

Abstract Submission for 5th Canadian River Heritage Conference

Title of Presentation:

Towards the Water Soft Paths Approach for Manitoba

Category: River Management

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Abstract

A major premise of water soft paths is that demand for water is mostly not for the substance itself, but for the services it provides. In taking this approach, it becomes possible to identify other ways to provide services that use less water, thus increasing water supplies. Water soft paths aims to improve the productivity of water, and match water quality to its intended use. There are four key management concepts to a soft paths strategy: prevention and precaution, ecosystem-based management, matching authority to jurisdiction, and adaptive management. Prevention and precaution is essential because it is easier to maintain ecosystem integrity than attempt restoration after it is lost. Ecosystem-based management ensures that social and economic processes fit the structure of the ecosystem. Matching authority to jurisdiction is done so that local institutions are given necessary authority and are accountable to larger authorities. Adaptive management ensures that policies are modified to respond to change and feedback. To date most study of soft paths in Canada has been at the conceptual level, and the focus has largely been on urban water issues.

IISD aims to develop a functional water soft path for Manitoba. Most watersheds in our study area (south of the Saskatchewan and Winnipeg Rivers) are rural and agricultural, and direct human use of water is minimal. Where humans have the most impact on water resources in Manitoba is through agriculture and landscape management. A prerequisite to applying water soft paths in a manner consistent with ecological governance objectives is watershed-based hydrologic budgeting to assess major consumptive activities. This presentation discusses the soft paths concept and summarizes our recent work.

Biographical sketch:

Matt McCandless is currently working in the capacity of Project Officer in the Sustainable Natural Resources Management team at the International Institute for Sustainable Development. His current role involves working on water sustainability.

Matt spent four years working as an environmental engineer in Manitoba where he did work on hydrological analysis and modeling, as well as water quality, solid waste disposal and wastewater treatment analysis. He has experience working on ecological impact assessments and with First Nations Environmental Issues in Northern Manitoba. Matt has provided expert testimony before the Manitoba Clean Environment Commission.

He has completed his Masters from the Natural Resources Institute at the University of Manitoba. His research took him to India for six months, where he studied public participation in small hydro rural electrification initiatives in isolated Himalayan villages. Matt received his Bachelor of Engineering in Biological/Environmental Engineering from Dalhousie University.