Chapter 7 Indicators and SOLEC

Monitoring and surveillance programs have logistic and economic constraints. These programs cannot measure all the parameters desired to assess progress under the Agreement. Indicators offer a means of tracking progress and provide integration of data and information. However, indicators will only be as good as the data used to develop them.



There are two parallel and complementary activities addressing ecosystem indicators under the Agreement. In 1992, the Parties established the State of the Lakes Ecosystem Conference (SOLEC) to develop comprehensive, binational reports on the environmental condition of the lakes in order to measure progress under the Agreement. An information and data management policy would assist SOLEC and the Commission by providing a framework for the development of indicators for monitoring and other related needs.

The 1998 SOLEC conference began working on a group of 80 indicators intended to characterize the condition of ecosystem components, to identify stresses to the ecosystem, and to guide program responses. The Parties intend to report on these indicators every two years to inform the public and assess progress in achieving the purpose of the Agreement. The proposed approach for SOLEC 2000, to group the indicators into compartments by issue and major topic, should result in more meaningful and useful information.

The Commission's Indicators Evaluation Task Force's 1996 Report, Indicators to Evaluate Progress under the Great Lakes Water Quality Agreement, proposed a framework for indicators based on nine Desired Outcomes, in part derived from Annex 2 of the Agreement (RAPs and LaMPs). Subsequently, in 1996, the Commission established the Indicators Implementation Task Force (IITF) to advise on obtaining the required data and information to support the nine Desired Outcomes and to investigate the feasibility of using the indicators to assess the Parties' progress under the Agreement. The Task Force final report, provided to the Commission in early 2000, recommended that indicators be developed for three Desired Outcomes: water in which it is safe to swim, water that is safe to drink, and fish that are safe to eat. These are called the "swimmability, drinkability, fish edibility" outcomes. (Indicators Implementation Task Force 2000)

Indicators will only be as good as the data used to develop them. According to the IITF, there appears to be enough data available to proceed with indicators measuring the three Desired Outcomes of swimmability, drinkability and fish edibility. Consequently, the Commission would like to see a field trial at an appropriate location and of appropriate scale to test these indicators. The Commission has suffi-

cient confidence in the success of this field test that it believes such a trial can occur concurrently with the adoption of these indicators. Reporting on the field test and the adoption of the indicators should occur at SOLEC 2000.

Although reporting on these three designated Desired Outcomes is an important beginning, work in other key areas of the Agreement must continue. Foremost among these is the development of indicators to support the Desired Outcome of virtual elimination of inputs of persistent toxic substances.

Growing concern about the impact of land use on water quality, as addressed in Chapter 4, points to the need to track the three components of the Desired Outcome of physical environmental integrity. These components include wetlands, groundwater, and land use, and they will support work under Annex 13 (Pollution from Nonpoint Sources). An indicator for stream base flow would provide much needed information on groundwater as well as complement activities under Annex 16 (Pollution from Contaminated Groundwater). (U.S. Geological Survey 1998)

THE COMMISSION RECOMMENDS THAT:

The Parties should report on indicators for the three Desired Outcomes of drinkability, swimmability and fish edibility beginning with the SOLEC 2000 conference and biennially thereafter.

The Parties should report on indicators for the Desired Outcome of virtual elimination of inputs of persistent toxic substances beginning with the SOLEC 2002 conference and biennially thereafter.

The Parties should develop and report on three specific indicators for the Desired Outcome of physical environment integrity beginning with the SOLEC 2002 conference and biennially thereafter.