

Monitoring in the Great Lakes Basin Ecosystem

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Under the terms of the 1987 Canada-US Great Lakes Water Quality Agreement, the governments of the 2 countries are obliged to develop ecosystem health indicators, and to report on those indicators on a regular basis. Starting in 1994, the State of the Lakes Ecosystem Conference has been reporting on conditions in the Great Lakes Basin Ecosystem (SOLEC) every 2 years. In 1998, SOLEC began the process of developing a list of indicators encompassing the biophysical and socio-economic components of the Basin. At SOLEC 2000, the first 33 of the 80 indicators were reported.

There is a requirement for a monitoring program throughout the Basin to provide data that will be essential in populating the indicators with information to report. My talk will give an overview of the indicator selection and development process, and will highlight areas where land based information (monitoring) is required. I will also discuss the identification of Biodiversity Investment Areas, and the role that parks can play in preserving these important areas.

Applying an Adaptive Management Approach to Ecological Integrity Monitoring at St. Lawrence Islands National Park

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St. Lawrence Islands National Park of Canada, in 1997, developed an ecological integrity monitoring program to assess ecosystem health within park boundaries, as well as within the greater park ecosystem. This program is based on a suite of indicators that targets monitoring at species/population, community and landscape levels of biodiversity. Following field testing and initial implementation of sampling protocols, the park has begun a formal review process to ensure the efficacy of the program to meet its goals and objectives. The review process includes analysis of baseline data and retrospective power analysis for specific indicators (e.g., bullfrog population demographics). This formal review represents a key component to the