

**Managing Heritage Rivers in the Context of Integrated Watershed Management:
The Grand River Experience**

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**Presented at *Current Perspective, 5th Canadian River Heritage Conference*, Winnipeg, MB
Wednesday, June 13, 2007**

Historical Context

The Grand River watershed is located in southwestern Ontario. The Grand River and its major tributaries drain an area of over 6800 km² and support a population of 940,000 people. The watershed represents a diverse area, ranging from intense agricultural production to rapidly expanding urban areas, boasts a rich diversity of heritage resources, and provides quality outdoor recreational opportunities.

In the 1800s, the Grand River provided transportation, water supply and water power, attracting settlement and industry to the valley. However, deforestation and urban settlement combined to aggravate flood and drought conditions. With drought conditions came concern over water quality and human health, since much of the flow in the river was nothing more than raw sewage!

To deal with recurring poor water quality and fluctuating river flows, eight municipalities banded together in 1938 to form the Grand River Conservation Commission (GRCC). This was the first water management agency in Canada, and one of only a handful in the world. The GRCC's mandate was to implement the recommendations of a joint provincial/municipal report completed in 1932. The report considered the problems of low flow and its relationship to public health, water supply, sewage disposal, flood control, and the provision of hydroelectric power. Recommendations included the construction of five dams and reservoirs. The GRCC's earliest project was the construction of the first multipurpose dam in Canada operated for flood control,

water supply and water quality purposes. During the 1950s, the GRCC built additional multi-purpose reservoirs and was actively involved in reforestation projects throughout the watershed.

The Grand Valley Conservation Authority (GVCA) was formed in 1948, under the terms of Ontario's *Conservation Authorities Act*. This legislation permitted watershed municipalities to band together to collectively address basin-wide resource issues. Activities, guided by a plan prepared by the provincial Department of Planning and Development in 1954 called *The Grand River Conservation Report - Hydraulics*, focused on land acquisition, reforestation, local erosion and flood control, extension programs to rural landowners, and recreational areas. Initial emphasis was placed on water control through the construction of multi-purpose dams and channel works. During its formative years, the Conservation Authority relied heavily on partnerships with its funding partners - the watershed municipalities and the province of Ontario.

To avoid duplication, the GVCA undertook conservation works other than those carried out by the GRCC and amalgamated with the GRCC in 1966, to become the Grand River Conservation Authority (GRCA). This union offered a more coordinated and integrated approach to watershed management.¹

In 1977, a more inclusive approach to decision making was initiated through the *Grand River Basin Water Management Study*, a multi-agency study to address issues relating to water quality, water supply, and flooding. The Grand River Implementation Committee (GRIC), with members from five government ministries and the GRCA, directed the project. Five subcommittees with representatives from local municipalities, government agencies, and the

¹ According to WWF and the Global Water Partnership, integrated river basin [watershed] management is the process of coordinating conservation, management and development of water, land and related resources across sectors within a given river basin, in order to maximise the economic and social benefits derived from water resources in an equitable manner while preserving and, where necessary, restoring freshwater ecosystems (http://www.panda.org/about_wwf/what_we_do/freshwater/our_solutions/rivers/irbm/index.cfm)

conservation authority carried out the technical work and reported to GRIC. Public input was invited through public meetings and four public advisory committees representing a wide range of interests throughout the watershed. In 1982, after a detailed review of all of the inputs received, GRIC selected a preferred approach and provided a series of recommendations, 84 percent of which were implemented (Conservation Ontario, 2003, Appendix D, 14).

Through the combined efforts of the GRCA and its partners, river health gradually improved. In 1987, another watershed initiative was started when several municipalities approached the GRCA and the provincial Ministry of Natural Resources requesting that the Grand River be considered for addition to the Canadian Heritage Rivers System.

The Grand Strategy

In 1994, the Grand River and its major tributaries were declared Canadian Heritage Rivers. An extensive public participation process resulted in a management plan called *The Grand Strategy*. *The Grand Strategy* embodied a new approach for managing watershed resources based on community involvement, cooperation, consensus and commitment. It was founded on beliefs, values and principles that provided a framework for initiating individual and collective actions to strengthen the knowledge, stewardship and enjoyment of the valley's resources. This approach recognized that no one agency, organization, corporation or individual could effectively manage watershed resources independently. *The Grand Strategy* was spearheaded by the GRCA.

Over the past 13 years, under the umbrella of *The Grand Strategy*, the GRCA has worked with a wide array of stakeholders to address critical resource issues and determine priorities for action. Priorities include improving water quality, maintaining reliable water supply, reducing flood damage, providing quality outdoor recreational experiences, protecting natural areas and

biodiversity, and protecting heritage resources and a sense of place. Opportunities for stakeholders to actively participate in *The Grand Strategy* are provided. The philosophy is that everyone who shares watershed resources should be encouraged to be part of a collective effort to address watershed issues.

In order to encompass a more inclusive approach, the GRCA created a number of working groups comprised of representatives from municipalities, federal and provincial agencies, businesses, community groups, educational institutions, and First Nations. Within *The Grand Strategy* network, information is shared and resources are pooled. Progress is documented and celebrated through regular publications, forums and special events. Opportunities to directly participate in *The Grand Strategy* are offered through various working groups, public meetings and interactive web-based surveys.

Accomplishments

Through this process, a number of collective accomplishments have been achieved such as the sympathetic restoration and adaptive reuse of heritage structures, the erection of commemorative historic plaques and new “heritage” replicas which honour the past, and an ever increasing array of community events to celebrate river heritage. The Grand River continues to motivate artists and writers as evidenced by the increasing volume of paintings, photographs, sculptures, quilts, videos, books and articles produced. Many municipalities throughout the watershed have recently invested time and resources in the development of heritage inventories and planning documents to strengthen local heritage policies and programs.

There have been huge efforts to improve recreational and tourism opportunities associated with the Grand River. A guide showing river canoe routes is in its ninth printing. River access points and associated parking lots, signage and informative kiosks have been

improved or created. Over 325 km (202 miles) of trail have been constructed, linking upstream and downstream communities to the Trans Canada Trail. *Grand River Country* is a marketing brand developed by tourism organizations to promote Grand River experiences and leverage existing brands and attractions promoted by individual municipalities and tourism organizations. The *Grand River Country* model is being used to establish co-operative tourism marketing alliances in other parts of Canada. Many municipalities have incorporated the river theme into their corporate logos to promote tourism and economic development. The County of Brant is “Simply Grand” while Haldimand County offers “A Grand Experience”. *Grand River Scenic Parkway* signs now mark a route along the river from the Six Nations Reserve to Lake Erie. Community stewardship initiatives to improve watershed health are also enthusiastically supported.

The heritage river designation has prompted some unexpected outcomes. In 1999, the Grand River was twinned with another Canadian Heritage River, the mighty Fraser River in British Columbia. The twinning is represented by a partnership agreement promoting exchange of information and expertise, fostering community-based collaborative efforts and encouraging a watershed approach to managing rivers. In 2000, the GRCA was internationally recognized for its success in restoring an ailing river. This accolade has reinforced a growing sense of pride among watershed residents and municipal decision-makers.

Opportunities

The Canadian Heritage River designation has been a positive catalyst for improving integrated watershed management in the Grand River watershed. The following observations based on Grand River experiences illustrate that:

- watershed management is about influencing people - a common goal (the designation) can build existing and new partnerships for collaborative and/or complimentary resource management activities,
- a mechanism to nurture an ongoing, participatory process (conservation authority or other watershed agency) is essential,
- a participatory process must engage stakeholders (implementers) and lead to action,
- the designation can encourage a broader approach to watershed management by incorporating broad environmental, social and economic considerations,
- the designation can support local economic development by providing opportunities for joint marketing, which in turn, can assist private entrepreneurs and public agencies to build viable cultural and eco-tourism businesses,
- the designation can inspire works of art and literature, which can raise community awareness and pride,
- increased awareness and enjoyment of the river can lead to increased community stewardship and action,
- national profile for the river can lead to international recognition, and celebrating success keeps people motivated and can renew commitments to further action.

Challenges

Despite the many successes that have been experienced in the Grand River watershed since obtaining the heritage river status, several persistent and emerging management challenges could reduce the influence that the heritage river designation has on future watershed management decisions. These include:

- nurturing an ongoing participatory process takes dedicated time and resources – often competing projects limit the amount of staff time that can be spent in partnership building, red tape and changing staff among government agencies prevent partnerships from developing to their fullest potential,
- shifting priorities (e.g. concerns about drinking water quality, source water protection, rapid population growth and climate change) vie for limited resources,
- heritage features are aging, with many structures simultaneously in need of rehabilitation (e.g. heritage bridges). With competing interests, limited funds and few financial incentives readily available, many heritage features are being demolished and replaced,
- the province is directing new population growth to existing urban centres in south-central Ontario, potentially putting more development pressure on historic downtown cores, and with downloading of responsibility to municipalities from other government levels, there is more reliance on volunteers to implement local actions and increased risk of burnout. **Next Steps**

The sheer scale and scope of the Grand River watershed and the complexity of its resource issues and human interactions make it a continuous challenge to develop, conserve and interpret heritage resources and to build new economic and social opportunities within the context of integrated watershed management.

Grand Strategy partners have adopted the motto *Share the Resources – Share the Responsibility*. It reminds participants that continued success requires working together towards common goals.

Further Reading

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