DES PLAINES RIVER WATERSHED WORKGROUP
MEMBERSHIP MEETING
MAY 19, 2016 1:30-3:30 PM
NORTH SHORE WATER RECLAMATION DISTRICT
14770 William Koepsel Dr, Gurnee, IL 60031

MEETING AGENDA

1. ***Introductions and Announcements*** *– Peter Kolb, Director of Public Works for Lake County and DRWW President, will conduct introductions and provide an overview of the meeting.*
2. ***Approve 2/11/16 meeting minutes.***
3. ***Public Comment***
4. ***Reducing Urban Phosphorus Load: Identifying Sources and Controls presentation*** *– Bill Selbig, Research Hydrologist with the USGS Wisconsin Water Science Center will present an evaluation of BMPs used by MS4s to reduce pollutant phosphorus loads, mainly leaf litter collection programs. Leaves are a significant source of phosphorus in stormwater in the fall.*
5. ***Database presentation*** *– Bryan Heald, Senior Scientist for Geosyntec will present the database management system created for the DuPage River Salt Creek Workgroup (DRSCW), providing insight into how to manage the data gathered by the Workgroup. The DRSCW is geospatially linked and available to the public on their website so data can be accessed by the public by sites at any time.*
6. ***DRWW Business*** *– Peter will lead the group DRWW business matters.*
    a. ***Membership Update***
    b. ***Committee Updates***
        i. ***Monitoring Committee*** *– Joe Robinson, Monitoring Committee Chair, will present a summary of data collected, an update on the Monitoring Report submitted to Illinois EPA for POTW permit compliance, and provide a monitoring plan update.*
        ii. ***Lakes Committee*** *– Mike Adam, Lakes Committee Chair, will present an update of the lake data scheduled to be collected this season.*
        iii. ***Impairments Committee*** *– Scott Pippen, Impairments Committee Chair, will provide a status update for this committee.*
    c. ***Geosyntec - Technical Advisor contract –*** *A draft contract is being presented to the membership for review and comment. Discussion and action with*

membership feedback will occur at the Executive Committee meeting on 6/16 at SMC. Comments can be forwarded to Peter Kolb pkolb@lakecountyil.gov , Brian Dorn BrDorn@northshorewrd.org and copied to Mike Warner mwarner@lakecountyil.gov .

d. Quarterly Status Report

7. Next meeting: Quarterly meeting: August 18th

8. Old business

a. Suburban Labs contract *– Suburban Labs contract was extended in February through June 30, 2016. The contract can be continued for fiscal year 2016 or the DRWW can go out to bid. In May 2015, the DRWW put out an RFP for water and sediment chemistry collection and analysis and received two proposals, from Cardno JFNew and Suburban Labs. Discussion and action with membership feedback will occur at the Executive Committee meeting on 6/16 at SMC.*

9. New business

10. Adjournment

DES PLAINES RIVER WATERSHED WORKGROUP MEMBERSHIP MEETING
FEBRUARY 11, 2016 10:00-12:00 PM
NORTH SHORE WATER RECLAMATION DISTRICT

MEETING MINUTES

1. ***Introductions and Announcements*** *– Peter Kolb, Director of Public Works for Lake County and DRWW President, conducted introductions and provided an overview of the meeting.*

2. ***Approve 11/12/16 meeting minutes.*** *Paul Kendzior motioned to approve the minutes, Joe Robinson seconded the motion. The motion passed unanimously.*

3. ***Public Comment.*** *None.*

4. ***Overview of Proposed Chicago Area Waterways Chloride Variance*** *– Fred Andes, Barnes & Thornburg provided information about the Chicago Area Waterways (CAWs) chloride variance.*

   Brian provided the background on ICPB rules and MWRDGC watershed variance. NSSD asked Barnes & Thornburg to conduct research and present its findings to DRWW and how it might affect this workgroup.

   Fred's Presentation: IEPA rulemaking for Chicago area waterways started in 2007 and is ongoing. Issue that came up during this process IEPA's year-round 500mg/L standard for chlorides (other standards were adopted July 2015). Nearly impossible to meet in the winter – can a variance be sought? The Illinois Pollution Control Board (ICPB) agreed but gave parties 3 years to apply for variances – not a long time. MWRD agreed to lead workgroup (POTWs, MS4 munis, tollway, IDOT, salt providers, industrial permit holders - watershed groups are not part of the group but used as resources for data) to determine what was needed for a successful request for variance.

   Plan: When a standard can't be met, the variance process requires individual variances from all entities affected by the variance – which will include all MS4 and Individual Permit holders in a watershed, which makes the task extremely complicated and infeasible in an expanding setting. However, information to support a variance is common to all, so the plan is to identify and agree on one set of BMPs via the creation of a technical report that describes current waterway conditions, lists entities affected by the standards, why the standard cannot be consistently complied with and

methods to monitor success of BMPs. Each permit holder then applies individually for a variance from the chlorides standard and attaches the same report and identifies which of the BMPs in the report will be implemented by that entity. Deadline to submit draft report to IPCB by winter 2017. IPCB decision in July 2018.

Fred's recommendation to DRWW is to conduct the research now, collect the data that would support a report that could be used for a variance request, but do not join the Chicago waterways variance at this time, one reason is that we would be adding to the 100+ current entities seeking a variance. It is logical to add the chloride variance investigation to the DRWW's 5-year plan.

Questions: – does each permittee have to collect data after variance is granted? Once a variance is granted, it is reviewed every 3 years so that kind of information could be required. It's also required when a permit gets reissued. Note that it would take a legislative change to allow the variance to be used on a watershed level verses individual permit holder applications. The Fox River report was about the phosphorous standard and was not created for a variance so while a good model, not applicable to the chloride variance process.

IEPA is anticipated to add a 500 mg/L chlorides standard in future permits, so it's going to make sense for other watersheds to conduct the same work as CAWS is. Also, IPCB may assess watersheds that impact other watersheds but no indication of this yet. Question is when will IEPA start enforcing the standard.

The system the CAWS is putting together will be a good model for others to follow. It is likely the BMPs list will be applicable to all other watersheds in the region. DRWW may want to begin defining its water quality, looking at data, identifying BMPs that will work in Lake County along Des Plaines River. It may want to look at site specific chloride limits if water body does not support species the 500 mg/L standard was based on.

Question – During this 3-year period will the CAWS group be testing whether the BMPs will achieve 500 mg/L? No, the group is looking at literature and making projections based on local conditions for that answer because there isn't enough time to institute BMPs and then study how they are affecting the waterways.

Question regarding liability concerns over reduced salt use – if communities adopt a policy about salt application it protects them from liability – is this a BMP being discussed? Yes, some communities have ordinances and legal committee is studying these.

Innovative BMPs? Not yet discussed. Need a broad list, and analysis of each in terms of effectiveness, feasibility and affordability. List will be split

into a must-do and an also-do if appropriate for your community. IEPA wants to see new ideas, but it's not a requirement.

5. ***2015 DRWW Accomplishments Document Overview -*** *Peter complimented Andrea on effort to compile document and thanked the members on all the work represented by the list of accomplishments in the document.*

6. ***Financial Status Summary and 2016 Draft Budget Presentation*** *– Mike Warner and Peter Kolb presented the draft budget. Conservative assumption – The draft budget was shown conservatively at $210,000 in projected dues as the total revenue number – actually collected $231,000. The $210,000 level, if maintained, is currently projected expenses through 2019, however other expenses would detract from that number. LC FAS is waiting for the Executive Board approval of final budget line items.*

   Peter noted that some of the items in the group's 5-year plan are not covered by the draft budget.

   Question: Does fiscal year for budget start on May 1st? Yes, it follows most municipal budget cycles. Question: If a member wants to add a monitoring site, who to approach? Attend a Monitoring Committee meeting which the schedule is posted on the website.

7. ***5-year Draft Work Plan Discussion*** *– Mike Warner/Peter Kolb*

   Mike Warner refreshed the members on one of the main objectives in the group bylaws is to develop and implement a Des Plaines River Watershed Based plan. He also thanked County staff and the membership for help in technical and financial aspects of plan. SMC staff also offered their or DRWW's Technical Manager (Andrea Cline) to present to village boards if requested on the benefits of membership and our accomplishments. Peter noted that current membership covers much of the work plan items, but that more members would be welcome. There is no intention to raise dues for 2016.

   Peter mentioned key issues to consider:

a. *Complete watershed work plan and monitoring effort.*

b. *Research into a nutrient trading program as initiated in other states.*

   Recommend an approach for the membership to review and provide input. Mike W – IEPA interested in this but what is the actual process – it requires state legislation and IEPA oversight and it is reasonable to expect both to occur? WI program is not going well due to stringent phosphorous standard. Madison is going farmer to farmer to address issue of meeting the standard. Peter – board member interest in OH program so the workgroup should explore the opportunity.

c. *Chloride plan as modeled by Chicago watershed group. This should be added to the 5-Year Workplan and objectives set.*

d. *Monitoring program. We have a three-year raw data collection timeline. What type of program will be needed for subsequent years?*

e. *Permit holders will have to generate annual reports. What information from the planning or DRWW efforts can added to enhance the annual permit reports?*

8. Des Plaines River Watershed Based Plan Status Update *- Mike Novotney, Lake County SMC. Mike's presentation will be available on the DRWW website.*

a. Section 319 grant – 3 water quality BMPs

i. Mundelein Park District: Bull Creek

ii. College of Lake County – bioswales on parking lot redesign

1. Question – any discussion with coal tar sealants? That is not included in their current grant.

2. Monitoring of bioswales? There is a yearly monitoring program in the grant that requires inspection of the project implementation and planting standards, but no chemical monitoring.

iii. LCFPD – Agricultural BMPs in 4 farm fields in north Mill Creek watershed

b. SWAAP Pilot

i. 2 study areas chosen to begin assessment and project planning (lake sheds and drainage areas)

ii. Strategic planning

iii. Outcome – detailed field assessments & conceptual plans/budgets for BMPs

c. Umbrella Watershed Plan

i. Update existing watershed-based plans

ii. Complete plans

iii. DRWW Plan will define planning area, period (2016-18) & meet with USEPA watershed-based planning requirements, making members more eligible for IEIPA 319 grants throughout the entire watershed.

iv. *Major Plan Elements*

1. *Watershed issues, opportunities, goals, objectives & vision*
2. *Watershed Characterization*
    a. *Compiling existing data*
    b. *Collecting new data*
3. *Watershed Problems Assessment*
4. *Action Plan Recommendations (watershed-wide and site specific)*
5. *Evaluating Plan Implementation*
6. *Education & Outreach Plan*
7. *Stakeholders – MS4s, POTWs, Forest Preserve District, private property owners*

v. *Planning Process & Status*

1. *Stakeholder-guided – 20 meetings over next 2 years (8 general; 12 topic specific)*
2. *Kickoff meeting – March 17, 2016 – request that members help publish meeting information*
3. *DRWW meeting – August 2016 will feature watershed plan & project update*
4. *Data compilation & collection underway (monitoring data & stream river & detention basin inventory. Special acknowledgement to DRWW for its efforts.*
5. *Questions from Jim Bland – how are road projects or impervious surface increases handled in the watershed plan and can that data be interchangeable with other studies that are ongoing in the watershed. In established watershed plans (USEPA Watershed Based Plans), impervious surfaces or hazardous waste sites do not have enough specifics as part of plan inventory. Also, hydrologic modeling isn't used to link land use to monitoring results in analyzing data.*

6. *NOTE: IEPA FY2017 is a priority year for implementation grants in the Des Plaines Watershed – SMC staff may be putting out a request for proposals for MS4 communities to gage interest for in-the-ground projects that can be submitted to IEPA.*

Applications are due August 1st and an RFP would need to be distributed starting in March. Several members expressed interest.

9. ***Monitoring Committee Report*** *– Joe Robinson – The Committee has 7 voting members but 15+ attend meetings, and their input and help is appreciated.*

    a. ***Chemical Analysis*** *– contract in place, started at 45 sites. Sites listed on DRWW webpage.*

        i. ***Water*** *3 collections – Sept. Oct. Nov, variable flow conditions, next sampling scheduled for March*

        ii. ***Sediment*** *– will coincide with biological monitoring*

        iii. ***Continuous*** *– in process of being developed*

    b. *Bioassessment Monitoring contract has been signed and is being discussed with the contractor.*

    c. *Flow Monitoring – contract in place, 21 sites, allows for evaluation of mass loadings, impact of stream flow on biodiversity. Sites are on DRWW website.*

    d. *Annual Report- NPDES permit holders are required to report so committee is putting data together to use in those reports. Suggestion that MS4s use data for their annual reports.*

    e. *Upcoming Meetings – February 18, 2016, Monitoring and Executive Board, next General Membership meeting is 5/12/16. All meetings are posted on the website http://www.drww.org*

    Comment from Fred Andes – this data is useful in shifting focus on what has to be done on this waterway

10. ***Lakes Committee Report*** *- Mike Adam*

    First meeting was on January 28th, committee created a database of all lakes in watershed and is now compiling data, identifying gaps of information, and categorizing types of lakes. FYI, there are over 90 lakes in this watershed, over 50 that are 6 acres or more. This data will be shared with the Monitoring Committee. Next meeting is on April 21st (Quarterly - 4th Thursday 10AM) – meetings are held at the Central Permit Facility in the Health Department conference room on the first floor in Libertyville.

    Question – could the list of lakes be added to the DRWW website when closer to final? Yes. Question – can committee identify and examine wildlife migration corridors? Yes, the hydraulics and dams are identified during stream inventory work conducted during the summer can assess that issue.

11. ***Next General Membership meeting: Quarterly meeting: May 12th at NSSD 10AM***

12. ***Adjournment:*** *Mike Adam made a motion to adjourn. Paul Kendzoir seconded the motion. The motion passed unanimously.*

Members and Delegates Present:	**Non Members Present:**
Mike Adam	K.C. Doyle
Dave Brown	Kathy Paap
Chris Carter	Jim Bland
Brian Dorn	Vern Witthahn
Al Giertych	Tom Morthorst
Charles Hernandez	Willy Dittrich
Donald Hey	Farrah Watson
Brandon Janes	Rob Flood
Paul Kendzior	Mike Novotney
Peter Kolb	Ed Coggin
Marcia McCutchan	Caitlin Burke
Joe Robinson	Cyrus McMains
Randy Seebach	Dan Bounds
Steve Vella	Jarod Oliver
	Marcy Knysz
	Brian O'Neill
	Phil Speck
	Nick Leach
	Patty Werner

Des Plaines River Watershed Workgroup Quarterly Report

May 19, 2016

The Des Plaines River Watershed Workgroup (DRWW or Workgroup) officially formed in 2015 with the intent of improving water quality through a collaborative, locally led process. In conjunction with our quarterly membership meetings, a quarterly report is provided to keep membership up to date and informed on the many activities the Workgroup is undertaking.

Membership

The DRWW has built a strong membership base by demonstrating value to members. As of 5/6/16 the Workgroup has gained the support of nine members for FY 2016, securing $176,153 in membership dues. Membership dues, along with in-kind services and grant money, fund all activities of the Workgroup. Membership in the group consists of municipal and county government agencies, publically owned treatment works (POTWs), consulting firms, and environmental not-for-profits. Over fiscal year 2016, the DRWW will work to increase membership through outreach to additional municipalities, townships, park districts, and non-governmental agencies. Meetings are held quarterly and are open to the public.

Des Plaines River Watershed Based Planning

The first two stakeholder meetings occurred for the Des Plaines River Watershed Based Planning effort being led by SMC and supported by DRWW dues. Many Workgroup members are participating and the DRWW was asked to give a presentation on our efforts at the last stakeholder meeting. The information and projects in the plan are instrumental in obtaining grant funding for implementation projects. The meetings will continue through 2018. The next meeting is scheduled for Wednesday, June 1st at 1:30 PM at the Central Permit Facility. Check the website for updates: https://www.lakecountyil.gov/2387/Des-Plaines-River-Watershed-Plan.

National Pollutant Discharge Elimination System Permitting

WRFs Annual Report

The Monitoring Committee, led Committee Chair Joe Robinson, submitted an annual stream monitoring report for all member WRFs to support compliance for the NPDES special condition that requires upstream and downstream monitoring of all WRFs. The report included all data from 2015, an outline of the monitoring program, and a watershed map. No feedback has been received. A copy of the report is available on the DRWW website.

MS4 Permit

With the issuance of the new MS4 permit, there are a handful of new special conditions that require additional measures to be undertaken for compliance and/or coordination with the Workgroup. These include:

III.D. "Special Conditions. If the permittee performs any deicing activities that can cause or contribute to a violation of an applicable State chloride water quality standard, the permittee must participate in any watershed group(s) organized to implement control measures which will reduce the chloride concentrations in any receiving stream in the watershed."

V.A. "Monitoring. The permittee must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts within 180 days

(August 28, 2016) of the effective date of this permit (March 1, 2016). . . Evaluation and/or monitoring results shall be provided in the Annual Report."

Flow Monitoring

Burns & McDonnell developed a Quality Assurance Project Plan (QAPP) for flow monitoring in the Des Plaines River Watershed. The QAPP was provided to the Des Plaines River Watershed Workgroup (DRWW) on March 7, 2016 for submittal to the Illinois EPA for review and approval. The QAPP is currently under review. The QAPP describes the Quality Assurance/Quality Control program for collecting, managing, and analyzing steam flow data for the DRWW Flow Monitoring Project. This project will establish a flow monitoring network to characterize water discharge of the main-stem Des Plaines River, major tributaries, and major tributary branches within the Des Plaines River watershed. Flow monitoring will be conducted at 15 stream locations and discharge data will be analyzed from six USGS gage stations. Installation of data loggers and stream surveys will commence after the QAPP is approved by the Illinois EPA. Stream discharge measurements will be completed at 15 monitoring locations during three separate events by December 2016.

Bioassessment Monitoring

Midwest Biodiversity Institute (MBI) is preparing to start data collection for the bioassessment monitoring. The Monitoring Committee is working closely with MBI to finalize the approximately 77 monitoring locations which are a result of the original DRWW monitoring locations and the geometric monitoring locations added by MBI. A draft map of all stations is available on the DRWW website. All sites will be sampled during 2016. In following years, sampling will be conducted on a rotating basis.

For additional details on the DRWW visit www.drww.org. If you'd like to hear more about the DRWW, please contact Mike Warner, Administrative Agent at 847-377-7710 or mwarner@lakecountyil.gov.

DRWW Executive Board

President: Peter Kolb, Lake County Public Works

Vice President: Brian Dorn, North Shore Water Reclamation District

Treasurer: Michael Talbett, Village of Kildeer

Secretary: Paul Kendzior, Village of Libertyville

Monitoring Committee Chair: Joe Robinson, North Shore Water Reclamation District

Lakes Committee Chair: Mike Adam, Lake County Health Department

Impairments Committee Chair: Scott Pippen, Village of Lincolnshire

DRWW Membership

Applied Ecological Services
Village of Buffalo Grove
Cardno JFNew
Village of Deerfield
Village of Grayslake
Village of Green Oaks
Village of Gurnee
Illinois Lakes Management Association
Village of Kildeer
Lake County
Lake County Forest Preserve District
Lake County Stormwater Management Commission
City of Lake Forest
Village of Lake Zurich
Village of Libertyville
Village of Lincolnshire
Village of Lindenhurst
North Shore Water Reclamation District
Sierra Club
Village of Third Lake
Village of Vernon Hills

Geosyntec consultants

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Oak Brook, Illinois 60523
PH 630.203.3340
FAX 630.203.3341
www.geosyntec.com

May 13, 2016

Mr. Peter Kolb
President
Des Plaines River Watershed Workgroup
Lake County Stormwater Management Commission
650 W. Winchester Road
Libertyville, Illinois 60048

Subject: Scope of Work for Technical Support for the Des Plaines River Watershed Workgroup for Fiscal Year 2016

Dear Mr. Kolb:

Geosyntec is pleased to provide the Des Plaines River Watershed Workgroup (DRWW) this scope of work to allow for a coordinator to provide technical support to the DRWW for fiscal year 2016, from May 1, 2016 through April 30, 2017. The DRWW and Geosyntec, via Andrea Cline, have an existing relationship and unique qualifications to provide this work effort. We understand that the DRWW is at a crucial point in its development as a water quality improvement workgroup and will work collaboratively and cooperatively with all entities involved in a timely manner to move the group forward in meeting its goals. Below is a brief scope of work and tasks that the contract covers.

SCOPE OF WORK

Geosyntec will provide staff time to serve as the technical coordinator for the DRWW. The coordinator will provide technical expertise as needed, particularly in the continued development and implementation of the monitoring program, coordinating the technical needs of committees and the Executive Board, supporting the continued development of the monitoring program, and other technical tasks, as needed. Work will be completed in a timely manner through the end of the DRWW fiscal year 2016. Geosyntec appreciates the opportunity to continue serving DRWW and is therefore discounting its standard rate of $180/hour to $150/hour for this work.

Scope of Services

Task 1 – Monitoring Program Development and Support: Geosyntec will continue to provide support in the development and implementation of the monitoring program. Lake County Stormwater Management Commission (SMC) has received grant funding from Illinois Environmental Protection Agency's (Illinois EPA) 319 program, using the DRWW data as match. This requires Illinois EPA approval of a monitoring plan and Quality Assurance Project

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Plan (QAPP), which has been submitted to the agency for review. Geosyntec will continue to provide support in this effort by addressing reviewing agency comments and making revisions as needed.

Geosyntec will also support the monitoring program of the DRWW by providing continued technically-based input to the Monitoring Committee, Burns & McDonnell, Midwest Biodiversity Institute, Suburban Labs, and other entities as needed. The DRWW contract with Suburban Labs expires June 30, 2016. If needed, Geosyntec will develop a request for proposals for the water column and sediment chemistry collection and analysis contract and lead the Monitoring Committee through the selection procedure, as completed under the previous contract.

In addition, a Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit has been released and includes various monitoring requirements and additional chloride conditions. Geosyntec will assist the DRWW in helping members meet the conditions of their permit, through shared effort where possible.

Services expected to be performed as part of this task include:

- Address reviewing agency comments and make necessary revisions to the QAPP and monitoring plan.
- Provide support to the DRWW, SMC, Burns & McDonnell, Midwest Biodiversity Institute, and Suburban Laboratories. Geosyntec will review data reports and provide initial quality assurance/quality control and will provide technical expertise regarding the processing of the data.
- Assist in the development of monitoring measures to meet the MS4 NPDES permit requirements for DRWW municipal members.

Task 2 – Executive Board, Committees, and Meetings Support: The DRWW work plan is implemented through the work of the Executive Board, Committees, and general membership. Various meetings are held to discuss and implement the DRWW work plan. Geosyntec will continue to support the DRWW by:

- Attending Executive Board, Committee, and general membership meetings as needed.
- Providing technical support through verbal and written communication.
- Drafting meeting minutes for those meetings attended.

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- Drafting one page quarterly summaries of DRWW activities intended for distribution to member organizations' staff and elected officials.

- Drafting quarterly summaries of DRWW activities for SMC's 319 reporting requirements.

Task 3 – Outreach and Membership Recruitment: The DRWW currently has 21 members. There is the potential of at least 35 agency members, as well as many more associate and individual members. Geosyntec will help develop a strategy, PowerPoint presentation, and supporting materials to present to potential members. Services expected to be performed as part of this task include:

- Development of a membership recruitment strategy.

- Preparation of a PowerPoint presentation with an intended audience of municipal staff and elected officials to explain the importance of the DRWW and benefits of membership.

- Development of a recruitment package including factsheets, bylaws, draft agreements, for membership development purposes.

ASSUMPTIONS

In preparing this proposal, we have attempted to provide you with a complete package of technical support services anticipated at this time. In doing so, we have made some assumptions including:

- It is assumed that all other tasks not included in the tasks above, including administrative support, will be completed by others. This includes, but is not limited to, agenda development and distribution, securing and preparing speakers for meetings, meeting scheduling, minutes of meetings not attended, non-technical communication, and website management.

- Compliance with the Illinois Open Meetings Act will be SMC's responsibility.

- Illinois EPA 319 requirements are the responsibility of SMC.

- Membership billing and other DRWW financial matters is the responsibility of SMC.

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PROFESSIONAL SERVICES FEE

Geosyntec's proposed professional services fees for the proposed SOW shall be performed on a time and material basis with an estimated budget of **$84,000** as outlined below, which shall not be exceeded without prior written approval. Geosyntec is prepared to proceed with the professional services outlined above upon receipt of a signed Service Order.

Tasks	Cost
1) Monitoring Program Development and Support	$36,000
2) Executive Board, Committees, and Meetings Support	$24,000
3) Outreach and Membership Recruitment	$24,000
Total	**$84,000**

If you have any comments or questions or if you need additional information, please call Matt Bardol at (630) 203-3368.

Sincerely,

Matt Bardol, P.E., CFM, CPESC, D. WRE
Principal

CC: Mike Warner, Lake County SMC

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Des Plaines River Watershed Group

RFP 2015

Revision 1

Effective: May 29th, 2015

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Ste. 150
Geneva, IL 60134

Previous Contract RFP Response

The information contained herein is the confidential property of Suburban Laboratories, Inc. No photocopies or other reproductions of this document or its attachments may be made without the written consent of Suburban Laboratories' management. Questions regarding this RFP can be addressed to Kelly Culhane at (708) 544-3260

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Figures

No table of figures entries found.

1.0 INTRODUCTION

1.1. Summary of the Project

Suburban Laboratories, Inc., is interested in the opportunity to provide experienced surface water sampling and analysis for the Des Plaines River Watershed Workgroup planned for June 2015. Suburban Laboratories was founded in 1936 and is a full service laboratory with NELAC accreditation. Qualifications for Suburban Laboratories are included with the Sampling Quality Control Plan (SQCP).

The DRWW will provide the sites and schedules as necessary to assist with sampling. Suburban Labs will be equipped with portable field meter, GPS and all sampling equipment listed in the RFP. The GPS will also be used for navigation to the specified sampling coordinates and provided to the DRWW. Suburban Laboratories will collect the samples and perform all analytical testing. The vicinity map is provided in the RFP. Suburban Labs has full understanding of the site locations due to our experience working with the Conservation Foundation on the lower, east, and west branches of the Dupage River and Salt Creek.

Mr. Kaleb Meihls and Ms. Kelly Culhane will coordinate the sampling and analytical testing for Suburban Laboratories.

This RFP addresses both the water quality monitoring (35 21 00) and sediment monitoring (01 35 45), including Tier 1, Tier 2, Tier 3 water/sediment chemistry and all associated QC, beach sampling, surface water samples, mid-depth samples and sediment samples. Proper chain of custody will be maintained for each sample that is collected. The quality assurance objectives for sampling are addressed later in this document.

1.2. References

The following is a list of primary sources used for the generation of quality control procedures used in the laboratory:

1) American Public Health Association, and others. *Standard Methods for the Examination of Water and Wastewater* – 18th Edition, 1992 and Supplement. 19th Edition, 1995 and Online Edition, 1997 for certain methods.
2) American Society for Testing and Materials (ASTM) Methods
3) Illinois Administrative Code (IAC) Title 35 Part 186, *Accreditation of Laboratories for Drinking Water, Wastewater and Hazardous Waste Analyses*.
4) Illinois Administrative Code (IAC) Title 77 Part 465, *Certification and Operation of Environmental Laboratories.*
5) National Environmental Laboratory Accreditation Conference (NELAC) standards
6) USEPA ORD-EMSL, *Methods for the Determination of Inorganic Substances in Environmental Samples* (EPA-600/4-R-93/100), August, 1993.
7) USEPA ORD-EMSL, Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020), March 1983.

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2.0 SAMPLING SCHEDULE

2.1. Tier 1, 2, 3 Water and Sediment Chemistry Sampling

Water sampling for Tier 1, 2 and 3 will begin immediately after contract approval. Suburban Labs will spread out the 45 sampling sites over the course of each month. This sampling will be performed each week averaging 10-15 sites per week. The weekly sampling will continue throughout the 7 months listed in the RFP. These months consist of May through September and November and March. For the first contracted year, we understand there will be no sampling in the month of May.

These collected samples will be tested for the water quality monitoring parameters listed in Table 2. The analytical methods and Suburban Laboratory's Standard Operating Procedures (SOPs) for analyzing the samples are listed on Table B. The reporting limits and the laboratory method detection limits (MDLs) are listed in table C.

2.2. Field QA/QC samples

For every 20 samples collected, Suburban will also collect a blank and duplicate samples. The blank will be made up in the field by pouring deionized water into the same type of sample containers that are used for the surface water. The deionized water will be laboratory grade water from Suburban Laboratories Geneva location. This water will be placed inside a pre-cleaned and certified container.

2.3. Field Parameters

Suburban Laboratories is equipped with an YSI field meter. This meter will be utilized for the following analyses in the field:

- Conductivity
- pH
- Temperature
- Dissolved Oxygen

The results of these parameters will be reported on the final report along with the results of the analyses performed in the laboratory. This meter is calibrated each day prior to sampling.

3.0 FIELD REPORTING

3.1. Field Log

A field log will be kept each day that samples are collected. The field log will include:

- Name and signature of the field services technician;
- Location of sampling site
- Weather and water conditions (if unordinary condition apply);
- Dates and times of sample collection;

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- GPS location of sampling (in latitude/longitude and state plane) for first event on each site;
- Preservatives;
- Field measurements
- Descriptions of any unusual conditions at the sample locations
- Chains of Custody
- Indication of duplicate sample location

4.0 SAMPLE CUSTODY AND HANDLING

4.1. Labeling and Storage

All samples will be placed in non-contaminated containers provided by Suburban Laboratories. All containers will be properly labeled. The duplicate sample will be labeled with the sample location and identified as "duplicate". When preservation is required, pre-preserved bottles will be used. Samples will be placed inside a cooler with wet ice until they reach the laboratory.

4.2. Chain of custody

Proper chain of custody documentation will accompany the collected samples. The chain of custody will contain the sample IDs, analyses to be performed, date and time of collection, type and number of containers, preservatives added, date and time of transfers, and the signature of each person involved in custody transfer. The chain of custody will be placed in a water-resistant plastic bag inside each cooler. Indelible ink will be used on the container labels and chain of custody records. Upon receipt at the laboratory, sample temperature will be recorded on the chain of custody form. A copy of the chain of custody form (shown in Figure B) will be included with the final report.

4.3. Sample preservation

Preservatives will be added to sample bottles prior to sample collection. Sample containers must only be purchased from reputable suppliers and cannot be re-used.

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5.0 SAMPLING EQUIPMENT

5.1. Supplies

- 1-gallon HDPE bucket, nylon rope
- Distilled or reagent-grade deionized water
- Sample bottles (provided by Suburban Laboratories, Inc.):
    - One 1000 mL HDPE with H_2SO_4 preservative for NH_3-N, TKN and Total Nitrates
    - One 1000 mL HDPE unpreserved bottle for BOD, TSS, TDS, Chloride, Sulfate

  - One 1000 mL HDPE bottle with HNO_3 preservative for Metals, (including Phosphorous and Mercury)
- Two 1000 mL amber glass bottles unpreserved for Pesticides, PCBs, and PNAs
- Three 40 mL VOA vials with HCl preservative for VOCs
- Disposable gloves
- Cooler and ice
- Antibacterial soap
- Sharpie markers and labels
- Field books/log sheets/chain of custody
- Portable pH meter
- Sampling pole

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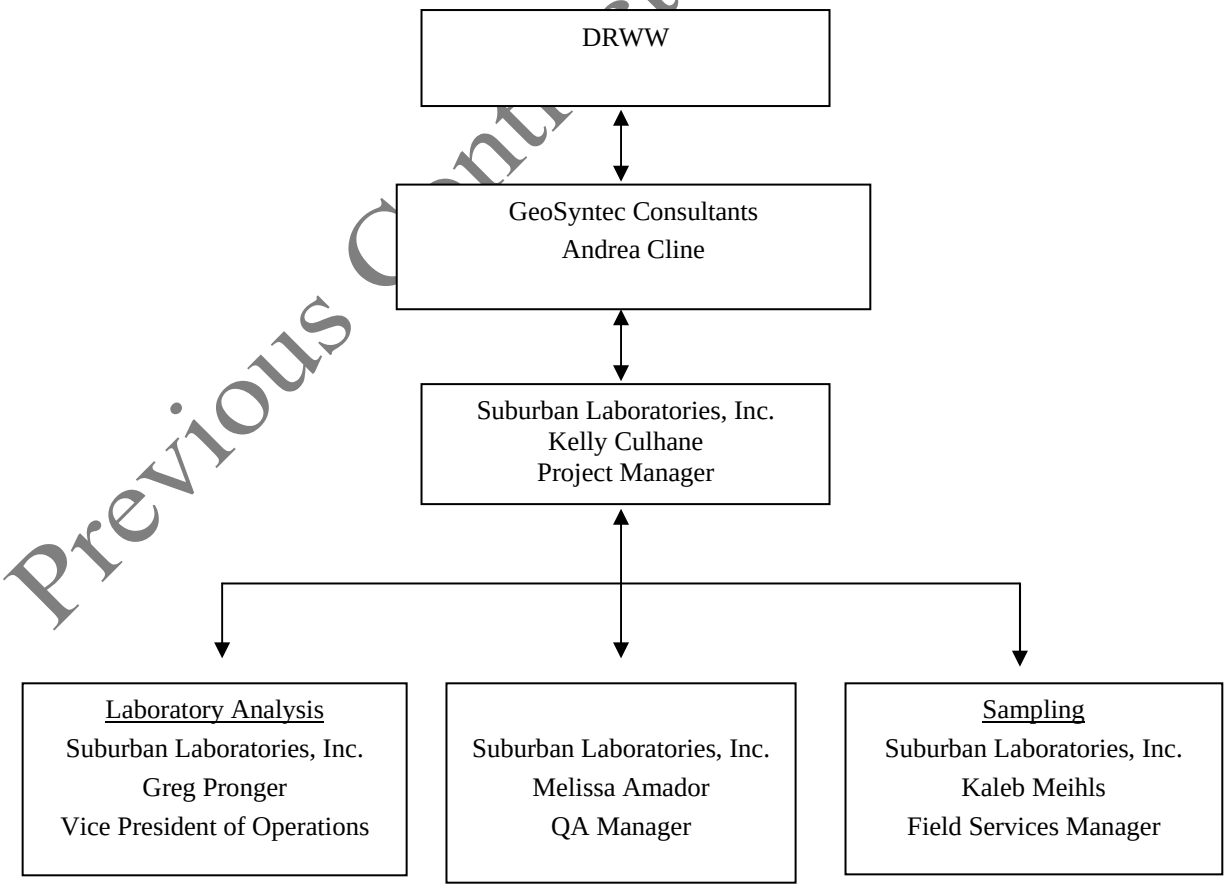
6.0 PROJECT ORGANIZATION

The following chart defines the project organization for the Des Plaines River Watershed Workgroup 2015. See attachments for qualifications of key personnel.



7.0 ANALYTICAL METHODS

7.1. Analytical Methodology and Standard Operating Procedures (SOPs)

SOPs have been developed for all analytical methods and related QA/QC operations. Our QA/QC manual can be sent as a large file upon request. The test methods and reporting limits are also included (shown in Table B).

8.0 QUALITY ASSURANCE OBJECTIVES FOR SAMPLING

8.1. Laboratory QC Requirements

All data produced by our laboratory are assumed to have far-reaching financial, regulatory, or health implications. We are committed to ensuring that all employees understand data importance, are professionally competent, and strictly adhere to quality assurance standards. The laboratory will follow all applicable method requirements to ensure quality control of each analytical batch. Where applicable, quality control checks will include laboratory method blank (LMB), matrix spike and matrix spike duplicate (MS/MSD) and laboratory control sample (LCS).

8.2. Duplicate

A duplicate will be collected after every 20 samples are collected. The sample location will be identified on the bottle and the chain of custody form. The location of the duplicate will be also be identified on the field log.

8.3. NELAC Accreditation

The laboratory is accredited for waste water analysis through the National Environmental Laboratory Accreditation Council (NELAC). Note that NELAC certification is not available for some parameters. A copy of the laboratories current certification is attached.

8.4. IDPH Accreditation

Suburban Labs is also accredited for E-coli tested through the Illinois Department of Public Health (IDPH). A copy of the current IDPH certification is attached.

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9.0 SUBCONTRATORS

Suburban Laboratories, Inc. will be subcontracting some of the analysis as follows:

- The analysis of herbicides (2,4-D and 2,4,5-TP) in sediment will be subcontracted to STAT Analysis in Chicago, IL.
- If needed for the low detection limit. The analysis of low-level Mercury by method 1631 will be subcontracted to TekLab, Inc. in Collinsville, IL. Suburban Laboratories should be accredited to perform this analysis within 6 months of the start of this project.

10.0 FINAL REPORT PACKAGE

10.1. Final Report

The final report will consist of a PDF file of all analytical results, analytical methods, chain(s) of custody and a field log. Any sampling or testing observations which may have affected accuracy will be noted in the report narrative. Any applicable data qualifiers (e.g., matrix spike failure) will also be noted in the project specific comments portion of the report narrative page.

10.2. Electronic Data Deliverable

An electronic data deliverable (EDD) which includes the sample results in an editable Microsoft Excel file will be included for every report.

10.3. Turnaround Time

The results for all analytical analyses will be provided no later than 10 business days following the date of collection.

11.0 PRE-SAMPLING QUALITY ASSURANCE / QUALITY CONTROL MEETING

If needed. The pre-sampling quality assurance / quality control meeting will be held prior to the initial sampling event. Included will be members of the DRWW, Suburban Laboratories and Andrea Cline. The purpose of the meeting will be to discuss specific sampling and Data Quality Objectives related to this project.

12.0 PAST STUDIES WITH WATER BODIES

Suburban Laboratories has extensive experience in regards to sampling and analysis on monitoring watersheds and sediments. For the past 8 years (June 2007 to current) we have worked exclusively with Stephen McCracken with the Conservation Foundation and directly for the DuPage River Salt Creek Work Group (DRSCW) on varies projects that are equal to the DRWW. With these projects, we are performing the same exact sampling, scheduling plan and analytical parameters as being requested in this RFP. Those projects include:

- Lower DuPage River
  10 S 404 Knoch Knolls Rd
  Naperville, IL 60565
  Jennifer Hammer jhammer@theconservationfoundation.org
  630-478-8106
- East Branch of the DuPage River
  10 S 404 Knoch Knolls Rd
  Naperville, IL 60565
  Stephen McCracken smccracken@theconservationfoundation.com

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630-768-7427

- West Branch of the DuPage River
  10 S 404 Knoch Knolls Rd
  Naperville, IL 60565
  Stephen McCracken smccracken@theconservationfoundation.com
  630-768-7427
- Salt Creek
  10 S 404 Knoch Knolls Rd
  Naperville, IL 60565
  Stephen McCracken smccracken@theconservationfoundation.com
  630-768-7427

Suburban Labs has also performed similar water quality sampling/analysis for the Waukegan Harbor for dredging purposes. All sampling, analytical, QAQC and reporting has been approved through the Army Corp of Engineers. We used the same field meter and a Kemeler Sampler. Since June of 2007 to current, we have worked with the following firms as a subcontractor for the Waukegan dredging project:

- Great Lakes Boat and Dock –
  1800 Lakeshore Dr.
  Muskegon MI 49441
  Joe Bailey Jbailey@greatlakesdock.com
  231-728-4172

- Luedtke Engineering –
  10 Fourth Street
  Frankfort MI, 49635
  Jon Keilor Landskeilor@yahoo.com
  231-352-9631

- Ryba Marine –
  629 N. Main Street
  Cheboygan MI 49721
  Ralph Farver Rfarver@rybamarine.com
  231-627-4333 x15

The following equipment was used for this water quality dredging study:

- A 2.2L capacity Acrylic Kemmerer with measured drop line will be used to collect the weekly surface and mid-depth samples.
- Carboy for carrying reagent water to the field. Reagent water used for decontamination of field equipment will be deionized water obtained from the laboratory.

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- Biodegradable phosphate free detergent solution for decontamination of field equipment. The preferred detergent is a dilute solution of Dawn® Ultra Concentrate which contains biodegradable anionic and nonionic surfactants and no phosphate.
- Brushes and paper towels for decontamination of equipment.
- Gloves for field use when handling ropes. Latex gloves for use when handling samples.
- Pre-preserved bottles for ammonia / phosphorus (500mL plastic with H2SO4), hardness (500mL plastic with HNO3), total suspended solids (1L plastic unpreserved) and pH / temperature (8oz plastic unpreserved).
- Cooler and ice for storage and transport of collected samples.
- Field meter for measurement of pH, DO and thermometer for measure of field temperature.
- Field log and water resistant pen
- Camera for photos of sediment samples
- Weighted measure device
- Bucket

Please let us know if you would need more information on these references.

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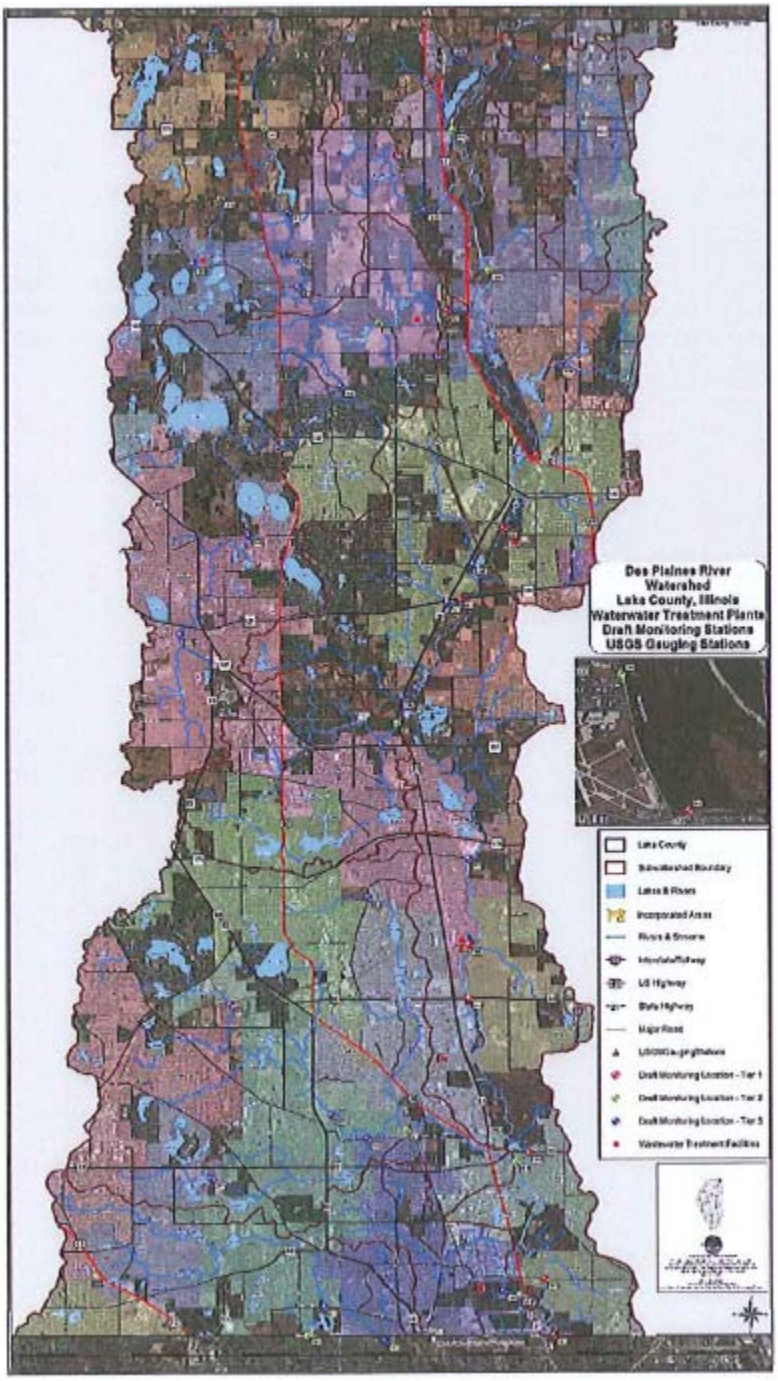
Figure A Sampling Locations Map



Previ
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Table A Sampling Locations Description

Des Plaines River Sample Locations	Street	Station ID	Bioassessment Tier Designation		
Upper Des Plaines	Russell Rd	13-6	1		
	Highway 173	13-5			3
	Wadsworth Rd	13-4		2	
	Above Highway 41	13-3	1		
	McClure Ave	13-2	1		
	Highway 120	13-1	1		
Lower Des Plaines	Rockland Rd	16-7			3
	CN Railroad	16-6	1		
	Highway 60	16-5	1		
	Half Day Rd	16-4	1		
	Deerfield Rd	16-3	1		
	Lake Cook Rd	16-2	1		
	Willow Rd	16-1	1		
Upper Des Plaines Tributaries	Bull's Brook @ Route 21	13-8			3
	Belvidere Rd Tributary @ Highway 21 and 120	13-9			3
	Stoneroller @ Lake Carina	13-10			3
	Suburban Country Club Tributary @ Shirley Dr	13-11			3
	Slocum Corners Creek @ Mill Creek Rd	13-12			3
Newport	Newport Drainage Ditch @ Kilbourne Ave	12-1			3
North Mill	Milburn Rd	10-1			3
	Kelly Rd	10-2			3
	Route 173	10-3		2	
	Miller Rd	10-4		2	
	Grass Lake Rd	10-5			3
Mill Creek	Dilley's Rd	11-1	1		
	Hunt Club Rd	11-2		2	
	Stearns School Rd	11-3			3
	Route 45	11-4			3
	Washington St	11-5			3
	Wick St	11-6			3
Bull Creek	Bull Creek @ Route 21	14-1		2	
	Route 137	14-2			3
Indian Creek	Marriot Lincolnshire Grounds	15-1		2	
	Sullivan Wood Preserve, North of Creek View Dr	15-2		2	
	Butterfield	15-3			3
	Port Clinton Rd @ Kildeer Creek	15-4			3
	Oak Wood Rd	15-5			3
	Washitay Ave	15-6			3
	Salem Lake Dr	15-7			3
Aptakisic	Pekara Rd	18-2			3
	Aspen Rd	18-1		2	
Buffalo Creek	Lake Cook Rd @ Farington Ditch	17-2			3
	Checker	17-3			3
	Lake Cook Rd @ Buffalo Creek Tributary A	17-4		2	
	Route 21	17-1		2	
	Total		11	10	24

Table B Test Methods and Reporting Limits

	Method	MDL/Reporting Limit
Demand		
Chloride	325.2, EPA	0.5 mg/L
Conductivity	2510B, SM18th Ed.	2 µmhos/cm
pH	4500-H B, SM18th Ed.	N/A
TOC	5310B	1 mg/L
Sulfate	375.4, EPA	1 mg/L
TSS	2540D, SM18th Ed.	0.2 mg/L
VSS	2540E	0.2 mg/L
DO	4500 YSI field meter	0.1 mg/L
Temperature	170.1	°C
Turbidity	180.1	0.1 mg/L
Metals		
Total Hardness	2340B. SM18th Ed.	0.05 mg/L
Iron	200.7, EPA	0.005 mg/L
Sodium	200.7	0.1 mg/L
Arsenic	200.8	0.0008 mg/L
Manganese	200.8	0.002 mg/L
Mercury *	245.1, EPA or *1631 low det	0.0002 mg/L or 0.5 Ng/L
Copper	200.8, EPA	0.0005 mg/L
Nickel	200.8	0.0004 mg/L
Zinc	200.8, EPA	0.007 mg/L
Nutrients		
Ammonia	4500 NH3 D, SM18th Ed.	0.1 mg/L
Total Nitrates (NO2 + NO3)	352.1, EPA	0.05 mg/L
TKN	4500 NH3 C, SM18th Ed.	0.124 mg/L
Phosphorous	200.8, EPA	0.02 mg/L
Dissolved reactive Phosphorus	SM4500P E	0.026 mg/L
Bacteria		
E-coli	9213D	1 CFU/100ml
Water Organics		
PCBs	8082, EPA	0.1 ug/L
Pesticides	8081, EPA	0.025 ug/L
Methoxychlor	8081 EPA	0.25 ug/L
PNAs	8270, EPA	0.1 ug/L
VOCs	8260, EPA	1.0 ug/L
Sediment Organics		
PCBs	8082, EPA	16.7 ug/Kg
Pesticides	8081, EPA	0.833 ug/Kg
Methoxychlor	8081 EPA	0.833 ug/Kg
PNAs	8270, EPA	40 ug/Kg
VOCs	8260, EPA	1.0 ug/Kg
Herbicides (2,4,D & 2,4,5 TP)	8321	0.004 ug/Kg
Sediment inorganics		
TKN	4500 NH3E	100 mg/Kg
Phosphorus	6010B, EPA	2.3 mg/Kg
Cyanide	9014	0.005 mg/Kg
Phenols	420.1	0.005 mg/Kg

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Table B (cont.) Methods and Reporting Limits

	Method	MDL/Reporting Limit
Sediment Metals		
Aluminum	6010B, EPA	2.50 mg/Kg
Arsenic	6010B, EPA	1.15 mg/Kg
Barium	6010B, EPA	0.125 mg/Kg
Beryllium	6010B, EPA	0.0025 mg/Kg
Boron	6010B, EPA	0.05 mg/Kg
Cadmium	6010B, EPA	0.075 mg/Kg
Chromium	6010B, EPA	0.0600 mg/Kg
Cobalt	6010B, EPA	0.625 mg/Kg
Copper	6101B EPA	0.150 mg/Kg
Iron	6010B, EPA	0.625 mg/Kg
Lead	6010B, EPA	0.6 mg/Kg
Manganese	6010B, EPA	0.625 mg/Kg
Mercury	245.1	0.02 mg/Kg
Nickel	6010B, EPA	0.235 mg/Kg
Potassium	6010B, EPA	2.5 mg/Kg
Silver	6010B, EPA	0.06 mg/Kg
Sodium	6010B EPA	1.25 mg/Kg
Strontium	6010B, EPA	0.120 mg/Kg
Vanadium	6101B EPA	0.150 mg/Kg
Zinc	6010B, EPA	0.075 mg/Kg
Fluoride	4500	0.05 mg/Kg

- If Low level Hg method 1631 is needed, the detection limit for that method is 0.5 Ng/L

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