

**PROFESSIONAL SERVICES AGREEMENT**  
between  
**LAKE COUNTY STORMWATER MANAGEMENT COMMISSION**  
and  
**GEO-LOGIC ASSOCIATES, INC.**  
for  
**CONSULTING SERVICES FOR LAKE MICHIGAN WATERSHED**  
**PCB & MERCURY POLLUTANT SAMPLING PROGRAM**

This is an Agreement, by and between the LAKE COUNTY STORMWATER MANAGEMENT COMMISSION, 500 Winchester Road, Suite 201, Libertyville, Illinois 60048 (hereafter called SMC) and GEO-LOGIC ASSOCIATES, INC., 25 NORTH RIVER LANE, #103, GENEVA, IL 60134 (hereinafter called CONSULTANT).

**PURPOSE**

SMC wishes to engage the CONSULTANT to provide professional consulting services and related technical services to design and implement a sampling program for evaluating baseline pollutant levels of Polychlorinated Biphenyls (PCBs) and mercury in sediments using USEPA-approved test methods, to provide a report evaluating the levels of PCBs and mercury supported with sampling data, identify potential source areas of the pollutants, and recommendations for achieving TMDL compliance.

**SERVICES**

The CONSULTANT agrees to perform the PROJECT APPROACH for LAKE MICHIGAN WATERSHED PCB & MERCURY POLLUTANT SAMPLING PROGRAM to accomplish the SMC's objectives for this project.

**COMPENSATION**

1. For an approved cost estimate on a work assignment, the SMC agrees to pay the CONSULTANT on a time and material basis with a **total not to exceed contract value of \$85,510.00**. The fees and costs charged to the SMC for work performed will be in accordance with GEO-LOGIC ASSOCIATES, INC. Standard Charges as described in EXHIBIT A.
2. The SMC shall pay invoices in compliance with the Illinois Local Government Prompt Payment Act (50 ILCS 505/1, et seq.).
  - a. CONSULTANT shall furnish SMC with an itemized invoice on a monthly basis.
  - b. Invoices need to identify scope of services task(s) identified in work assignment, CONSULTANT staff, staff rate per EXHIBIT A, and hours per task.
  - c. Invoices need to identify SMC Project Manager and SMC Project.
  - d. Invoices will be submitted to [StormwaterAP@lakecountyiil.gov](mailto:StormwaterAP@lakecountyiil.gov).

**TERMS AND CONDITIONS**

3. The Agreement for Professional Consulting Services shall be effective through June 30, 2025.
4. The SMC may make, by written Order and agreed to by the CONSULTANT, changes in the scope of the work assignment if such changes are within the general scope of the

Agreement.

5. The SMC or CONSULTANT may at any time, terminate this Agreement in whole or in part by written or verbal notice confirmed in writing. Upon notice of termination, the SMC will assume responsibility for services rendered to the point of termination. SMC will pay to the CONSULTANT any costs incurred prior to notification and any reimbursable expenses and reasonable costs relating to the termination. All services, property, publications, or materials provided during or resulting from the Agreement shall be the property of the SMC.
6. This Agreement shall be governed by and construed according to the laws of the State of Illinois.
7. CONSULTANT will maintain INSURANCE coverage as required by Lake County Purchasing for Professional, Comprehensive, General, Automobile, Worker's Compensation, and Employer's Liability in amounts in accordance with generally accepted legal and business requirements. Certificates evidencing such coverage must be provided to SMC prior to undertaking any assigned work.
  - a. CONSULTANT will provide certificates of insurance.
  - b. Certificates of insurance must include project name and additionally insured to the COI section DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES.
  - c. Additionally insured to include Lake County Stormwater Management Commission, and any property entities where work assignment is occurring, including Municipality, Township, or public and or private property owners.
  - d. Certificates of insurance will be submitted to [StormwaterAP@lakecountyil.gov](mailto:StormwaterAP@lakecountyil.gov).
8. This Agreement shall not be assigned, altered or modified without the express written consent of both parties except as provided in paragraph 4 above. The CONSULTANT shall not reject any reasonable change proposed in the best interest of the project by SMC. This Agreement supersedes any and all other Agreements, oral or written, between the parties hereto with respect to the subject matter hereof.
9. Consultant shall act as an independent contractor and shall perform the services provided for in this Agreement in accordance with the generally accepted standard of care of the CONSULTANT'S profession.
10. CONSULTANT agrees to fully indemnify and hold SMC, its employees, and agents harmless of, from, and against any and all claims, costs, expenses (including attorney's fees), judgments, penalties, liabilities or losses which may be sustained by or secured against SMC, its employees, and agents, arising from the negligent acts, errors or omissions of the CONSULTANT, its employees, and agents arising out of or connected with the performance of this Agreement.
11. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and SMC.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed, as evidenced by the signatures of their duly authorized representative as affixed below.

**LAKE COUNTY STORMWATER  
MANAGEMENT COMMISSION**

**GEO-LOGIC ASSOCIATES, INC.**

\_\_\_\_\_  
Kurt Woolford, P.E.  
Executive Director

\_\_\_\_\_  
Devin Moose, P.E., DEE  
Principal Engineer

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**EXHIBIT A:**

**FEE SCHEDULE FOR CONSULTANTS AND SUPPORT SERVICES**

A schedule of the hourly rates currently in effect for employees follows:



## 2024 FEE SCHEDULE

### PROFESSIONAL STAFF

|   |                |
|---|----------------|
| Staff Professional I.....   | \$130.00/Hour  |
| Staff Professional II.....  | 145.00/Hour    |
| Staff Professional III.....   | 159.00/Hour    |
| Project Professional I.....   | 174.00/Hour    |
| Project Professional II.....  | 189.00/Hour    |
| Project Professional III.....   | 204.00/Hour    |
| Senior Professional I.....  | 212.00/Hour    |
| Senior Professional II.....   | 226.00/Hour    |
| Senior Professional III.....  | 241.00/Hour    |
| Principal Professional I.....   | 255.00/Hour    |
| Principal Professional II.....  | 273.00/Hour    |
| Principal Professional III.....   | 291.00/Hour    |
| Court Appearance (Expert Witness, Deposition, etc.; four-hour minimum)..... | 2 x HourlyRate |

### FIELD/LABORATORY STAFF

|  |             |
|--|-------------|
| Technician I.....                                | 92.00/Hour  |
| Technician II.....                               | 111.00/Hour |
| Technician III (or Minimum Prevailing Wage)..... | 125.00/Hour |
| Technician IV.....                               | 138.00/Hour |
| Laboratory Manager.....                          | 166.00/Hour |
| Principal Technician.....                        | 186.00/Hour |
| Managing Technician.....                         | 199.00/Hour |

### CADD/GIS

|                                   |             |
|-----------------------------------|-------------|
| CADD/GIS/Database Manager I.....  | 111.00/Hour |
| CADD/GIS/Database Manager II..... | 130.00/Hour |
| CADD Designer.....                | 160.00/Hour |
| GIS Specialist.....               | 145.00/Hour |

### SUPPORT STAFF

|                                   |             |
|-----------------------------------|-------------|
| Administrative Assistant I.....   | 111.00/Hour |
| Administrative Assistant II.....  | 125.00/Hour |
| Administrative Assistant III..... | 128.00/Hour |
| Technical Editor.....             | 103.00/Hour |
| Senior Technical Editor.....      | 145.00/Hour |

\*Overtime Premium is 35% of PERSONNEL CHARGE

### EQUIPMENT CHARGES

|  |                            |
|--|----------------------------|
| BAT Permeameter.....                                       | 200.00/Day                 |
| Compaction Testing Equipment & Supplies.....               | 50.00/Day                  |
| Peel & Shear Strength Apparatus (FML Seams).....           | 900.00/Month               |
| Portable Laboratory (8' x 32' trailer) with equipment..... | 1,200/Month                |
| Portable Laboratory (mobilization / demobilization).....   | 1,500.00                   |
| ReMi/Refraction Seismograph.....                           | 600.00/Day                 |
| Sealed Single Ring Infiltrometer (SSRI).....               | 200.00/Day or 750.00/Month |
| Sealed Double Ring Infiltrometer (SDRI).....               | Call for Quote             |
| Slope Inclinator.....                                      | 250.00/Day                 |
| Unmanned Aerial Vehicle (Drone) Reconnaissance.....        | 250.00/Day                 |



**EXPENSES**

|   |   |
|---|---|
| Vehicle Use for Field Services .....                                    | 17.00/Hour 115/Day or 500.00/Week               |
| Soil Sampling Equipment & Drilling Supplies.....                        | 7.00/Hour                                       |
| Groundwater Sampling Equipment and Supplies.....                        | 17.00/Hour                                      |
| Per Diem .....  | Lesser of (Cost +8%) or (Local Government Rate) |
| Outside Services (Consultants, Surveys, Chemical lab Tests, etc.) ..... | Cost + 8%                                       |
| Reimbursables (Maps, Photos, Permits, Expendable Supplies, etc.).....   | Cost + 8%                                       |
| Outside Equipment (Drill Rig, Backhoe, Monitoring Equipment, etc.)..... | Cost + 8%                                       |

**PERMITS, FEES AND BONDS**

The costs of all permits, fees, and performance bonds required by government agencies are to be paid by the Client, unless stated otherwise in an accompanying proposal.

**INSURANCE**

Geo-Logic Associates, Inc. carries workers' compensation, comprehensive general liability and automobile with policy limits normally acceptable to most clients. The cost for this insurance is covered by the fees listed in this schedule. Cost of any special insurance required by the Client, including increases in policy limits, adding additional insured parties and waivers of subrogation, are charged at cost plus 15%. Unless otherwise stated, such charges are in addition to the estimated or maximum charges stated in any accompanying proposal.

**TERMS**

Payment is due upon presentation of invoice and is past due forty-five (45) days from invoice date. Past due accounts are subject to a finance charge of one and one-half percent (1-1/2%) per month, or the maximum rate allowed by law.

**PROPOSAL PERIOD**

Unless otherwise stated, a proposal accompanying this schedule is effective for sixty (60) days. If authorization to proceed is not received within this period, Geo-Logic Associates, Inc. reserves the right to renegotiate the fee.

### GLA NOT-TO-EXCEED PROJECT FEE

GLA developed the costs provided on the following table specifically for the execution of the Lake Michigan PCB and Mercury TMDL Sampling Program. They include the five tasks provided in the RFP, and are further broken into subtasks where appropriate to provide clarity.

**Table 5.1 – GLA Proposed Fee Table**

| Tasks                        | Description                                    | Total Cost      |
|------------------------------|--|-----------------|
| TASK 1                       | COORDINATION ACTIVITES                         |                 |
| Subtask 1a                   | Kick-Off Meeting                               | \$1,920         |
| Subtask 1b                   | Develop Program Workplan                       | \$6,460         |
| Subtask 1c                   | Permitting                                     | \$2,330         |
| Subtask 1d                   | Bi-Weekly Meetings                             | \$8,880         |
| TASK 2                       | CONTRACT WITH QUALIFIED LABORATORY             | \$890           |
| TASK 3                       | IMPLEMENT SAMPLING PROGRAM                     |                 |
| Subtask 3a                   | GLA Labor Costs – Sediment Sample Collection   | \$18,400        |
| Subtask 3b                   | GLA Travel & ODCs – Sediment Sample Collection | \$4,250         |
| Subtask 3c                   | Laboratory Fees – Sediment Sample Analysis     | \$16,000        |
| TASK 4                       | MANAGE PROGRAM DATA                            | \$5,520         |
| TASK 5                       | PROVIDE ANALYSIS OF DATA                       |                 |
| Subtask 5a                   | Draft Sampling Evaluation Report               | \$16,120        |
| Subtask 5b                   | Final Sampling Evaluation Report               | \$4,740         |
| <b>Total Proposal Value:</b> |  | <b>\$85,510</b> |

The proposed fees are based on the following assumptions:

- GLA team members John Low and Mike Monteith will attend the project kick-off meeting, which GLA assumes will occur in person at the SMC office
- Permitting costs include \$500 application fee payable to the City of Waukegan
- GLA team members John Low and Mike Monteith will attend 26 one-hour bi-weekly meetings, to be conducted virtually.
- Upon approval of the Workplan, GLA will staff a two-person sampling crew to collect sediment samples from each of the 148 locations. GLA assumes that up to 15 locations will be sampled daily, requiring up to 10 days to complete the sediment sampling scope. Every effort will be made to collect more than 15 samples per day to reduce the number of days required to minimize sampling costs.
- Sediment sampling costs assume that the sampling sites are able to be located based on information provided by the SMC during the kick-off meeting or subsequently and they are accessible.
- Sediment sample analytical costs include 148 samples to be analyzed for PCBs and mercury, and include up to 48 QA/QC samples, as further discussed in Section 6 – Quality.
- Laboratory fees include 8% GLA mark-up
- Teklab will provide Level 2 QA/QC reports.

**GENERAL INFORMATION SHEET**

**AUTHORIZED NEGOTIATORS:**

Name: Devin Moose, PE Phone # (630) 336- 0344 Email: dmoose@geo-logic.com

Name: \_\_\_\_\_ Phone # \_\_\_\_\_ Email: \_\_\_\_\_

**RECEIPT OF ADDENDA: The receipt of the following addenda is hereby acknowledged:**

Addendum No. SMC #RFP 2024TMDL , Dated 7/25/2024

Addendum No. 1. SMC #RFP 2024TMDL , Dated 8/16/2024

In submitting this statement of interest, it is understood that the SMC and its Stormwater Coordinator reserves the right to reject any or all submittals, to accept an alternate submittal, and to waive any informalities in any submittal.

**BUSINESS ORGANIZATION: (check one only)**

Sole Proprietor: An individual whose signature is affixed to this proposal.

Partnership: State full names, titles, and addresses of all responsible principals and/or partners on attached sheet.

Corporation: State of Incorporation: California

Non-profit Corporation

501c3-- U.S. Internal Revenue Code

By signing this proposal document, the proposer hereby certifies that it is not barred from bidding on a contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

Geologic Associates, Inc.  
Business Name

  
Signature

Devin Moose, PE  
Print or Type Name

Principal Engineer  
Title

8/21/2024  
Date





**VENDOR DISCLOSURE STATEMENT**

|                               |   |                  |                |
|-------------------------------|---|------------------|----------------|
| Vendor Name:                  | GeoLogic Associates, Inc.                                   |                  |                |
| Address:                      | 25 North River Lane #103, Geneva, Illinois 60134            |                  |                |
| Contact Person:               | Devin Moose   | Contact Phone #: | 630 - 336-0344 |
| Bid/RFP/SOI/Contract/Renewal: | LAKE MICHIGAN WATERSHED PCB & MERCURY TMDL SAMPLING PROGRAM |                  |                |

Vendors wishing to contract with Lake County for goods and services in an amount greater than \$30,000 shall submit this form in advance of award. This disclosure statement is not required for utility companies regulated by the Illinois Commerce Commission or local units of government. Vendors shall disclose:

- A familial relationship between a Lake County elected official, department director, deputy director and manager and owners, principals, executives, officers, account managers or other similar managerial positions of the vendor’s company. Familial relationship is defined as a spouse (including civil partner), child, stepchild, parent, stepparent, grandparent, in-laws (including parent, grandparent, sibling, or child), relatives and non-relatives living in the same residence, and offspring born to any aforementioned person.
- All political campaign contributions made by the vendor or an owner, principal, executive, officer, account manager, or other similar managerial position of the vendor to any county board member, county board chair, or countywide elected official within the last five years.

If there is nothing to report in a section, please state none in the appropriate space.

**FAMILIAL RELATIONSHIPS**

List names and departments/agencies of Lake County employees or public officials with whom owners, principals, or officers of the vendor’s company have a familial relationship and the nature of the relationship. Attach additional pages, as necessary. (Provide all names or state none in the space below. Do not leave blank.)

| Name and Department/Agency of Lake County Employee/Public Official | Familial Relationship |
|--|-----------------------|
| None   | None                  |
| None   | None                  |

**CAMPAIGN CONTRIBUTIONS**

List campaign contributions that have been made within the last five years that exceed \$150 annually. Attach additional pages, as necessary. (Provide all names or state none in the space below. Do not leave blank.)

| Recipient | Donor | Description (e.g., cash, type of item, in-kind) | Amount/Value | Date Made |
|-----------|-------|---|--------------|-----------|
| None      |       |   |              |           |
| None      |       |   |              |           |

Continuing disclosure is required if information changes. This Vendor Disclosure Statement form is available at [www.lakecountyil.gov](http://www.lakecountyil.gov).

The full text of the County’s Ethics and Procurement policies and ordinances are available at [www.lakecountyil.gov](http://www.lakecountyil.gov).

I hereby acknowledge that the information above is accurate and complete, that I am an authorized signer on behalf of the vendor, that I have read and understand these disclosure requirements, and that I agree to update this information if there are any related changes by submitting a new Vendor Disclosure Statement.

|                       |             |        |                    |
|-----------------------|-------------|--------|--------------------|
| Authorized Signature: |             | Title: | Principal Engineer |
| Printed Name:         | Devin Moose | Date:  | 8/21/2024          |

Vendors must insert “x” in the following box indicating exception and provide a brief narrative for exception.



## VENDOR CERTIFICATION FORM

|   |   |                      |           |
|---|---|----------------------|-----------|
| Bid/RFP/SOI Number:   | LAKE MICHIGAN WATERSHED PCB & MERCURY TMDL SAMPLING PROGRAM   |                      |           |
| Vendor Name:  | GeoLogic Associates, Inc.   |                      |           |
| Address:  | 25 North River Lane #103, Geneva, Illinois 60134  |                      |           |
| Primary Contact Name:   | Devin Moose   |                      |           |
| Primary Contact Email Address:  | dmoose@geo-logic.com  |                      |           |
| Primary Contact Phone Number:   | 630-336-0344  |                      |           |
| Project Manager Name:   | John Low  |                      |           |
| Project Manager Email Address:  | jlow@geo-logic.com  |                      |           |
| Project Manager Phone Number:   | 907-351-2781  |                      |           |
| # Years in Business:  | 33  | # of Employees:      | 350       |
| Annual Sales:   | \$ 50 M   | Dunn & Bradstreet #: | 798042685 |
| <b>Vendor Certification Statement: Please identify all of the following that apply to the ownership of this firm. This information is collected for reporting purposes only and not vendor selection. Please include a copy of the certification. (Definitions are included on the second page of Vendor Certification Form).</b> |   |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Minority – Business Enterprise (MBE)                       |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Women Business Enterprise (WBE)                            |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Veteran-Owned (VBE) Business Enterprise                    |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Persons with Disabilities Owned Business Enterprise (PDBE) |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Service-Disabled Veteran-Owned (SDVBE) Business Enterprise |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Business Enterprise Program (BEP)                          |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Small Disadvantaged Businesses (SDB)                       |                      |           |
|   | <input type="checkbox"/> Contractor certifies as a Veteran-Owned Small Business (VOSB)                        |                      |           |
|   | <input type="checkbox"/> Local Business   |                      |           |
| <input checked="" type="checkbox"/>   | None  |                      |           |
| Other (Specify)   |   |                      |           |
| Certification Number:   |   |                      |           |
| Certified by (Agency):  |   |                      |           |

I certify that this information is accurate to the best of my knowledge and that I am authorized to provide this information on behalf of my company.

\_\_\_\_\_  
 Signature, Title

Devin Moose | Principal Engineer  
 \_\_\_\_\_  
 Printed Name, Title

8/21/2024  
 \_\_\_\_\_  
 Date



### Vendor Certification Definitions

- 3 Minority-owned business (MBE)

## 7. Project Approach

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### PROJECT UNDERSTANDING

To establish baseline pollutant levels in the Lake Michigan Watershed as required in Section 303(d) of the Clean Water Act, TMDLs for PCBs and mercury will be developed for setting pollution reduction goals to improve impaired waters. The Lake County SMC has been coordinating the TMDL compliance task on behalf of the MS4 permit assigned to Lake County. The SMC has requested a proposal from qualified interested firms to design and implement a sampling program for evaluating baseline pollutant levels of PCBs and mercury in sediments using USEPA-approved test methods, and to provide a report evaluating the levels of PCBs and mercury supported with sampling data, potential source areas of the pollutants, and recommendations for achieving TMDL compliance. The RFP (#2024MDL) anticipates the collection and laboratory analysis of 148 sediment samples from pre-determined locations in Lake County.

### PROJECT APPROACH

Upon project award, GLA proposes to perform the detailed scope of services provided in the following Tasks.

#### **TASK 1 – Project Coordination**

GLA is assigning Mr. John Low, P.G., as the main point of contact for implementing the PCBs/mercury sampling program. Mr. Low shall serve as the overall manager of the PCBs/Mercury Evaluation Program coordinating all scheduling, communication and deliverables between GLA, Teklab, and the SMC. GLA will schedule a kick-off meeting with the SMC to review the scope of work, project schedule, expectations and deliverables for the Lake Michigan Watershed sediment sampling program. GLA will confirm with the SMC the number and location of sample collection points described in the RFP (#2024MDL) in order to develop a formal workplan detailing the scope of work, coordinate and obtain required documentation for sample collection, coordinate and schedule with our selected environmental laboratory, develop a project schedule of the tasks to be completed, provide a description of the sediment sample collection activities, the number of samples submitted, the parameters to be analyzed, and a report providing results of the sampling plan. The Program workplan will be submitted to the SMC as a draft for review and comment. The workplan will be finalized upon receipt of comments from the SMC.

GLA will establish and coordinate virtual bi-weekly meetings to update the SMC on project related activities at all stages of the project. The first meeting is anticipated to be conducted the week of September 23, 2024 and the final the week of June 16, 2025. Additional coordination will be completed as needed through email or teleconference as conditions change.

GLA will coordinate with the local road jurisdictions (Lake County Department of Transportation, City of Waukegan and/or the City of North Chicago) with obtaining the required permits and information specific to each sampling location for collecting sediment/water samples from stormwater outfalls, catch basins and/or manholes stormwater infrastructure within the road right-of-way (ROW). GLA will arrange to make observations and confirm each

sampling location for coordinating the equipment necessary to safely and efficiently complete the collection activities. A Health and Safety Plan (HASP) will be generated and incorporate the Site-Specific conditions to inform the sample collectors of potential chemical and physical hazards and how to address these hazards during the sample collection activities.

GLA contacted the Lake County Department of Transportation (LCDOT) concerning requirements and associated costs for obtaining permits to complete the proposed activities in the County Road ROWs. Mr. Patrick Sheeran, Utility Permit Coordinator for the LCDOT, stated a Utility permit will be required to grant access onto the ROWs. Because this work is being performed under the Lake County Stormwater Management Commission, there is no charge for obtaining a Utility permit.

GLA contacted the City of Waukegan concerning requirements and associated costs for obtaining permits to complete the sampling activities at the 10 outfall locations at the Lake County Health Department (LCHD). Mr. Jesus Alquicira, City of Waukegan Engineering Department stated that any sampling of outfalls on the LCHD campus does not require a permit. Sampling in any ROWs to the campus will require a permit with a maximum cost of \$500.

#### **TASK 2 – Contract with Qualified Laboratory**

Upon project award, GLA will contract with Teklab, a certified National Environmental Laboratory Accreditation Program (NELAP) laboratory that is also a participant in the EPA's Discharge Monitoring Report – Quality Assurance (DMR-QA) Program. GLA and Teklab will coordinate sample jar drop offs, sample collection pickups, laboratory analysis turnaround times, QA/QC procedures and laboratory results reporting. Teklab will utilize the following analytical methods approved by the EPA under 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants", July 1, 2022:

##### **PCBs:**

- GC/ECD (SW8082)

##### **Mercury:**

- SW7471B

GLA will work with Teklab to coordinate the sample schedule collection dates, pre-labeled bottle orders, chain of custody forms and commit to a turnaround time to meet the project schedule. All collected samples will be placed in a cooler on ice and transported under chain of custody procedures to the laboratory.

#### **TASK 3 – Implement Sampling Program**

GLA will collect sediment samples from each of the 148 locations during the execution of this sampling program. GLA will pre-program the coordinates of each sampling location into a Trimble Geo 7x Series System hand-held GPS unit to ensure that the correct location is sampled. GLA will perform sediment sampling activities in accordance with the US EPA SOPs, the SMC-approved Work Plan, and with the permits obtained from each jurisdiction.

GLA will be conscientious to obtain sediment samples during dry conditions to ensure that project reporting limits are achieved. Should sediments contain an excessively high moisture content, the laboratory will need to perform dry weight adjustments that may dilute the results, which could elevate the reporting limit. The sediment sampling locations that are located within the ROWs will be sampled by two-person sampling crews to accommodate the safety requirements of the permit. For cost estimation purposes, GLA assumes up to 15 sediment samples will be collected each working day by a two-person crew, requiring up to 10 days to obtain all 148 sediment samples. The sampling locations that are not located within ROWs may be sampled by one person crews. The GLA sampling crews will make every safe and reasonable effort to collect more than 15 samples per day to reduce the number of days required to minimize sampling costs. Any efficiencies gained during sampling from the assumptions made during cost estimation, either by reduced crew size or increased number of samples collected in a day, will be passed on to Lake County.

Arrangements for sample drop offs and pickups will be coordinated with the laboratory to meet holding and testing times. New, certified clean containers will be provided by the chosen laboratory for sample collection throughout the Sampling Program. GLA will coordinate with the Lake County Department of Transportation (LCDOT) to confirm all required permitting has been completed and appropriate traffic control procedures are followed while collecting samples in the road and paved right of ways.

An experienced GLA representative/sampler will use a bound log book to document the field sampling activities. The GLA representative will provide the date, the approximate location of the sample collection site by global positioning system (gps), approximate time onsite, the scope of work for the chosen day, the equipment and lab to be used, the general weather and site conditions, decontamination procedures for sampling equipment, necessary safety precautions if in the road or right of way and the personnel onsite.

Special care will be taken not to contaminate samples. GLA personnel completing the sampling activities will wear clean new, non-powdered disposable gloves each time a different location is sampled and should be worn immediately prior to sampling. The gloves will be changed any time during sample collection when their cleanliness is compromised. Samples will be collected with new, verified and certified clean disposable or non-disposable sampling equipment. Samplers will be disposed or cleaned with a warm soap and water and followed with a water rinse between each sample collection.

Sampling devices used to collect sediment samples may include stainless steel scoops or spoons, or a sediment Teflon® or plastic manual coring device. The sediment sample collected will be placed directly into the clean laboratory provided jars, sealed and placed in a cooler on ice and documented on a chain of custody form. A description of the sediment sample, the method of collection and the time of collection will be detailed in the field log book.

At each discharge point, grab dry sediment samples will be collected by using clean, sterilized appropriately sized plastic bottles for the parameter to be analyzed. Collected samples will be documented on a chain of custody form and placed in a cooler with ice. Visual observations of

the sediment and water quality (if present) at each outfall will be made and will consist of the following:

- Color;
- Odor;
- Clarity;
- Floating Solids;
- Settled Solids;
- Suspended Solids;
- Foam;
- Oil sheen; and
- Other indicators of stormwater pollution

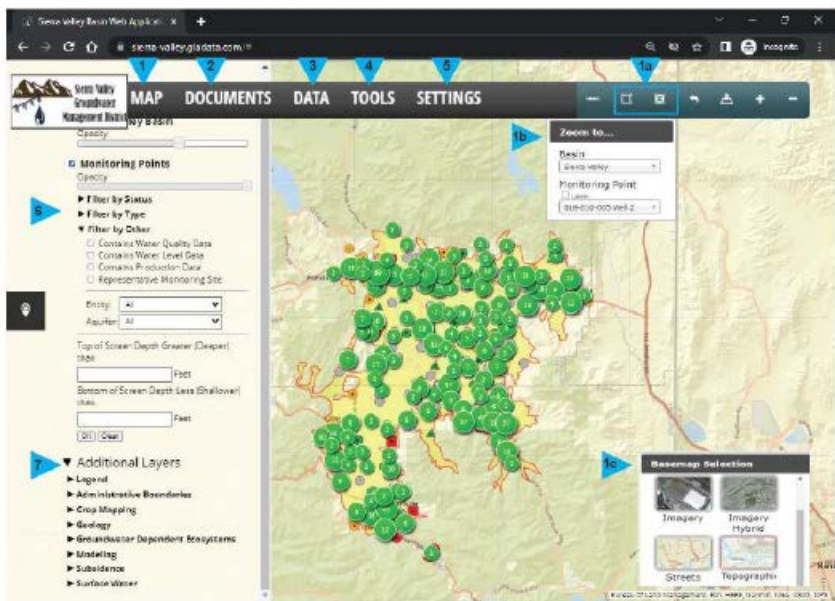
#### **Task 4 – Data Management**

To effectively manage and analyze water quality information that is generated over the course of this contract, GLA is proposing to develop a comprehensive, web-accessible, GIS-based relational database management system. A relational database will reduce data entry and associated quality control requirements, provide easy data output and graphing functions, and allow SMC staff to have access to data and reports at their fingertips. Each outfall location will have records of field sampling reports, photographs, laboratory data, and chain-of-custody forms.

Since 2007, GLA has been a leader in the development of environmental database management systems (DBMS or DMS). Our developers have continuously enhanced our systems, incorporating new technology to meet clients' evolving needs. This web-accessible GIS-based data management system facilitates data management with a user-friendly interactive online data portal. This system provides a powerful set of tools for efficient data analysis, visualization, and reporting. GLA's team has a proven track record of providing interactive, web-based software platforms for managing and visualizing water resources data that are customizable, stable, and secure. The framework can be designed such that the application meets current requirements with the ability to easily add additional features as needed. Below is an example of a site GLA created.

### GLA-Data Customizable Features at a Glance

GLA-Data is customizable, user-friendly, widely accessible, and secure.



### **Task 5 – Pollutant Evaluation Report**

Following the completion of the mercury and PCB sampling activities from all of the proposed outfall and road stormwater locations, GLA will evaluate the data and develop a Pollutant Evaluation Report. The report will evaluate the baseline results of mercury and PCBs at each of the outfall/road stormwater locations in the Lake County MS4 within the Lake Michigan watershed. The report will present sediment sample results in comparison with the applicable PCB and mercury sediment/solids quality standards. The report will highlight locations that exceed the applicable standards. Locations exceeding the applicable mercury/PCB sediment quality standards will include Best Management Practices (BMPs) to help meet the TMDL objectives for mercury and/or PCBs. The Pollutant Evaluation Report will be submitted electronically as a draft and allow sufficient time for the SMC to review and comment. Upon receipt of the comments/changes from the SMC, GLA will prepare a final Pollution Evaluation Report and submit to the SMC electronically as a final report.