

Project Name: Carp River Watershed Study 		
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Budget: \$70,000	Completion: ongoing	Client: City of Ottawa
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Prime		Consortium		Sub-Consultant	?
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Project Highlights:
 The City of Ottawa required a mechanism for evaluating the cumulative effects of land uses on water resources and environmental quality on a watershed basis, specifically for the Carp River watershed. The Carp River watershed encompasses a quickly developing region of Ottawa. It is also a unique watershed in that much of this development is located in the upper reaches of the watershed.
 This study examined criteria for prioritizing and protecting water uses and will result in a watershed plan that will become an integral part of the overall planning process. If successfully completed, it will provide a solid foundation such that the environmental features will be protected, enhanced or restored under present conditions, and as land use changes occur. Information derived from the watershed/subwatershed plan will ultimately be incorporated into planning documents as the basis of environmentally conscious land use designations and development policies.

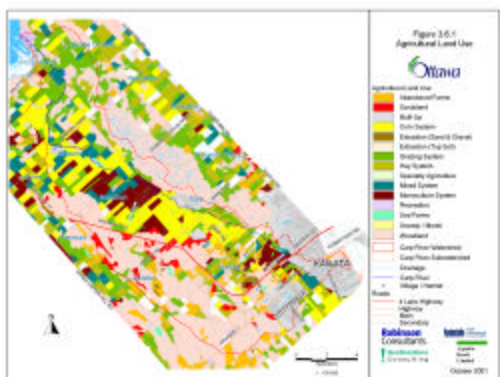
Scope of Services (Objectives and Deliverables):
 The project will develop watershed and subwatershed plans. These plans are similar to Official Plans, but for environmental use. Once the plans are completed, they will provide an environmentally sound framework within which those involved in planning and decision-making can evaluate the consequences of current land use and future development scenarios in the context of the entire watershed.
 Presently, watershed and subwatershed plans deal with a number of issues including:

- ?? the water budget
- ?? terrestrial and aquatic habitat
- ?? woodlands, including woodlots and forests
- ?? wetlands
- ?? stream morphology
- ?? Areas of Natural and Scientific Interest (ANSI)
- ?? Environmentally Sensitive Areas (ESA)
- ?? aesthetics
- ?? recreation

Furthermore, the plans are ecosystem base, with the potential interaction between each of the environmental features being strongly considered.



Fish Communities



Agriculture Land Use

Consultation: Technical review was conducted by the client. Open house and public meetings were also conducted at regular intervals

Challenges and Solutions:

Challenge: Data sets were required from many different sources and in different formats. The data for the project had to be formatted and translated into one database.

Solution: *GeoSolutions Consulting served as a central location for all the required data. The data was collected by GeoSolutions Consulting, loaded into a central GIS database which was utilized by the project team for data analysis and presentation.*

Challenge: The diverse geological and environment conditions within the study area make it difficult to understand the physical composition of the aquifer and soil media layers.

Solution: *Cross section profiles of the lithology and water well records were developed to assist team members and the client visualize the geological composition and location of the study area.*

Challenge: There are numerous challenges facing the management of the water resources. For one, the responsibility for land use and water resource planning falls within the mandate of multiple public authorities, each with varying levels of interest and differing management objectives.

Solution: *The watershed plan is a cooperative effort of stakeholders, municipalities and government agencies to create a long term management plan for resources. The present watershed plan considers flooding and erosion issues, and also issues relating to the overall quality and quantity of the water resources.*

Construction and Procurement Methods: Not Applicable

Key Personnel: Dave Branson - Project Manager
Drago Perkovic – GIS Technician

Sub-consultants: None