

Restoring United States Great Lakes Areas of Concern

Delisting Principles and Guidelines



***Adopted by the U.S. Policy Committee
December 2001***

The United States Policy Committee identifies strategic environmental goals and priorities for the U.S. portion of the Great Lakes basin. The committee is composed of senior policy makers from U.S. federal, state and tribal agencies with responsibility for programs that manage and protect the environment of the Great Lakes. Committee members share information, establish policy guidelines, and coordinate programs and activities with a basinwide impact.

Introduction

Remedial Action Plans (RAPs) for Great Lakes **Areas of Concern (AOCs)** are perhaps the best example of community-based environmental protection in existence. Through a blend of public and private agencies and organizations, the RAPs continue to be a catalyst to advance the watershed approach for ecosystem remediation and restoration, and they continue to make progress toward the restoration and protection of the forty-two remaining Great Lakes AOCs (see Figure 1).

The progress made in the RAP Program has led to the questions of *how* and *when* to formally delist AOCs as the implementation of all recommended actions for restoring beneficial uses are completed, and as the uses are restored and maintained. The critical test for any such process and associated criteria is to ensure that it is rigorous, scientifically defensible, and allows for full review and comment from interested and affected stakeholders. Acting on directions from the United States Policy Committee (USPC), U.S. EPA's Great Lakes National Program Office (GLNPO) convened the U.S. RAP Workgroup in order to draft these guidelines. This workgroup is comprised of representatives from the eight Great Lakes states and other U.S. federal agencies, with observers from the Canadian federal and provincial agencies and the International Joint Commission (IJC).

These guidelines offer various options for showing progress, maintaining momentum, and formal delisting, which a **RAP Implementation Group** (defined as the state agency responsible for the RAP program and the local public stakeholder group working with the state agency on the RAP) can use as guideposts and tools in their work. It is not envisioned that all parts of the guidelines will be applicable to all the AOCs; rather, those that suit the needs of a particular AOC can be adopted by the RAP Implementation Groups. There will be no sanctions imposed upon a state's RAP program based on which tools they may choose to use or not use.

Many important issues need to be addressed in order to achieve our shared goal of restoring and maintaining beneficial uses in the AOCs. We must be able to balance our collective desire to clean up and delist AOCs while maintaining the integrity of the RAP program and our role as environmental stewards. This is not meant to temper our push for delisting. Rather, we should view these questions as a sure sign that the U.S. RAP program is making significant progress, which makes this time ripe for addressing issues related to delisting the AOCs.

Delisting Principles

The following principles are intended to guide the restoration and maintenance of beneficial uses and the subsequent formal delisting in order to achieve a measure of consistency across the basin.

Specific goals and objectives should be established with measurable indicators to help measure progress and determine when RAPs can begin to consider delisting. These goals and objectives should be written in environmental rather than bureaucratic terms. Delisting targets should be locally derived and should include minimum requirements contained in Annex 2 sections 2, 3, and 4 of the **Great Lakes Water Quality Agreement (GLWQA)**, as well as regulations, objectives, guidelines, standards, and policies set by federal, state, and local jurisdictional agencies. The targets can change over time, but specificity is critical to ensure program accountability and appropriate revisions. Targets should also include a temporal component, both in frequency and longevity of monitoring, to ensure that success is achieved and maintained. It is crucial that the RAP process builds consensus among stakeholders on these locally derived restoration targets.

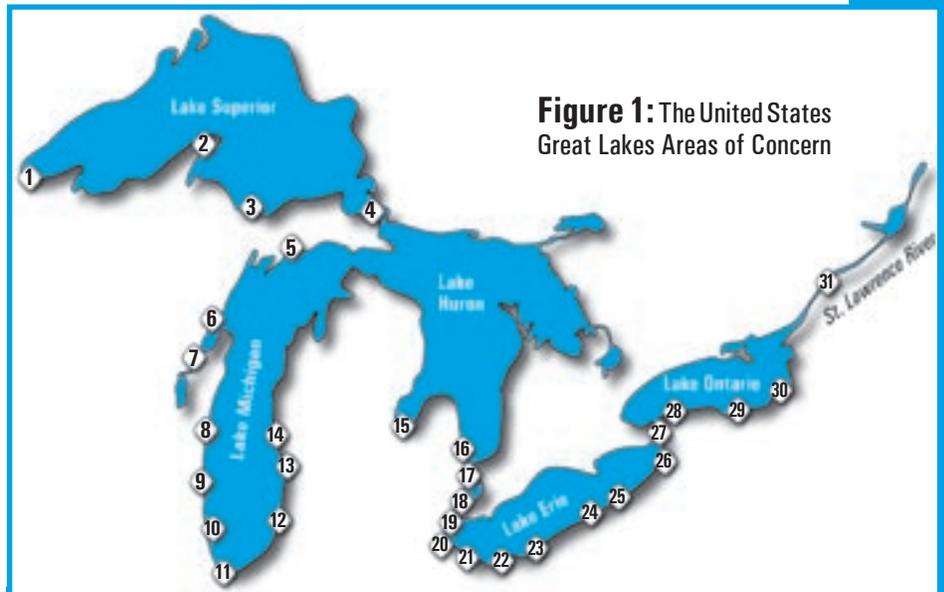


Figure 1: The United States Great Lakes Areas of Concern

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|-----------------------------|-------------------------|---------------------|-------------------------|
| 1. St. Louis River & Bay | 9. Milwaukee Estuary | 17. Clinton River | 25. Presque Isle Bay |
| 2. Torch Lake | 10. Waukegan Harbor | 18. Detroit River | 26. Buffalo River |
| 3. Deer Lake | 11. Grand Calumet River | 19. Rouge River | 27. Niagara River |
| 4. St. Marys River | 12. Kalamazoo River | 20. River Raisin | 28. Eighteenmile Creek |
| 5. Manistique River | 13. Muskegon Lake | 21. Maumee River | 29. Rochester Embayment |
| 6. Menominee River | 14. White Lake | 22. Black River | 30. Oswego River |
| 7. Fox River / S. Green Bay | 15. Saginaw River & Bay | 23. Cuyahoga River | 31. St. Lawrence River |
| 8. Sheboygan River | 16. St. Clair River | 24. Ashtabula River | |

It is recognized and permissible to determine that a beneficial use cannot be fully restored and is therefore not expected to be restored, even though all remedial actions are to be implemented. This decision can be based on a combination of timeliness and reasonableness, and the rationale used should be clearly stated and be fully supportable. Where full restoration may not be practical, partial restoration may be possible. For these areas, the impact of such a decision on the adjoining waters and associated management plans and targets (*e.g.*, **Lakewide Management Plans (LaMPs)**) must be addressed. It should be noted that the IJC has recognized and addressed this issue. Their intent was to explicitly recognize that there may be some impaired uses that may not be fully restored for justifiable reasons, and that this should not prohibit the delisting of an AOC.

Delisting occurs when locally derived delisting targets have been met; supporting data and rationale are needed so that delisting can take place. Monitoring must be an integral part of any final RAP produced and should be site specific. Under this scenario, AOCs should not be delisted unless there is actual monitoring data (not just monitoring activity underway) that supports delisting by showing that the relevant restoration targets have been met and maintained through some specified period. Restoration and maintenance of the beneficial uses once all activities are fully implemented should be based on site specific conditions acceptable to the parties and stakeholders and reasonableness of achieving any further improvement.

RAPs can only address impairments caused by local sources; impacts from outside an AOC (either upstream, downstream, via air deposition, or from the open lake waters) which cause use impairments should not impinge on the ability to delist an AOC. Such use impairments could be categorized as “impaired - not due to local sources.” In order to delist, these types of impairments and their attendant sources may need to be “handed off” to a responsible party or other environmental projects or program areas and then checked on periodically (in compliance/enforcement this is called “resolved pending”). This applies in the case where all possible action has taken place in the AOC.

These programs and projects that go beyond the RAP scope include the LaMPs, the Great Lakes Binational Toxics Strategy, and other national, binational, and international programs which can address out-of-AOC sources of pollutants that are impacting the AOCs and causing beneficial use impairments. The RAP cannot address these sources; they need these programs to do this to ensure that governments will address the source of the impairment. Opportunities for entering into “Memoranda of Understanding” or similar vehicles would help to institutionalize the required follow-up activities.

Interim goals and additional tools (*e.g.*, restoring and delisting individual beneficial uses, restoring and delisting subwatersheds, using the **Recovery Stage** concept - to be discussed later in this paper) may be needed to help maintain momentum and progress toward delisting. Again,

Delisting Targets

In order to move toward formal delisting, RAPs need delisting targets to gauge their success. While this document does not define explicit targets (beyond any articulated jurisdictional values incorporated here by reference), it does offer some criteria for target-setting below. The development of specific targets is a separate process, and is beyond the scope of this paper:

- Delisting targets should be premised on local goals and related environmental objectives for the watershed; they should be consistent with the applicable federal and state regulations, objectives, guidelines, standards and policies, when available, and the principles and objectives embodied in Annex 2 and supporting parts of the GLWQA.
- Delisting targets should have measurable indicators.
- Delisting targets should be developed and periodically reviewed on a site-specific basis (allowing for flexibility in addressing local conditions) by the respective state agencies, in consultation with local stakeholder groups. This is particularly important if new information becomes available.

we should strive for some consistency with minimal differences in setting up standards for interim goals or tools for describing the process/progress, while still providing room for local conditions.

Requirements from regulatory programs may not have to be met in all cases before delisting can occur. Generally, the criteria used to designate an AOC are equally or more stringent than these programs. Delisting targets are based on restoration of beneficial uses. Other programs may have other targets based on the needs of the program. While the RAPs should coordinate to the maximum extent with other programs, delisting does not require that the goals of other environmental programs be met unless this is required to reach these goals in order to meet AOC delisting targets.

Given their unique status, different criteria and processes for the three binational AOCs shared by Michigan and Ontario (St. Marys River, St. Clair River, and the Detroit River) are being developed.

The U.S. and Canada can have separate domestic processes and criteria which may differ somewhat but are functionally equivalent. However, the major process steps and criteria measures should be as consistent as possible. The point to RAP stakeholders should be that in both the U.S. and Canada, special focus is placed on the restoration of the AOCs.

Procedures for the Removal of a Beneficial Use Impairment

- 1. Recommendation for Restoration:** The RAP Implementation Group recommends a change of status in one or more beneficial use impairments to U.S. EPA. The recommendation should be accompanied by documentation and data to substantiate that delisting targets have been met, permitting the status to change.
- 2. Decision on Restoration:** U.S. EPA will issue a decision whether or not to support the recommendation within 90 days, allowing for public review and comment. If U.S. EPA supports the recommendation, they will send an official statement of concurrence to the RAP Implementation Group and to the IJC. If U.S. EPA does not support the recommendation and/or decides that it needs further study, it will meet with the RAP Implementation Group to explain its decision and to resolve the issue(s) in a timely manner.
- 3. Celebration of Achievement:** When a beneficial use is restored, the RAP Implementation Group will then issue a public notice to acknowledge this milestone.

The above steps are based on the *Compendium of Position Papers - A Four Agency Framework of Roles and Responsibilities for the Implementation of the Detroit River, St. Clair River, and St. Marys River Areas of Concern Shared Remedial Action Plans*, U.S. EPA, EC, MDEQ, OMOE, February 2, 2000.

To the extent practicable, AOC delisting targets should mesh with Great Lakes Environmental Indicators being developed under the **State of the Lakes Ecosystem Conference (SOLEC)** process.

Tools for Recognizing Progress, Maintaining Momentum

Annex 2, section 4(c) of the Great Lakes Water Quality Agreement calls for the Parties to classify AOCs by their stage of restoration, progressing from the definition of the problems and causes, through the selection of remedial measures, to the implementation of remedial programs, the monitoring of recovery, and, when impaired beneficial uses are no longer impaired and the area restored, removal of its designation as an AOC.

Given the long time horizons for fully restoring some AOCs, classifying the RAPs according to implementation and monitoring of recovery affords the opportunity to recognize successes with local communities and strengthen the

program basinwide. RAP participants should celebrate that all reasonable and practical efforts are being made to restore beneficial uses and to bring closure to the implementation phase. Formal recognition for this milestone gives credit to the effort, while still recognizing that a period of recovery may be required before delisting can occur. This requires agreement between the RAP Implementation Group and the community, and review and approval by U.S. EPA, with time allowed for review and comment by the IJC. Using alternative models to gauge progress can help maintain enthusiasm and participation from all stakeholders involved in the RAP process.

Given this situation, these guidelines offer some tools for maintaining momentum. There are no doubt a variety of other methods which could be implemented to achieve this and RAP Implementation Groups are encouraged to develop new techniques and to share their success stories. The tools identified below are ones which have been piloted in the Canada-Ontario RAP program and which have had a positive influence on the RAP process. None of these tools are the “best;” what suits one AOC may not suit another.

Removing Beneficial Use Impairments

One way to maintain momentum toward full delisting is to remove use impairments as they are restored, and celebrating this as evidence of environmental improvement in an AOC. An AOC can remain formally listed without precluding the opportunity for public recognition that one or more of the original use impairments have been removed and the beneficial use has been restored. This idea has already been adopted in Canada. It upholds the goals of the RAP program (restoring beneficial uses), maintains momentum in the RAP community, and provides important, useful, and easily understood yardsticks for measuring progress.

Removal of a beneficial use impairment can occur under any of these scenarios:

- A delisting target has been met through remedial actions which confirms that the beneficial use has been restored.
- It can be demonstrated that the beneficial use impairment is due to natural rather than human causes.
- It can be demonstrated that the impairment is not limited to the local geographic extent, but rather is typical of lakewide, region-wide, or area-wide conditions (under this situation, the beneficial use may not have been originally needed to be recognized as impaired).
- The impairment is caused by sources outside the AOC. The impairment is not restored but the impairment classification can be removed or changed to “impaired - not due to local sources.” Responsibility for addressing “out of AOC” sources is given to another party (*i.e.*, LaMPs).

Restoration of Subwatersheds

For AOCs which are defined as a watershed comprised of a number of subwatersheds, there may be instances where all beneficial uses are restored for a particular subwatershed. In this instance, if a RAP group chooses, it could follow the steps listed earlier in **Procedures for the Removal of a Use Impairment** (see page 3) and include in the *Recommendation of Removal* a statement requesting the delisting of a subwatershed since all its beneficial uses have been restored. The approval process and ensuing celebratory activities would mirror the rest of the process.

Recovery Stage Redesignation

Interim steps may help to highlight progress made in restoring AOCs. Some have suggested an interim period of recovery and recommended a new phase for AOCs called **Recovery Stage**. During this post-implementation period, the AOC ecosystem is responding to actions taken. A decision to designate an AOC as being in recovery stage should be site specific and flexible enough to respond to new needs based on monitoring data. In each of these instances, the question arises as to how to report that no further active intervention is needed, and that a period of recovery is required to fully achieve the delisting targets. We must also ensure that this does not create an easy out; strategies to achieve the delisting targets for each use impairment must have supporting data and rationale.

The Canadian RAP program has some well-defined operating principles which are offered here as a guidelines for the U.S. delisting effort:

- All reasonable and practical implementation has occurred to address the sources of environmental degradation with present day tools.
- Commitments to a monitoring plan and program are in place to measure progress toward environmental restoration and a mechanism is established to report systematically to the public at a predefined frequency.
- The severity of the impairments will influence the rate of recovery. The time scale for recovery of the AOC ecosystem is agreed upon by the RAP Implementation Group, with the agreement that this decision can be revised based on the system's response to remedial measures as indicated by an active post-remedial monitoring program.
- The RAP Implementation Group and local public are satisfied with current conditions and the natural recovery strategy.
- Entering recovery stage must be accompanied by a commitment of governments or other partners to maintain their responsibilities. Governments will continue to undertake environmental improvements as part of their mandates, beyond the needs of the RAPs.

Process to Recognize that an AOC is in the Recovery Stage

1. The RAP Implementation Group details implemented actions, provides a rationale recognizing an AOC as being in recovery stage (the rationale would explain that actions to date are sufficient for this recognition), provides rationale for no further intervention, and proposes a monitoring plan to track recovery.
2. Once concurrence with the monitoring requirements and commitments are made, the RAP Implementation Group notifies U.S. EPA and the IJC that they will designate the AOC as being completely implemented and in recovery stage, pending U.S. EPA approval.
3. U.S. EPA reviews and either approves the request within 60 days, or meets with the RAP Implementation Group to resolve issues, leading to U.S. EPA approval.
4. U.S. EPA notifies the responsible state agency, the RAP Implementation Group, and the IJC of their approval.
5. The responsible state agency reports to U.S. EPA and the IJC on a biennial basis on progress toward delisting targets. Based on the monitoring results, there could be a need to implement further action(s).

- A pollution prevention or other maintenance plan is in place to reduce the risk of future degradation, and to ensure that recovery can proceed.
- A process is in place to respond to future development pressures and emerging technologies such that environmental recovery is sustainable and further intervention can take place if warranted. This will also allow for the identification of emerging issues in the AOC.

To the extent that the U.S. and Canadian processes resemble and complement each other, the stronger each of the Parties positions will be when presenting delisting requests to the public and to the IJC. Once a decision has been made to request a designation of being in recovery stage, the recognition process (see above sidebar) should begin.

Monitoring to Gauge Success

Monitoring data is crucial to support redesignating AOCs that are in recovery stage, delisting individual use impairments, and for formal delisting of the entire AOC. Sufficient monitoring is required to ensure that delisting targets have been met and maintained (over an agreed-upon timeframe). Monitoring plans should be developed for each AOC with periodic reporting of findings.

Beneficial Use Impairments

"Impairment of beneficial use(s)" means a change in the chemical, physical or biological integrity of the Great Lakes System sufficient to cause any of the following results:

1. Restrictions on fish and wildlife consumption
2. Tainting of fish and wildlife flavour
3. Degradation of fish wildlife populations
4. Fish tumors or other deformities
5. Bird or animal deformities or reproduction problems
6. Degradation of benthos
7. Restrictions on dredging activities
8. Eutrophication or undesired algae
9. Restrictions on drinking water consumption, or taste and odor problems
10. Beach closings
11. Degradation of aesthetics
12. Added costs to agriculture or industry
13. Degradation of phytoplankton and zooplankton populations
14. Loss of fish and wildlife habitat

Taken from the *Great Lakes Water Quality Agreement* (revised edition, as amended by Protocol, 1987)

Monitoring should also serve the needs of "in place" programs. When these two needs overlap, the RAP monitoring plan can achieve an economy of scale by accessing program-related data that is already being collected. Such programs could include, but are not limited to: permit monitoring, utility and municipality monitoring, supplemental monitoring obtained through legal settlements, and environmental quality monitoring conducted by citizens, industry, government agencies and academic institutions.

The sufficient time period for monitoring to ensure restoration will vary depending on the AOC. But some models do exist. In the case of **Collingwood Harbour, Ontario**, the only AOC to be formally delisted, three years of monitoring data was used to show that environmental conditions remained improved and that the restoration of beneficial uses was maintained. **The U.S. Superfund Program** has monitoring requirements for site clean-ups which may offer examples. As part of the monitoring strategy, a continuous improvement process to re-examine cleanup targets and consider additional responses should be implemented, based on monitoring results and new technologies.

At a minimum, monitoring commitments need to be in place with an emphasis on local, municipal, and state cooperation. Any monitoring regime must be supported by the RAP Implementation Group, and should report regularly to ensure that levels of protection are being maintained.

Process to Complete Formal Delisting of an AOC

When all beneficial uses have been restored and monitoring has shown that the restoration targets have been maintained, the RAP Implementation Group can initiate the process of formally delisting the AOC, in coordination with U.S. EPA. The sequence of the process may vary based on differences in State RAP programs:

1. Preparation of a draft Final Remedial Action Plan Report

A Final RAP Report (Stage 3 RAP) is produced when *"monitoring indicates that identified beneficial uses have been restored based on an evaluation of remedial measure implementation and effectiveness; and the surveillance and monitoring process (that has) track(ed) the effectiveness of the measures and the confirmation of the restoration of uses"* [GLWQA Annex 2, 4.(d)(iii)].

The RAP Implementation Group, in consultation with U.S. EPA, will coordinate preparation of the draft final RAP Report, including content and policy review, technical review and informal consultation with IJC staff and state agency staff. The RAP Implementation Group, in consultation with U.S. EPA, will be responsible for identifying additional data needs, resolving policy and technical issues, and overseeing revisions to the draft report.

2. Local Recommendation for Delisting

Within 30 days of completing the draft Final RAP Report, the RAP Implementation Group will submit a letter of recommendation to delist the AOC to the appropriate U.S. EPA Regional Administrator.

3. State Agency Consultation

The U.S. EPA will consult with the director of the appropriate state environmental agency on the draft Final RAP Report and on the recommendation to delist the AOC. The state agency will respond within 60 days and revisions will be incorporated by the RAP Implementation Group and U.S. EPA, as appropriate.

4. International Joint Commission Great Lakes Office Consultation

Concurrent with **Step 3** above, the U.S. EPA will consult with the Director of the IJC Great Lakes Regional Office on the draft Final RAP Report and the recommendation to delist the AOC. The regional office will respond within 60 days and revisions will be incorporated by the RAP Implementation Group and U.S. EPA, as appropriate.

5. Public Consultation

The RAP Implementation Group, in consultation with the U.S. EPA, then holds a public meeting to formally present the draft Final RAP Report to the public and stakeholders for review and comment. The

public comment period will be 60 days and revisions will be incorporated by the RAP Implementation Group and U.S. EPA, as appropriate.

6. Final Remedial Action Plan Report

Taking state agency, IJC Great Lakes Regional Office, and public comments into account, the RAP Implementation Group, in consultation with U.S. EPA, will prepare a **Final RAP Report**. The report will be prepared within 60 days. A summary of comments and responses will also be produced.

7. U.S. EPA Transmittal

The U.S. EPA Regional Administrator sends the Final RAP Report and a letter recommending AOC delisting to the U.S. Department of State and the relevant state director of environmental programs as well as appropriate Canadian federal and provincial agencies.

8. Delisting

The **United States Secretary of State** officially removes the water body from the list of Areas of Concern within 30 days of receipt of the Final RAP Report.

9. IJC Transmittal

Formal notice of delisting and the Final RAP Report and supporting letter is transmitted to the IJC by the U.S. Secretary of State within 10 days of formal delisting.

10. Celebration of Achievement

The U.S. EPA will coordinate with the RAP Implementation Group and all stakeholders to announce and celebrate delisting of the AOC.

There are a variety of state requirements that may also influence the final formal delisting process. Ideally, the process should be sufficiently robust to accommodate any differences. Additionally, a different process is envisioned

Acronyms used in this document:

AOC	Area of Concern
COA	Canada-Ontario Agreement
EC	Environment Canada
GLNPO	Great Lakes National Program Office of U.S. EPA
GLWQA	Great Lakes Water Quality Agreement
IJC	International Joint Commission
LaMP	Lakewide Management Plan
MDEQ	Michigan Department of Environmental Quality
OMOE	Ontario Ministry of the Environment
RAP	Remedial Action Plan
SOLEC	State of the Lakes Ecosystem Conference
U.S. EPA	United States Environmental Protection Agency
USPC	United States Policy Committee

References

Compendium of Position Papers: A Four Agency Framework of Roles and Responsibilities for the Implementation of the Detroit River, St. Clair River, and St. Marys River Areas of Concern Shared Remedial Action Plans, U.S. EPA, EC, MDEQ, OMOE, February 2, 2000.

Draft Delisting United States Great Lakes Areas of Concern, R. Eberhardt, MDEQ, November 17, 2000.

If You Don't Measure It, You Won't Manage It! Measuring and Celebrating Incremental Progress in Restoring and Maintaining the Great Lakes. Based on a Public Meeting on October 22, 1997 in Thunder Bay, Ontario. Cosponsored by: Lake Superior Programs Office, Ontario Ministry of Environment and Energy, Environment Canada, Great Lakes Water Quality Board of the International Joint Commission, 1998. On the Web at <http://www.ijc.org/boards/wqb/thunder/measure.html>

List / Delist Criteria for Great Lakes Areas of Concern, International Joint Commission, March / April, 1991. On the Web at <http://www.ijc.org/focus/listdelist/>

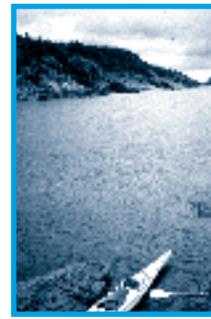
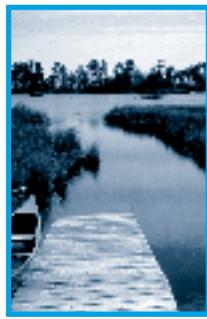
Recognizing Areas of Concern that have Completed RAP Implementation, Canada-Ontario Agreement RAP Steering Committee, Approved January 1999, COA Review Committee.

for the binational AOCs shared by Michigan and Ontario, which calls for a higher level of IJC involvement.

All of the processes allow for a thorough evaluation of the merits of the delisting request and lay out a reasonable chain of events to achieve the goal of formal delisting. It is anticipated that the delisting process should take no more than six months. Both processes may benefit from a formal review after the first delisting process is completed, and then on a periodic basis thereafter.

Conclusion

This paper offers guidelines for numerous issues involved in defining a RAP delisting process for U.S. AOCs. It is entirely possible that such a process may have to allow for modifications and alterations to allow for differences in state RAP programs as well as for the levels of environmental impacts which exist in individual AOCs. This is acceptable; no sanctions will be imposed upon a state's RAP program based on which tools they may choose to use or not use. Whichever process and whatever modifications are chosen should be sufficiently rigorous to address the environmental needs of the AOC and the objectives of the GLWQA, and should be able to meet the delisting principles and guidelines outlined in this paper.



For more information

Federal Agencies

U.S. Environmental Protection Agency
www.epa.gov

U.S. EPA, Great Lakes National Program Office
www.epa.gov/glnpo/

U.S. EPA, Region 5
(IL, IN, MI, MN, OH, WI)
www.epa.gov/region5/

U.S. EPA, Region 3
(PA, WV, VA, MD, DE, Washington, DC)
www.epa.gov/region3/

U.S. EPA, Region 2 (NY, NJ)
www.epa.gov/region2/

Information Resources

Great Lakes Information Network (GLIN)
www.great-lakes.net

GLIN: Areas of Concern in the Great Lakes Region
www.great-lakes.net/envt/pollution/aoc.html

Summaries of U.S. Great Lakes Areas of Concern
www.epa.gov/glnpo/aoc/

Great Lakes Water Quality Agreement
www.ijc.org/agree/quality.html

International Joint Commission, Annex 2:
Remedial Action Plans and Lakewide Management Plans
www.ijc.org/boards/annex2/

The Great Lakes Atlas
www.epa.gov/glnpo/atlas/

State Agencies

Illinois Environmental Protection Agency
www.epa.state.il.us

Indiana Dept. of Environmental Management
www.in.gov/idem/

Michigan Dept. of Environmental Quality
www.deq.state.mi.us

Minnesota Pollution Control Agency
www.pca.state.mn.us

New York Dept. of Environmental Conservation
www.dec.state.ny.us

Ohio Environmental Protection Agency
www.epa.state.oh.us

Pennsylvania Dept. of Environmental Protection
www.dep.state.pa.us

Wisconsin Dept. of Natural Resources
www.dnr.state.wi.us

Regional & Binational Agencies

International Joint Commission
www.ijc.org

Great Lakes Fishery Commission
www.glfc.org

Great Lakes Commission
www.glc.org



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