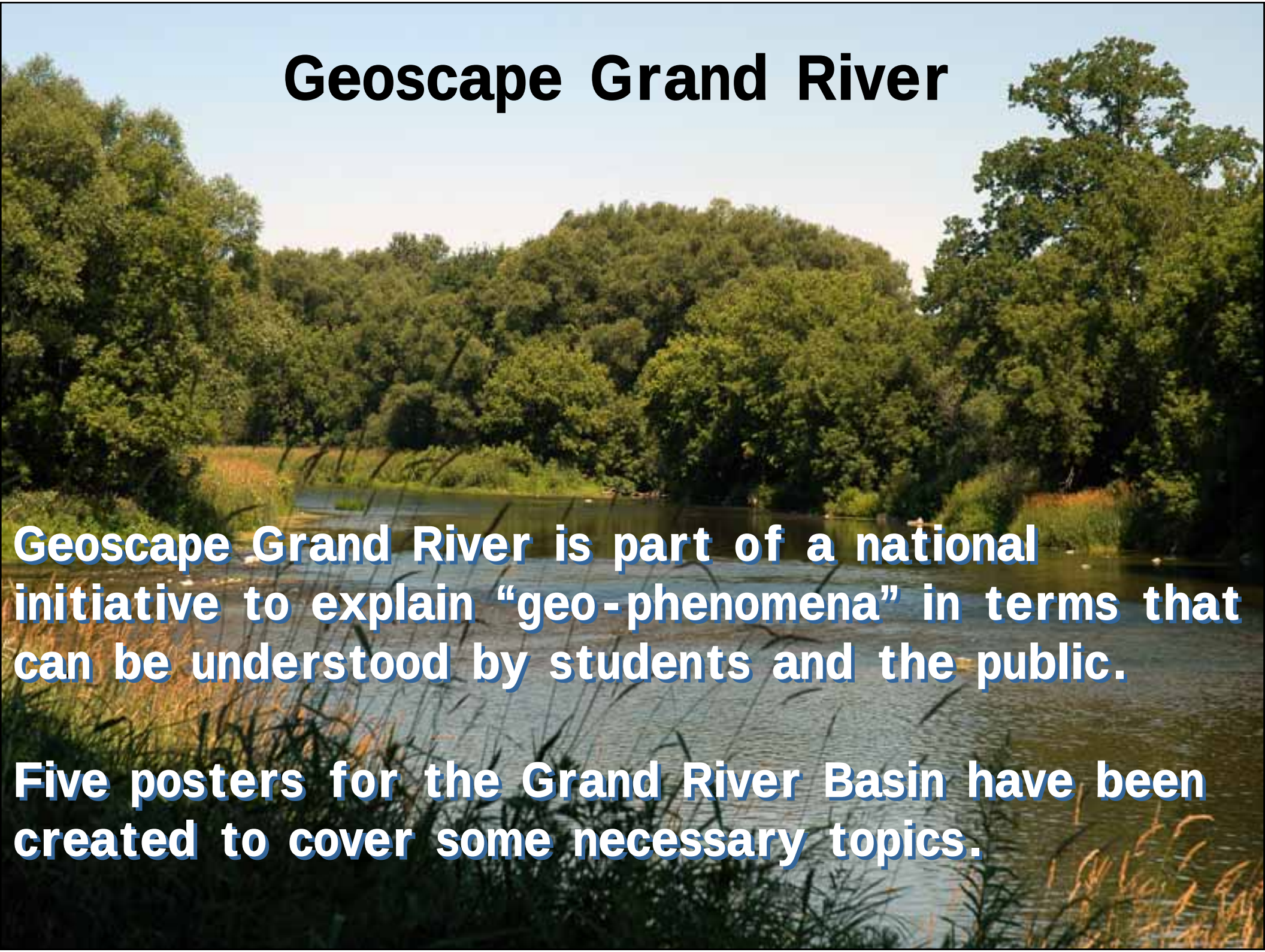

Water Forum 2005
Water
A Fine Balance: Managing...
and
GROWTH!


GEOSCAPE - GRAND RIVER
Designed to provide information to the citizens of the Grand River Basin
Alan V. Morgan, Department of Earth Sciences, University of Waterloo

Geoscape Grand River

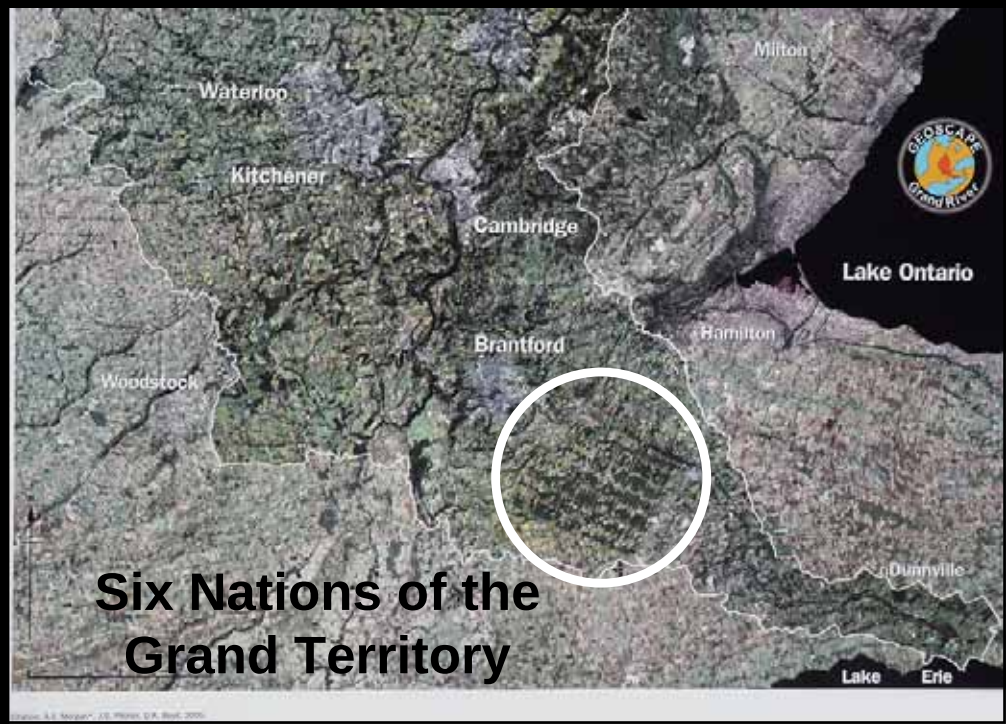


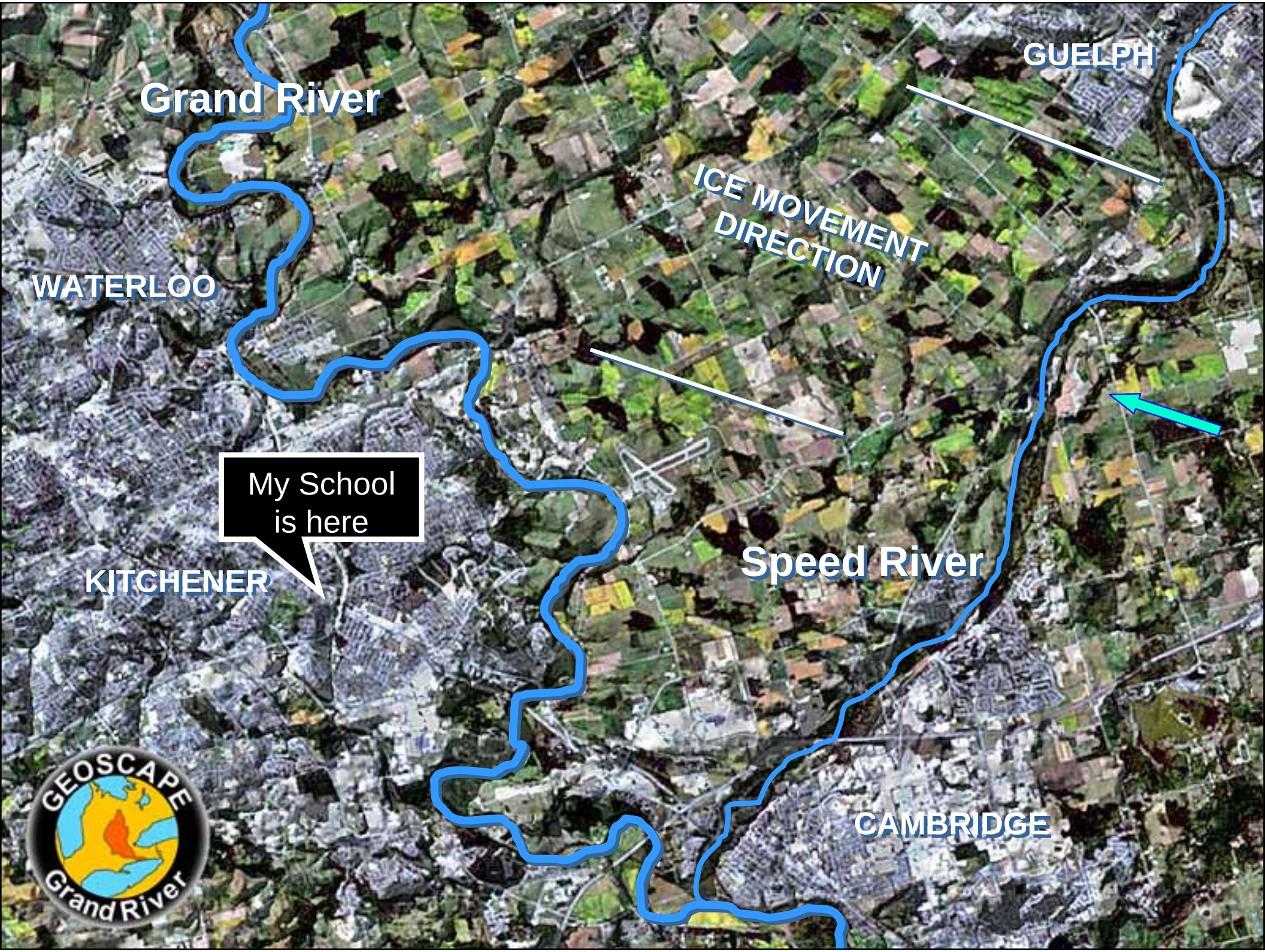
Geoscape Grand River is part of a national initiative to explain “geo-phenomena” in terms that can be understood by students and the public.

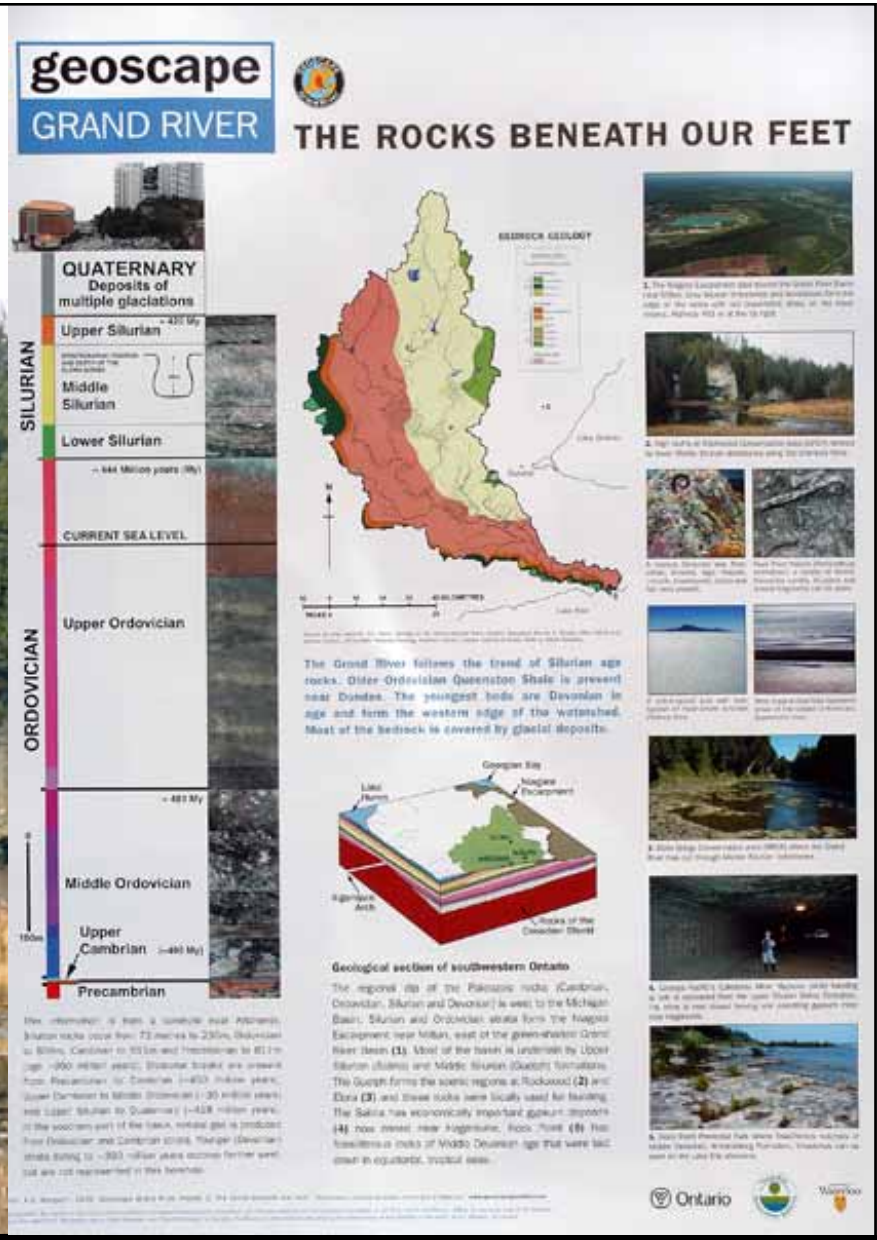
Five posters for the Grand River Basin have been created to cover some necessary topics.

The first poster commences with a view of the Grand River from space

Poster 1: Satellite View




Grand River
GUELPH
ICE MOVEMENT DIRECTION
WATERLOO
My School is here
KITCHENER
Speed River
CAMBRIDGE
GEOSCAPE Grand River

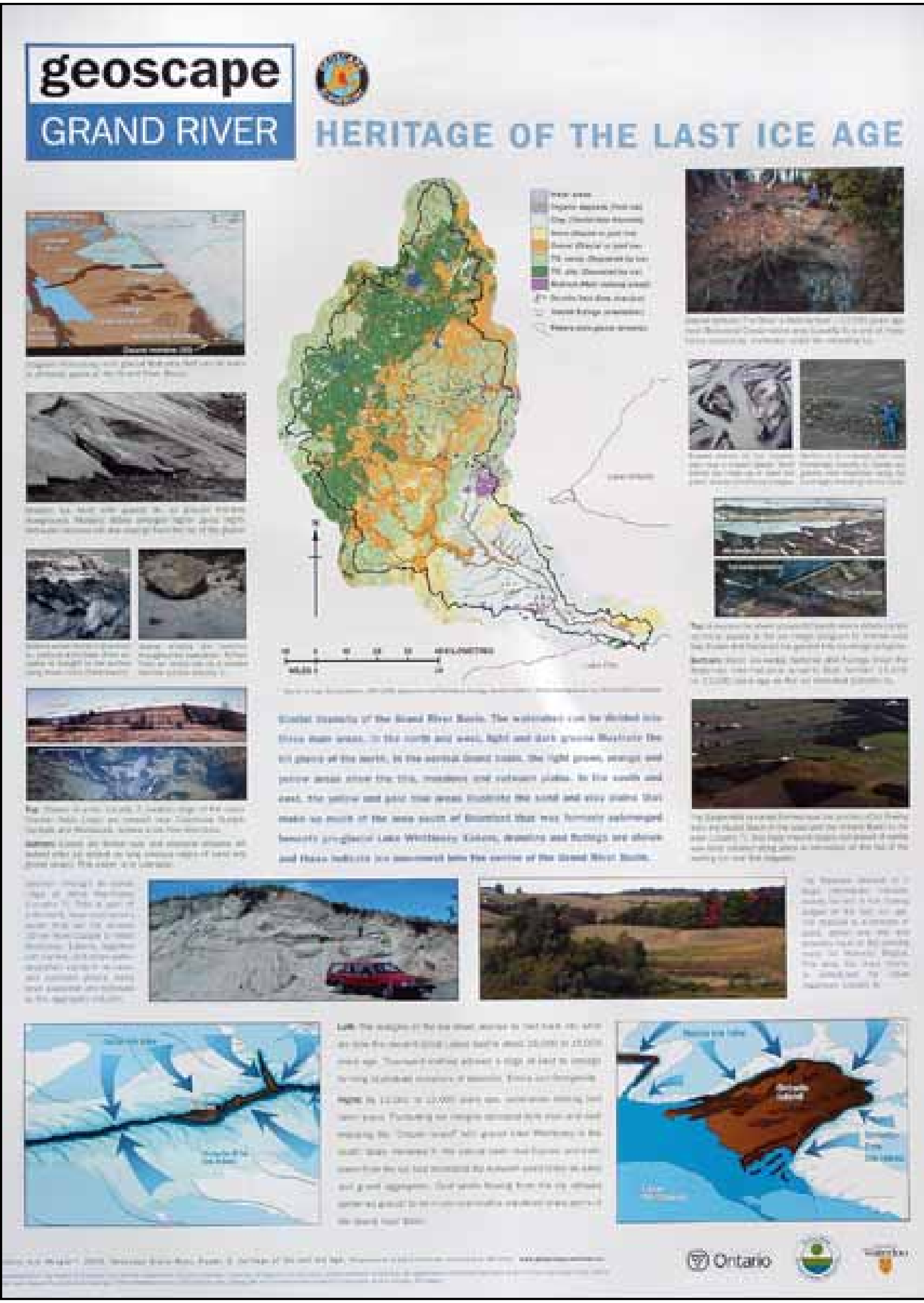


Poster 2 deals with the bedrock geology of the Grand basin. It shows the distribution of the bedrock units; some of the interesting geological features (Elora, Rockwood, Rock Point) and comments on the "rocks beneath our feet".

Poster 3

Heritage of the Ice Age

Kitchener-Waterloo region about 15,000 years ago.


geoscape
GRAND RIVER
HERITAGE OF THE LAST ICE AGE
Ontario

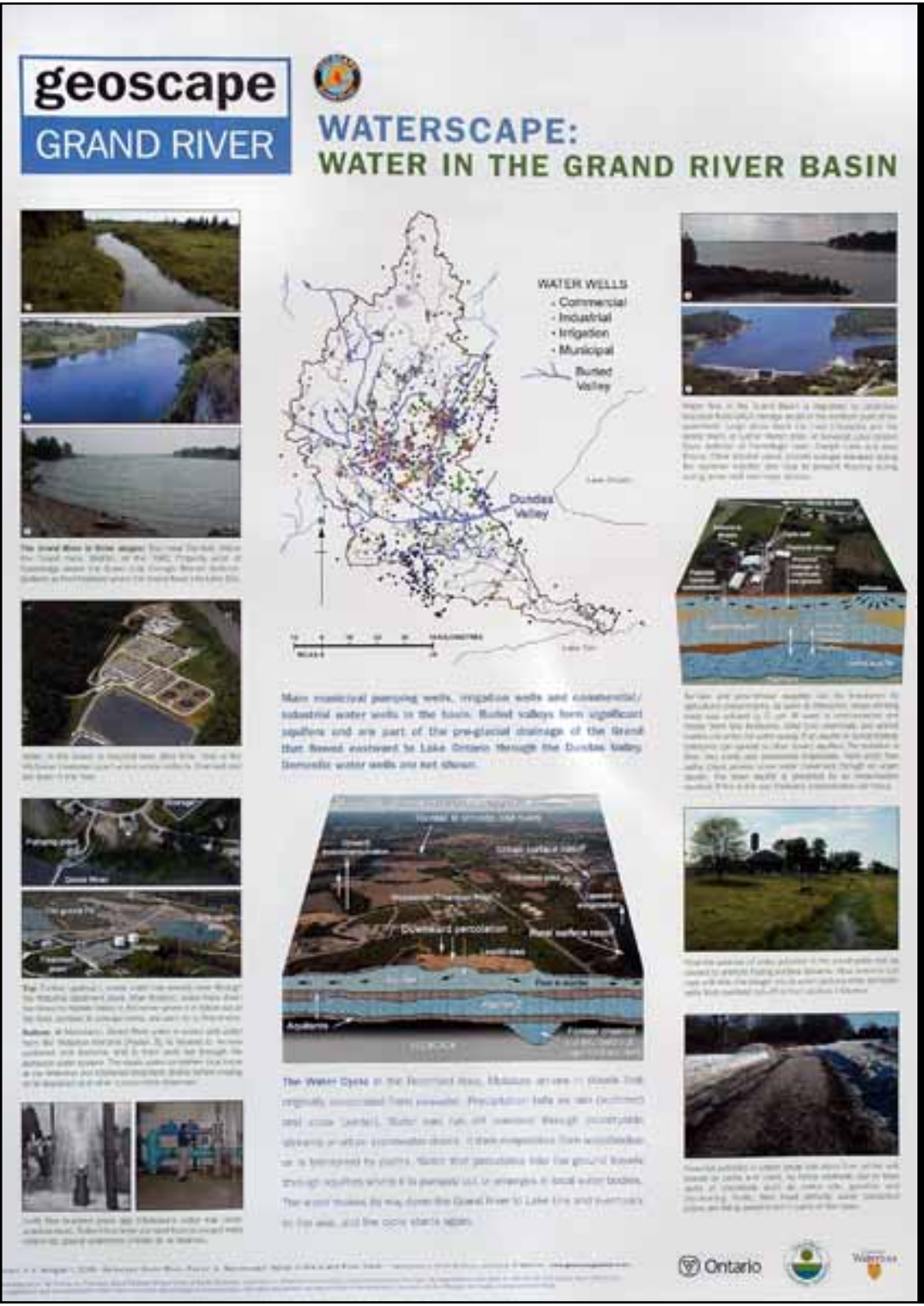

Legacy of the last ice!

This heritage gave us the Waterloo Moraine, pristine groundwater, and aggregate resources for development.

The question of GROWTH!

Planned: Vista Hills and associated developments, Westside Waterloo.

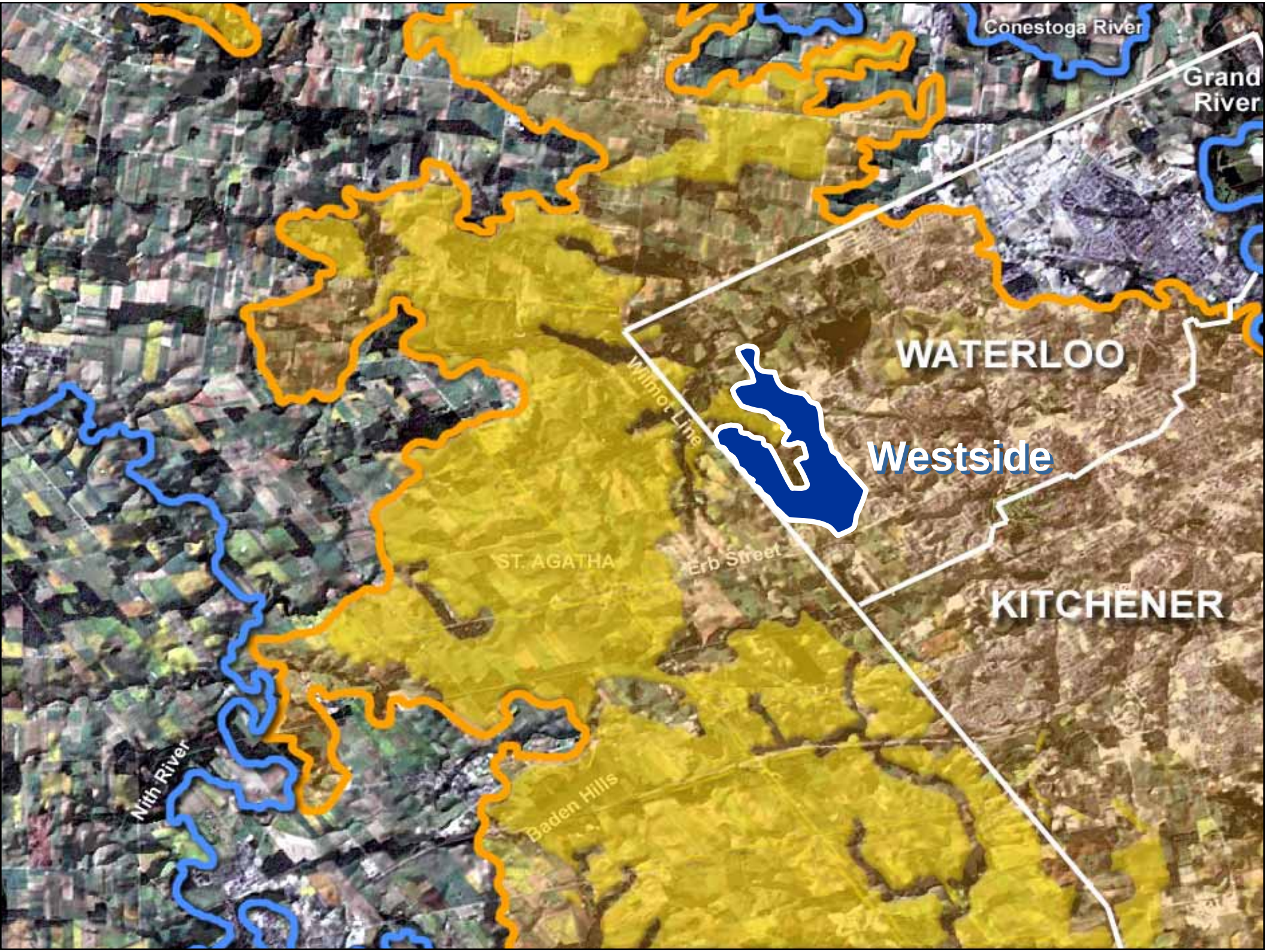
Just 27 months of "development" in Westside Waterloo!



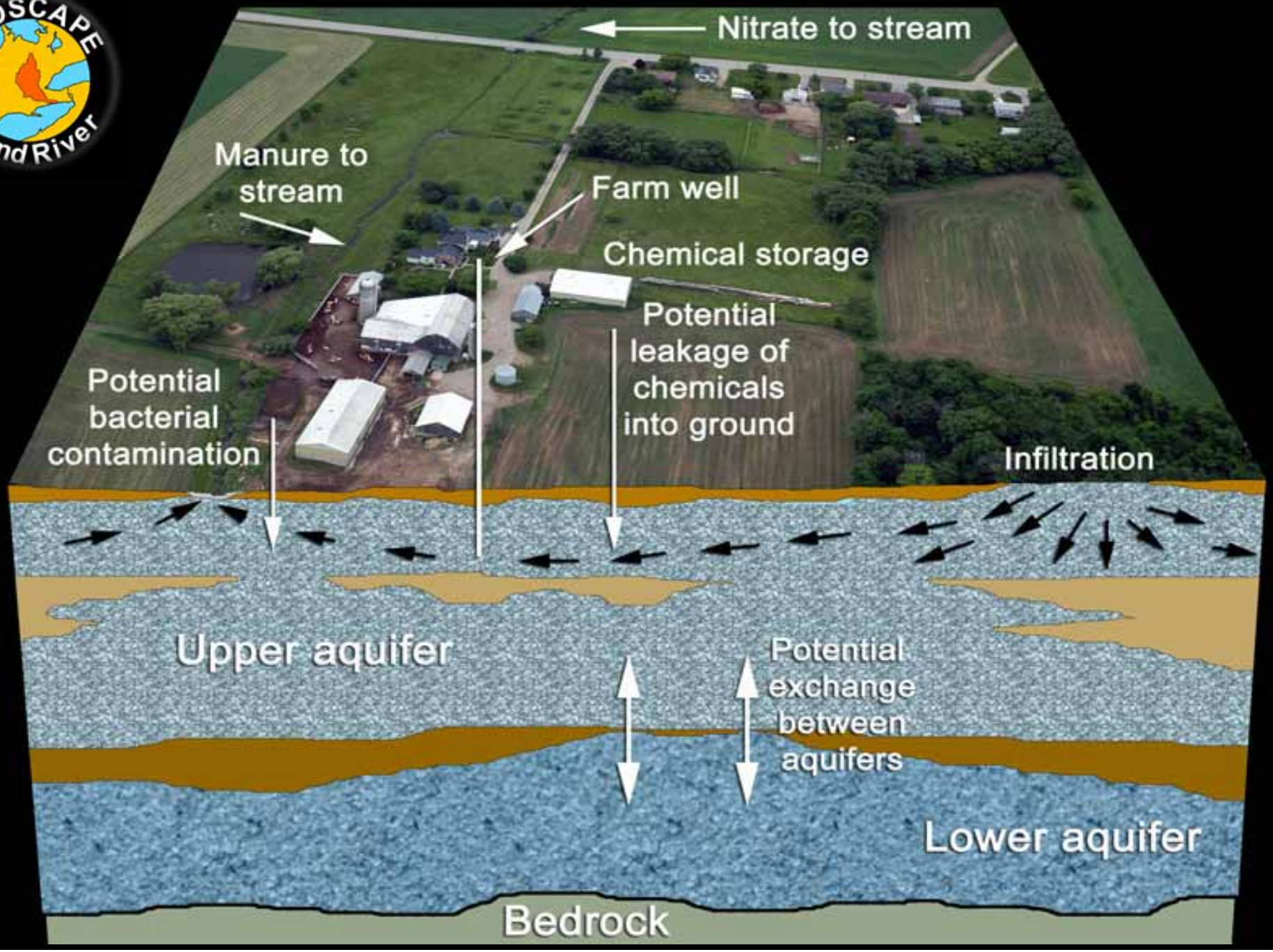
Poster 3

As population expands from 800,000 to over one million in the next two decades the citizens of the Grand River Basin are becoming increasingly dependent on water supplies from shrinking groundwater resources and from the Grand River itself.

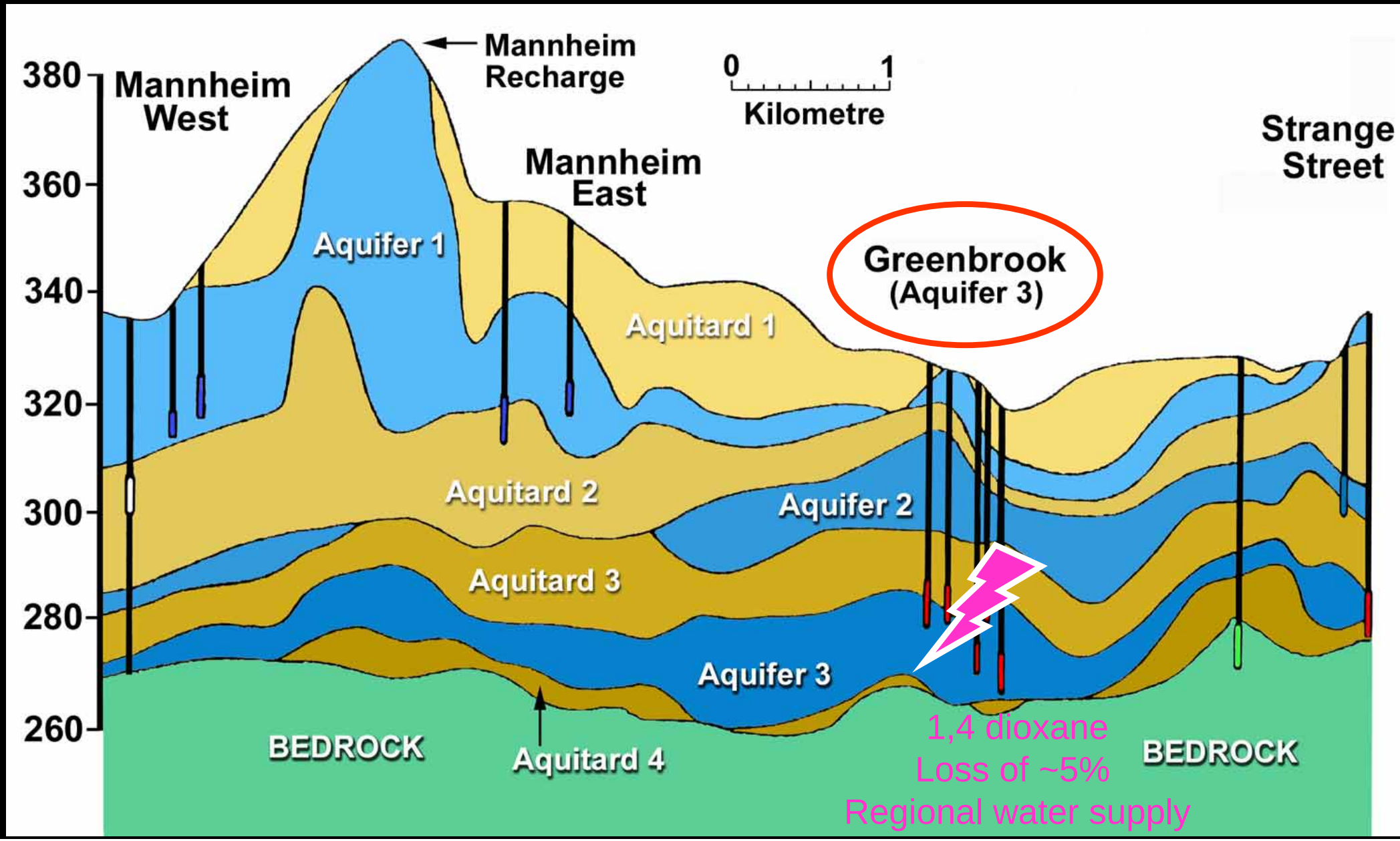
Last year 80 – 90 % of the flow of the Grand through K-W was from releases by the upstream GRCA reservoirs!

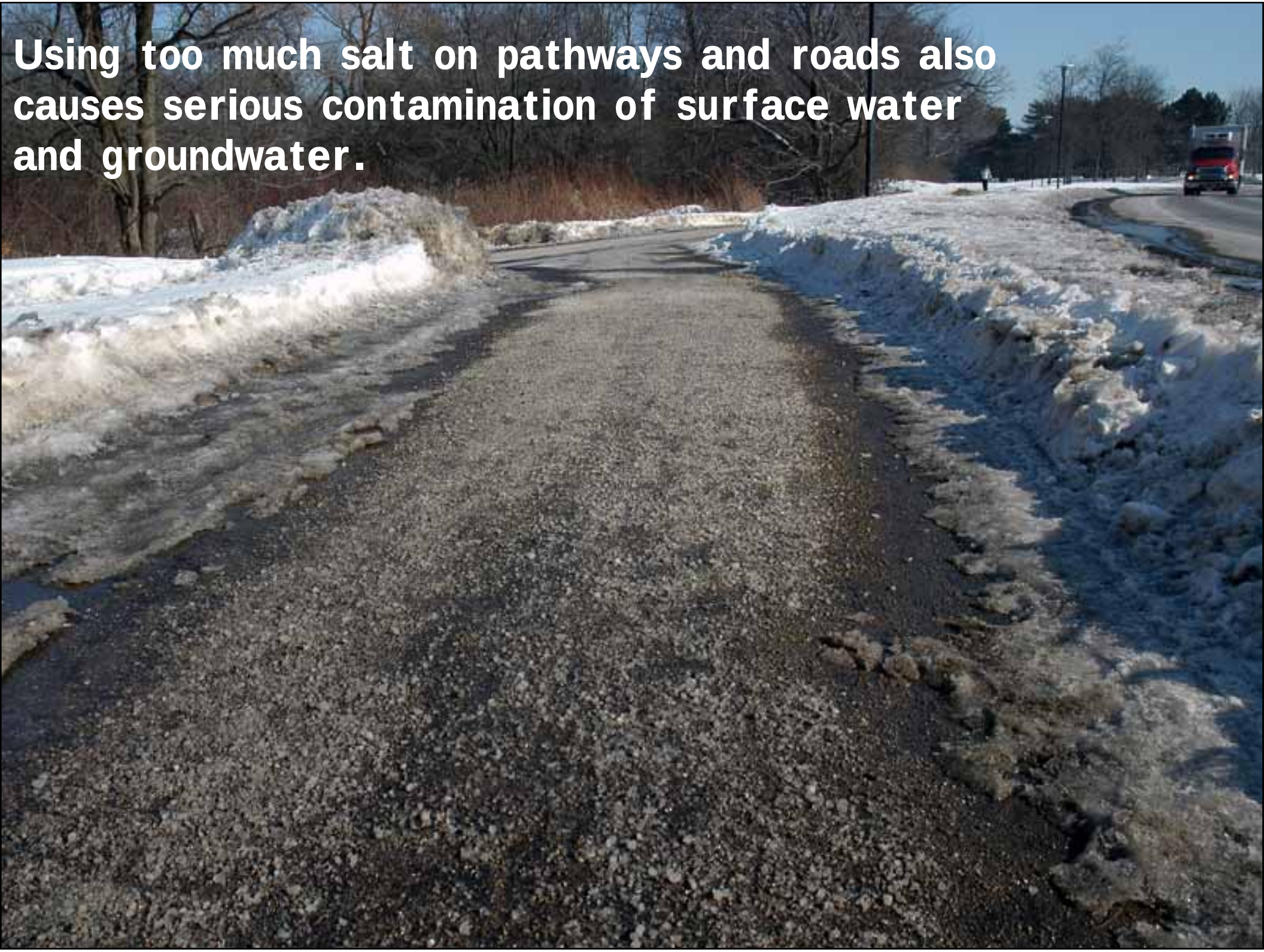

Conestoga River
Grand River
WATERLOO
Westside
Wilmot Line
Erb Street
ST. AGATHA
KITCHENER
Nith River
Baden Hills

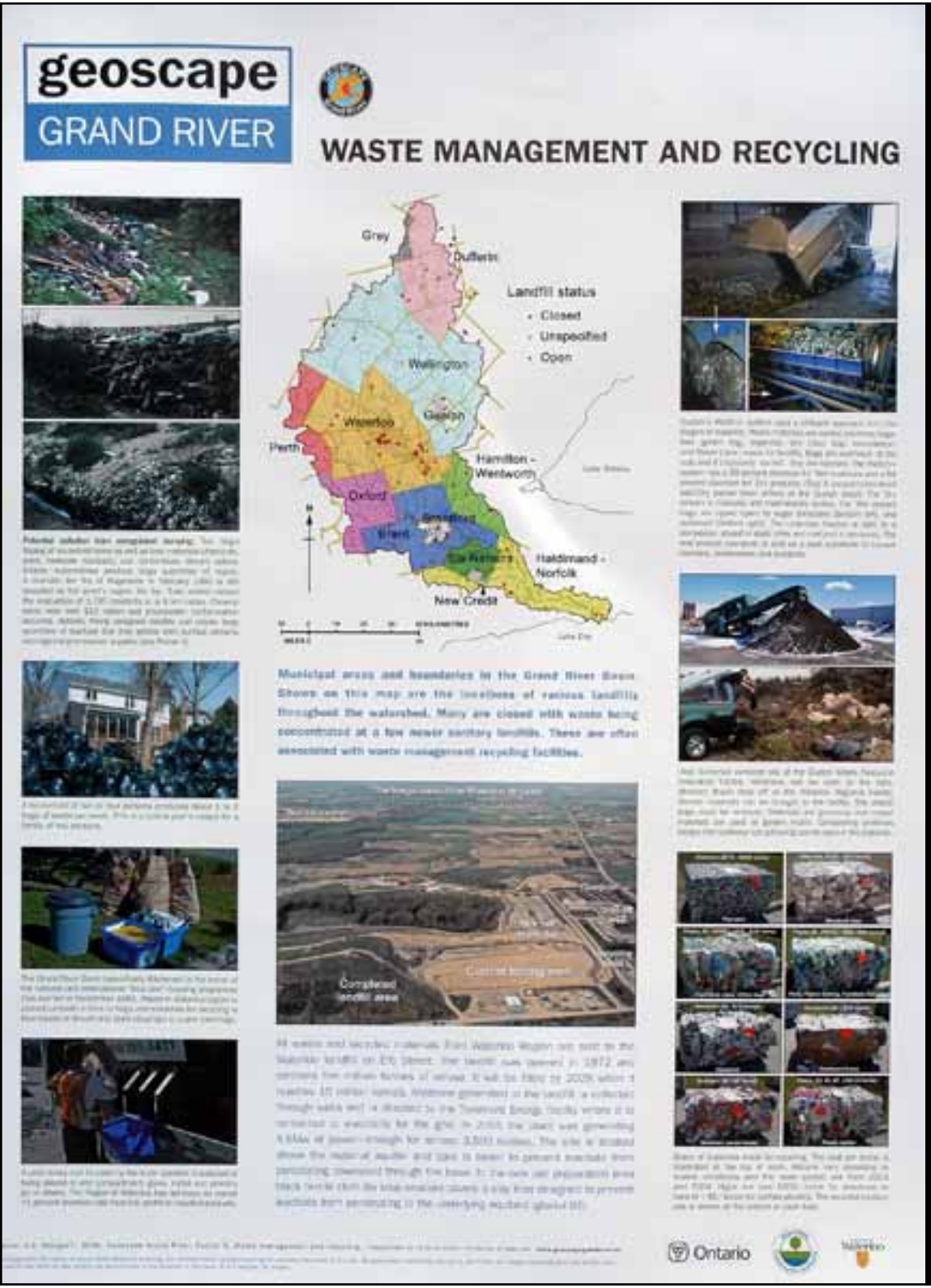
Geoscape Grand River Poster 4: Water!



The Waterloo Moraine consists of multiple "stacked" aquifers, some of which can be cross-contaminated if seriously polluted.




Using too much salt on pathways and roads also causes serious contamination of surface water and groundwater.



Poster 5
Waste and Recycling

Growth creates more waste for disposal and in spite of the best engineering principles, more chances of accidental contamination of water supplies.

Dependence on dumping in the US (Toronto's current method) means more likelihood of "emergency" waste disposal in centres around the Toronto Metropolitan area.

Geoscape Grand River Poster 5: Waste

Geoscape Grand River – Yours to enjoy!

For more information on the Grand River Geoscape

Either contact

avmorgan@uwaterloo.ca

or go to

www.whatonearth.org

www.geoscapegrandriver.ca

Will be online soon