

# Scope of Work

## Lake St. Clair Basin Monitoring Inventory and Strategy

### A. Contact Information

#### Great Lakes Commission

Ric Lawson, Project Manager  
Great Lakes Commission  
Eisenhower Corporate Park  
2805 South Industrial Hwy, Suite 100  
Ann Arbor, MI 48104  
Ph: 734-971-9135  
Fax: 734-971-9150  
[rlawson@glc.org](mailto:rlawson@glc.org)

#### U.S. Army Corps of Engineers

Ms. Colette Luff, Project Manager  
Army Corps of Engineers, Detroit District  
477 Michigan Ave.  
Detroit, MI 48226  
Ph: 313-226-7485  
Fax: 313-226-7095  
[Colette.M.Luff@usace.army.mil](mailto:Colette.M.Luff@usace.army.mil)

### B. Summary

The goal of the project is to develop a **water quality monitoring strategic plan** for the Lake St. Clair watershed. Achieving this goal will require the successful achievement of three objectives:

1. *Develop a monitoring needs assessment.* This has mostly been accomplished and will be completed outside the scope of this work plan by the Macomb/St. Clair Inter-County Watershed Management Advisory Group.
2. *Complete an inventory of water quality monitoring programs in the Lake St. Clair watershed.* This will be the primary function of this project.
3. *Develop a monitoring strategic plan.* The plan will detail steps to integrate monitoring initiatives and fill in monitoring gaps. The plan will be developed with guidance from the inter-county advisory group and will be implemented by the group members and their partners.

The study area for this project includes the U.S. portion of the watersheds draining to the St. Clair River and Lake St. Clair. This includes portions of Lapeer, Macomb, Oakland, Sanilac, St. Clair, and Wayne counties in Michigan. Information on monitoring within Canadian watersheds draining to these waterbodies will be included where possible.

### C. Tasks

All tasks needed to address the goal of the project are listed below. They are numbered according to the objectives listed in the above summary.

#### 1. **Develop a monitoring needs assessment.**

1.1 Project Scoping: Several tasks will be accomplished to initiate the project.

1.1.1 A technical advisory committee (TAC) will be formed with membership from relevant federal and state monitoring agencies, as well as staff from the impacted counties.

The Commission will work with the Macomb/St. Clair Inter-County Watershed Management Advisory Group to help select technical advisors. This committee will advise Commission staff at several critical junctures in the project.

- 1.1.2 A quality control plan will be developed to detail the procedures the Commission will employ to ensure a high level of data quality. This plan will be developed to meet U.S. Army Corps of Engineers standards.
- 1.1.3 Commission staff will obtain the final needs assessment from the Advisory Group. It may be necessary to meet with the Advisory Group to clarify monitoring needs as they relate to the monitoring inventory and strategic plan.

## **2. Complete a monitoring program inventory.**

- 2.1 Inventory Design: A set of inventory elements will be developed based on the needs assessment. These will include specific pieces of metadata fields that will be collected for each monitoring program. With the assistance of the Technical Advisory Committee, a list of potential monitoring organizations in the region will be developed. Finally, a strategy will be developed to collect metadata about monitoring programs in the most complete and efficient manner. This likely will include a survey to be administered across multiple media. Most surveys will need to be conducted via phone or in-person interviews, while others may be able to be completed through the mail or electronic media.
- 2.2 Existing Data Collection: Project staff will conduct a general search to collect and assess the quality and suitability of data from existing monitoring inventory documents and other sources. Where possible, information from this search will be tailored to address the goals of this project.
- 2.3 Conduct Inventory: Data from existing inventories and other studies is not likely to completely address project needs. Project staff will implement an inventory “survey” to fill in the knowledge gaps. As noted above, the survey process will likely use a combination of techniques including phone or on-site interviews, mail surveys, electronic communication, as well as substantial follow-up research. The goal is to ensure the inventory is as accurate and comprehensive as possible with regard to individual monitoring programs as well as the region as a whole.
- 2.4 Design and Build Database: Concurrent with the implementation of the inventory, project staff will develop the inventory reporting and delivery mechanism. A database will be tailored for the metadata collected through the inventory process. This database will also allow for linkages into web-based and desktop Geographic Information Systems (GIS). The database will build on existing inventory databases, but will be tailored for the specific needs of this project. The database will be populated with metadata from the inventory and data entry will be error-checked. The web-based interface will also be completed and housed on the Great Lakes Information Network (GLIN), which is managed by the Great Lakes Commission. Links will be provided from GLIN’s Lake St. Clair page and from other appropriate locations.
- 2.5 Develop Gap Assessment: Once the database is completed and populated, it will be analyzed to highlight gaps, using the needs assessment as a point of reference. This may include gaps in a) the geographic coverage; b) specific content; or c) integration of data from multiple sources. All types of gaps will be assessed and reported to the TAC. The web-based GIS inventory database will also be made available for their use.

## **3. Develop a monitoring strategic plan.**

- 3.1 Draft Strategic Plan: A meeting will be facilitated to review the gap assessment with the TAC. Recommendations will be solicited to be included in a strategic plan. Project staff will develop a draft strategic plan for addressing monitoring gaps in the Lake St. Clair basin. The plan will be distributed to the TAC and the Macomb/St. Clair Inter-County Watershed Management Advisory Group. A joint meeting of these two groups will be facilitated by the project team to provide feedback on the draft strategic plan.
- 3.2 Finalize Strategic Plan: Project staff will incorporate feedback from the two advisory groups and develop a plan for final review. Once approved, the gap assessment and strategic plan

will be published and released for public consumption. The inventory website will also be made available to the public at that time. Announcements will be released to the local press informing the public about the newly developed products. These communications will be closely coordinated with the Army Corps of Engineers and the Inter-County Advisory Groups. The strategic plan will also be integrated into the larger management plan being developed by the Commission and the Army Corps of Engineers. Most of the Inter-County Advisory Group members are engaged in the process.

## **D. Reporting**

All interim and final products will be delivered to Colette Luff at the U.S. Army Corps of Engineers in electronic format. Microsoft Word or Adobe PDF formats will be used for text-based reports. Two hard copies of the final gap assessment and strategic plan will also be delivered. Additionally, the final inventory database will be delivered on compact disk in ESRI ArcView and Microsoft Access formats, as well as being available in its web format on GLIN ([www.great-lakes.net](http://www.great-lakes.net)).