

Findings

A significant level of effort toward Remedial Action Plan implementation has been observed in the Great Lakes Areas of Concern. The Matrix of Restoration Activities that accompanies this report summarizes, for each Area of Concern, information on restoration activities provided by the governments to the Commission.

The findings of the Commission are as follows.

1. Two Areas of Concern in Canada have been delisted, and two Areas of Concern, one in Canada and one in the United States are recognized as being Areas of Concern in a Recovery Stage.
2. In Canada, work to remediate sediment has taken place or is ongoing in 2 of 10 Canadian-only Areas of Concern. Natural recovery^g has been selected as the remedial strategy in seven Canadian-only Areas of Concern. To date, approximately \$33 million (CAD) has been spent on sediment remediation in Areas of Concern. In addition, approximately \$270 million (CAD) has been spent on wastewater infrastructure in Areas of Concern.
3. In the United States, work to remediate sediment has taken place or is ongoing in 14 of the 26 United-States only Areas of Concern. To date, the United States reports that \$160 million (USD) has been spent in Areas of Concern, and several billion dollars has been spent on wastewater

^g (allowing natural physical, chemical or biological processes to reduce the mass, toxicity, mobility, volume or concentration of contaminants in sediment)

treatment. Aside from Presque Isle Bay (Pennsylvania) and Torch Lake (Michigan), no United States Area of Concern has decided whether natural recovery will be their strategy for remediating sediment. Cleanup of contamination at nonaquatic sites that contribute to restoration of Areas of Concern has occurred under other programs, such as the United States Superfund program, but cleanup of these nonaquatic sites is not always specifically associated with Remedial Action Plans.

4. Work to remediate contaminated sediment has taken place or is ongoing in two of the five binational Areas of Concern in Canada and in 4 of the 5 binational Areas of Concern in the United States.
5. The governments are not adequately reporting biennially on progress in developing and implementing Remedial Action Plans and in restoring beneficial uses, as called for in Annex 2 of the Agreement.
6. Key challenges facing the governments in implementing Remedial Action Plans and restoring beneficial uses are:
 - securing the resources to implement the plans;
 - identifying accountability and responsibility;
 - defining restoration targets where they do not exist;
 - setting priorities; and
 - monitoring recovery.
7. Information gaps on what has been implemented and what more needs to be done limit the governments' ability to estimate and successfully acquire resources necessary to restore beneficial uses in the Areas of Concern.

8. Many Areas of Concern, particularly those in the United States, do not have clearly defined geographic boundaries as required by Annex 2 of the Great Lakes Water Quality Agreement, thereby making it difficult to determine a full accounting of restoration activities within the Areas of Concern.^h
9. The governments' management of Remedial Action Plans requires more clearly delineated accountability and responsibility, however, some recent progress in this regard is noted.
10. The criteria and rationale for selecting natural recovery as the method of sediment remediation are not clear,
11. Although the Agreement does not use the term, the two governments are recognizing or designating Areas of Concern as being in a recovery stage.
12. Without clear restoration targets for each impaired beneficial use in each Area of Concern, particularly in the United States, it is difficult to quantify the specific costs of the remaining work. The United States government, however, has currently estimated that costs of \$7.4 billion (USD) will be required to address the wastewater infrastructure and sediment improvements necessary to restore beneficial uses in selected Areas of Concern for which detailed information is available. No information is available on future costs in its remaining Areas of Concern. The Canadian government has estimated a cost of \$1.9 billion (CAD) to address these improvements across all Canadian Areas of Concern.

^h The Commission is encouraged by the United States Environmental Protection Agency's expectation to develop GIS boundaries for each Area of Concern by June/July 2003

In view of our obligations, studies and discussions with the parties, the recommendations of the Commission are as follows.

1. The two governments should document their considerable investment and achievements to date in order to provide the public with a true reflection of their accomplishments.
2. The two governments should meet their responsibility to formally report biennially on the degree to which each impaired beneficial use in each Area of Concern has been restored, as required by Annex 2, Paragraph 7(b), of the Great Lakes Water Quality Agreement.
3. The two governments should ensure that monitoring, data support and information management systems are in place and that the governments soon provide an update of the Matrix of Restoration Activities to the Commission. The Commission believes that the utility of the matrix would be greatly enhanced by maintaining it as a living, web-based document available to governments and the public, and invites governments to help make this happen.
4. The two governments should report to the Commission and the public on the criteria and rationale for selecting natural recovery as the method of sediment remediation.

5. The United States government should soon provide the Commission with a schedule for the development of restoration targets for each impaired beneficial use in each of the Areas of Concern.
6. Federal, state and provincial governments should ensure accountability and responsibility for Remedial Action Plan implementation and set clear lines of authority for each Area of Concern.
7. Federal, state and provincial governments should ensure that maps for the Areas of Concern clearly define the geographic boundaries of each Area of Concern, particularly in the United States, and that they identify the sources of degradation.
8. Federal, state and provincial governments should report to the Commission and the public on their rationale for determining priorities for remedial measures and identify those priorities within and among the Areas of Concern.
9. The two governments should report to the Commission and the public the criteria and rationale for recognizing or designating Areas of Concern in a Recovery Stage.

In the Canada-Ontario Agreement of 2002 and the United States Great Lakes Strategy of 2002, Environment Canada and the United States Environmental Protection Agency identify plans to address several of these recommendations. The Commission looks forward to reporting on their implementation.