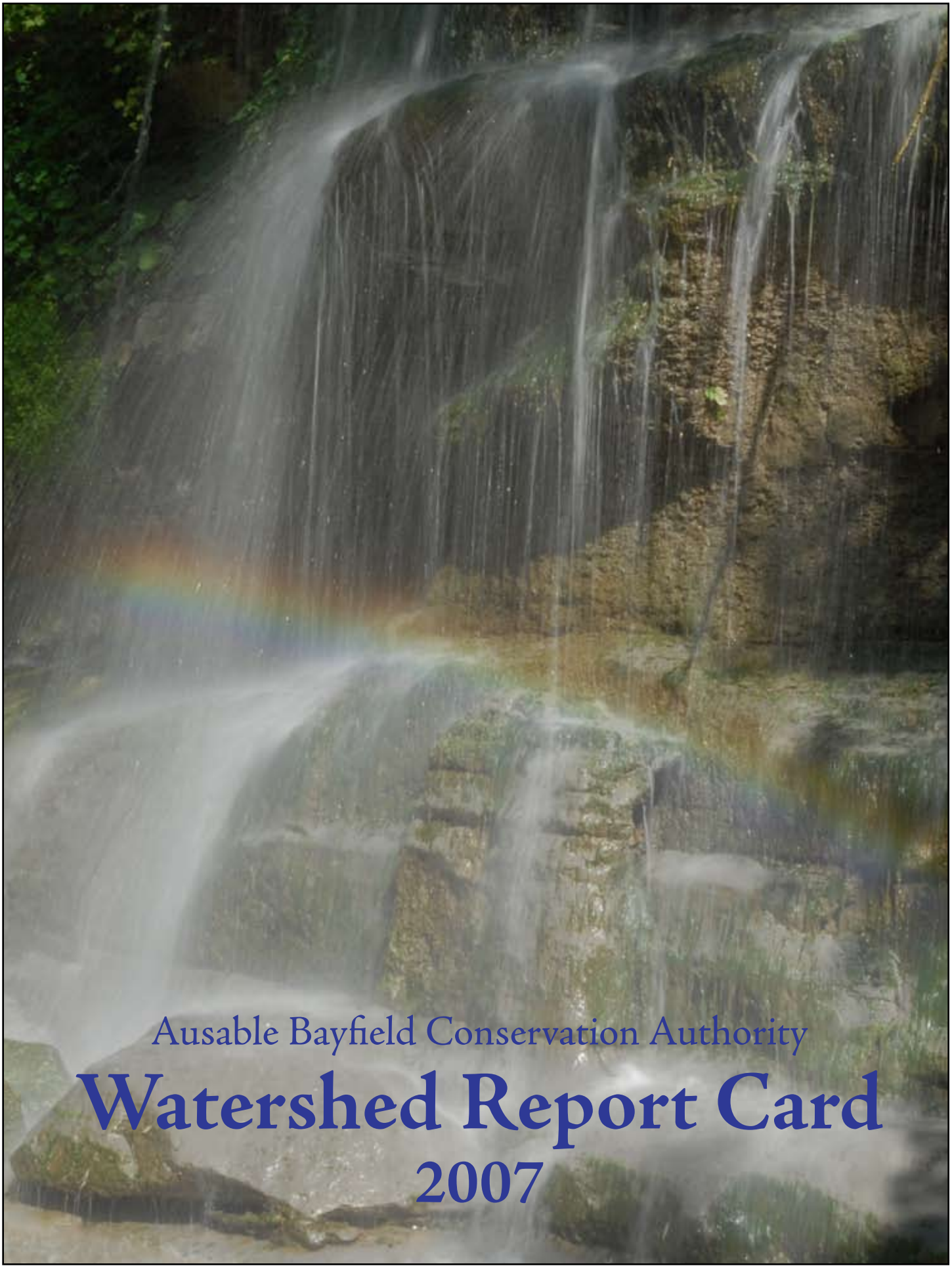

Ausable Bayfield Conservation Authority

Watershed Report Card

2007

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Ausable Bayfield Conservation Authority

Watershed Report Card

2007

BUILDING BETTER ENVIRONMENTAL CONSCIENCE

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Ausable Bayfield
Watershed Report Card

Executive Summary

We are proud to share with you the inaugural Watershed Report Card for the Ausable Bayfield Conservation Authority. We want this report to do more than sit on a shelf. Our wish is that this Report Card will become a road map for local action to protect our environment.

Report cards based on the forest and surface water quality conditions were completed for 16 watersheds in the Bayfield River (three watersheds), the Ausable River (eight watersheds), Parkhill Creek (two watersheds) and smaller Lake Huron tributaries (three areas).

Provincial indicators of forest health and surface water conditions were recommended by Conservation Ontario in order to standardize the reporting process across the province.

Forest condition indicators included: per cent forest cover and per cent forest interior as determined with digitized provincial topographic series maps.

Surface water quality indicators included: total phosphorus, *Escherichia coli* (E. coli), and a measure of the benthic invertebrate community. Phosphorus is an element that determines plant growth and is often associated with eroding soil particles. E. coli are a type of bacteria that can be found in human and animal waste. Their presence in water indicates a possible contamination with sewage or animal waste, as well as a potential for the water to have other disease-causing organisms. Benthic invertebrates are small animals without backbones that live in stream or lake sediments. The family biotic index (FBI) summarizes the information about the numbers and types of these animals in the sediment that in turn, indicate stream health. Lower FBI values indicate more animals that need clear, clean water; higher FBI values indicate more animals that tolerate turbid, nutrient-enriched conditions. Surface water quality samples have been taken at 33 locations in ABCA jurisdiction for this report card.

Forest cover is limited in the Ausable Bayfield area. Most of the watersheds fall into a grade of D.

Few watersheds have good forest conditions. Agriculture, and in a few areas, urbanization, have resulted in the clearing of much Ausable Bayfield watershed forest cover which consequently results in this poor grade.

The conclusions from the water quality indicators collected in the watershed between 2000 and 2005 suggest water quality in the Ausable Bayfield area is of moderate to poor quality (i.e., mainly C grades). Water quality reflects both the natural features (e.g., soil characteristics, tree cover) and land use. Low forest cover in the area combined with predominantly clay soils, intensive agricultural activities, and urbanization in some locations, result in water quality conditions that need improvement.

Improving water quality involves a number of approaches. The most essential activity is to focus on your own property and identify and prioritize key actions. In all watershed report cards, there is an action item for individuals to refer to their appropriate stewardship guide. Farmers are referred to the Environmental Farm Plan and other rural residents are referred to either the Stewardship Guide for the Lake Huron Coastline (2006) or a stewardship guide that will soon be released in Huron County.

Individual efforts that come together will have a positive cumulative effect. Many individual behaviours contributed to degraded watershed health in the past and, likewise, it is positive individual actions in the future that can lead to improved or protected watershed health.

Summarizing forest and water quality conditions on a watershed basis provides this information on an ecologically-relevant scale. We are often more accustomed to thinking of our property in terms of municipal boundaries (towns, townships and counties) rather than ecosystem boundaries, but water conditions are dependent on watershed boundaries. Grading the watersheds helps highlight areas we need to protect and areas that we need to improve.

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Authors
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Hope Brock
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Contributors
Angela Baitz
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Aaron Clarke
Tim Cumming
Erin Dolmage
Davin Heinbuck
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Brian Luinstra
Kate Monk

Reviewers
Steve Bowers, Huron Stewardship Council
Ted Briggs, Ontario Ministry of the Environment
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Holly Simpson, Ontario Ministry of Natural Resources
Patti Scherer, County of Lambton
Alec Scott, Ausable Bayfield Conservation Authority
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