



Des Plaines River Watershed Workgroup

Executive Board

1/6/2015

11:30AM-12:30PM

Lake County Central Permit Facility

500 W. Winchester Road, Libertyville IL 60048

Outcomes:

- Discuss Bioassessment Contract

Agenda

1. Call the meeting to order
2. Approve Previous Meeting minutes
3. Public Comment
4. Treasurer's Report/DRWW Membership update
5. Action Item: Discuss Bioassessment Contract Scope
6. Next General Membership Meeting February 11th
7. Next Executive Board Meeting February 18 – 11:30AM
8. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

1/6/2016

11:30 AM-12:30 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Call the meeting to order: Brian Dorn called the meeting to order.
2. Approve Previous Meeting minutes. Michael Talbett made a motion to approve the minutes from the December 10th Executive Board meeting, Paul Kendzior seconded the motion. The motion passed unanimously.
3. Public Comment: none.
4. Treasurer's Report/DRWW Membership update: Mike Warner said that after today's meeting the B&M contract \$39,600. Geosyntec's contract is for \$33,000. MBI's is for \$165,000. Budget projections will be presented at next Executive Board meeting and he will show how that will affect budget for years to come. It looks like we are within budget and dues projection. Peter asked about sending out invoices for membership dues. Mike W will send out cover letter and invoice. There will be a different letter for existing and potential members. Andrea will develop a one page annual summary to be included and also send along the delegate form.
5. Action Item: Discuss Bioassessment Contract Scope: Joe summarized the Monitoring Committee meeting. All sampling will be conducted in 2016. There is a cost savings by doing it this way. There will be a bioassessment kickoff meeting at the June Monitoring Committee meeting.
6. Next General Membership Meeting February 11th at 10 AM at NSWRD. Brian will talk to Fred Andes about presenting at the meeting about the proposed chloride variance. Mike W will have annual budget projections. Andrea will do an annual summary of activities and a work plan. Andrea asked Joe about monitoring summary. Patty wants someone to do a watershed planning status update. Peter asked about membership access to the raw data. He suggested Dropbox. Andrea will send a sample SharePoint site to the Executive Board and Monitoring Committee. Mike Adam announced that the Lakes Committee will meet January 28th. Scott will work with AI to discuss Impairments/MS4 committee.
7. Next Executive Board Meeting February 18 – 11:00AM at CPF. Monitoring Committee at 9:30.
8. Adjourn: Joe made a motion to adjourn. Paul seconded the motion. The motion to adjourn was approved unanimously.

Executive Board Members Present:

Brian Dorn, NSWRD

Michael Talbett, Kildeer

Paul Kendzior, Libertyville

Scott Phippen, Lincolnshire

Joe Robinson, NSWRD

Mike Adam, Lake County Health Department

Peter Kolb, Lake County Public Works (via phone)

Other Attendees:

Jim Bland, Sierra Club

Andrea Cline, Geosyntec

KC Doyle, Lake County

Rob Flood, NSWRD

Austin McFarlane, Lake County Public Works

Steve Vella, Libertyville

Mike Warner, Lake County SMC

Patty Werner, Lake County SMC



**Des Plaines River Watershed Workgroup
Executive Board
2/18/2016
11AM – 12PM
Lake County Central Permit Facility
500 W. Winchester Road, Libertyville IL 60048
(2nd Floor SMC Conference Room)**

Outcomes:

- Approve 2016 Budget
- Approve Suburban Labs Contract Amendment
- Discuss Nutrient Trading as Five-Year Workplan Item

Agenda

1. Call the meeting to order
2. Approve Previous Meeting minutes
3. Public Comment
4. Action Item: Approve 2016 Budget
5. Action Item: Approve Suburban Labs Amendment
6. Discussion Item: Water Quality/Nutrient Trading Future Work Plan Suggestion
7. Next Executive Board March 3rd – 11AM
8. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

1/6/2016

11:30 AM-12:30 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

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Rob Flood, NSWRD

Austin McFarlane, Lake County Public Works

Steve Vella, Libertyville

Mike Warner, Lake County SMC

Patty Werner, Lake County SMC



MEMORANDUM

Date February 12, 2016
TO: Des Plaines River Watershed Workgroup
FR: Mike Warner, DRWW Administrative Agent
RE: Contract Amendment for Suburban Labs

**ACTION REQUESTED: Discussion at 2/18/16 Monitoring Committee
Approval of Contract Amendment at 2/18/16 Executive Board**

SMC has had several discussion with Suburban Labs on changing the excel file deliverable in their current contract to match the data formatting required by the IEPA grant (STORET format) that is supported by DRWW monitoring efforts. An example excel file is attached.

STORET Data Formatting: Based on discussions and going back and forth with revisions to the excel format, that effort has been quantified and format tentatively approved. The cost to execute and amendment is also attached. Final approval will need to be in a contract amendment with Suburban Labs increasing their contract for a one time system modification of \$3000 from \$66,508 to \$69,508, approved by the Executive Board. There is funding available for this amendment.

Contract End Date: The start of the six (6) contractual samplings was moved back from the original contract date of July 2015 to September 2015 due to delays in the RFP process and finalizing monitoring locations. Suburban Labs was able to complete 3 samplings in 2015 starting in September 2015 and is planning on starting sampling (weather permitting) in March 2016. To accommodate the collection of the three additional samplings, this letter of agreement would extend the original contract through the end of June 2016, and Suburban labs would provide three (3) additional samplings during the period of March 2016 to June 2016.

Signature of this agreement amendment cover document will constitute agreement with the extension and additional cost associated with data management.

For the DRWW:

Attest:

Peter Kolb, President

Date:

Signature, Title

Suburban Labs

Dan Galeher

Date

Vice President of Sales and Service Suburban Laboratories, Inc.

SUBURBAN LABORATORIES, Inc.



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www.suburbanlabs.com

January 29, 2016

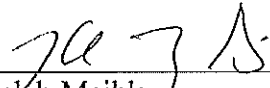
Mike Warner
Des Plaines River Workgroup

Subject: Amendment to Agreement for Des Plaines River Sampling

Mike Warner with the Des Plaines River Workgroup has inquired with Suburban Labs for formatting a spreadsheet (STORET form) for analytical results for the Des Plaines River sampling. The price for completion of this is \$3,000.

Please sign below, agreeing to the quoted price.

Yours very truly,

 1/29/16
Kaleb Meihls
Suburban Labs

Mike Warner
Des Plaines River Workgroup



Client/SampID	Analyte	Units	EDDFinalQual	MDL	9/21/2015 12:54:00 PM	10/22/2015 10:54:00 AM	12/1/2015 11:35:00 AM
13-2	Conductivity	umhos/cm			1298		1221
13-2	Dissolved Oxygen	mg/L			8.79		8.31
13-2	pH, Field				8.11		8.24
13-2	Temperature	C			20.61		6.79
13-2	Chloride	mg/L		20		102	170
13-2	E. Coli	MPN/100mL		1		236	816
13-2	Mercury	ng/L		0.5			1.21
13-2	Nitrogen, Ammonia (As N)	mg/L	ND	0.1		0.1	0.1
13-2	Nitrogen, Kjeldahl, Total	mg/L	J	0.5		1.2	0.97
13-2	Nitrogen, Kjeldahl, Total	mg/L	JS	0.5			0.83
13-2	Orthophosphate (As P)	mg/L		0.026		0.17	
13-2	Orthophosphate (As P)	mg/L		0.13			1
13-2	Residue, Non-Filterable	mg/L		0.2		8.2	6
13-2	Sulfate	mg/L		2		32.2	
13-2	Sulfate	mg/L		4			46.4
13-2	Sulfate	mg/L		10			75.6
13-2	Total Nitrates (Nitrate+Nitrite)	mg/L		0.05		1.3	0.454
13-2	Total Nitrates (Nitrate+Nitrite)	mg/L		0.1			2.78
13-2	Total Organic Carbon	mg/L	ND	1		1	
13-2	Total Organic Carbon	mg/L	ND	1.43			1.43
13-2	Turbidity	NTU		0.1			5.21
13-2	Turbidity	NTU	H	0.1		9.36	
13-2	Volatile Suspended Solids	mg/L	J	0.2		2.8	1.4
13-2	Arsenic	mg/L		8E-04			0.00939
13-2	Calcium	mg/L		0.015			72.2
13-2	Copper	mg/L		0.001			0.00166
13-2	Hardness (As CaCO3)	mg/L		0.05			313
13-2	Iron	mg/L		0.012			0.354
13-2	Magnesium	mg/L		0.011			32.1
13-2	Manganese	mg/L		0.002			0.0638
13-2	Nickel	mg/L		4E-04			0.00134
13-2	Phosphorus	mg/L		0.02		0.236	1.06
13-2	Sodium	mg/L		0.1			96.5
13-2	Zinc	mg/L		0.005			0.00753
13-2	1,1,1-Trichloroethane	ug/L	ND	1			1
13-2	1,1,2,2-Tetrachloroethane	ug/L	ND	1			1
13-2	1,1,2-Trichloroethane	ug/L	ND	1			1
13-2	1,1-Dichloroethane	ug/L	ND	1			1
13-2	1,1-Dichloroethene	ug/L	ND	1			1
13-2	1,2-Dibromo-3-chloropropane	ug/L	ND	1			1
13-2	1,2-Dichlorobenzene	ug/L	ND	1			1
13-2	1,2-Dichloroethane	ug/L	ND	1			1
13-2	1,2-Dichloropropane	ug/L	ND	1			1
13-2	1,3-Dichlorobenzene	ug/L	ND	1			1
13-2	1,4-Dichlorobenzene	ug/L	ND	1			1
13-2	2-Butanone	ug/L	ND	10			10
13-2	2-Chloroethyl vinyl ether	ug/L	ND	10			10
13-2	2-Hexanone	ug/L	ND	25			25
13-2	4,4'-DDD	ug/L	ND	0.05			0.05
13-2	4,4'-DDE	ug/L	ND	0.05			0.05
13-2	4,4'-DDT	ug/L	ND	0.05			0.05
13-2	4-Methyl-2-pentanone	ug/L	ND	25			25
13-2	Acenaphthene	ug/L	ND	0.1			0.1
13-2	Acenaphthylene	ug/L	ND	0.1			0.1
13-2	Acetone	ug/L	ND	25			25
13-2	Acrolein	ug/L	ND	25			25
13-2	Acrylonitrile	ug/L	ND	25			25
13-2	Aldrin	ug/L	ND	0.025			0.025
13-2	alpha-BHC	ug/L	ND	0.025			0.025
13-2	alpha-Chlordane	ug/L	ND	0.025			0.025
13-2	Anthracene	ug/L	ND	0.1			0.1
13-2	Aroclor 1016	ug/L	ND	0.1			0.1
13-2	Aroclor 1221	ug/L	ND	0.1			0.1
13-2	Aroclor 1232	ug/L	ND	0.1			0.1
13-2	Aroclor 1242	ug/L	ND	0.1			0.1
13-2	Aroclor 1248	ug/L	ND	0.1			0.1
13-2	Aroclor 1254	ug/L	ND	0.1			0.1
13-2	Aroclor 1260	ug/L	ND	0.1			0.1
13-2	Benzene	ug/L	ND	1			1
13-2	Benzo(a)anthracene	ug/L	ND	0.1			0.1
13-2	Benzo(a)pyrene	ug/L	ND	0.1			0.1
13-2	Benzo(b)fluoranthene	ug/L	ND	0.1			0.1
13-2	Benzo(g,h,i)perylene	ug/L	ND	0.1			0.1
13-2	Benzo(k)fluoranthene	ug/L	ND	0.1			0.1
13-2	beta-BHC	ug/L	ND	0.025			0.025
13-2	Bromodichloromethane	ug/L	ND	1			1
13-2	Bromoform	ug/L	ND	1			1
13-2	Bromomethane	ug/L	ND	1			1
13-2	Carbon disulfide	ug/L	ND	1			1
13-2	Carbon tetrachloride	ug/L	ND	1			1
13-2	Chlordane	ug/L	ND	0.1			0.1
13-2	Chlorobenzene	ug/L	ND	1			1
13-2	Chloroethane	ug/L	ND	1			1
13-2	Chloroform	ug/L	ND	1			1
13-2	Chloromethane	ug/L	ND	1			1
13-2	Chrysene	ug/L	ND	0.1			0.1
13-2	cis-1,2-Dichloroethene	ug/L	ND	1			1
13-2	cis-1,3-Dichloropropene	ug/L	ND	1			1
13-2	delta-BHC	ug/L	ND	0.025			0.025
13-2	Dibenzo(a,h)anthracene	ug/L	ND	0.1			0.1
13-2	Dibromochloromethane	ug/L	ND	1			1
13-2	Dichlorodifluoromethane	ug/L	ND	1			1
13-2	Dieldrin	ug/L	ND	0.05			0.05
13-2	Endosulfan I	ug/L	ND	0.025			0.025
13-2	Endosulfan II	ug/L	ND	0.05			0.05
13-2	Endosulfan sulfate	ug/L	ND	0.05			0.05
13-2	Endrin	ug/L	ND	0.05			0.05
13-2	Endrin aldehyde	ug/L	ND	0.05			0.05
13-2	Endrin ketone	ug/L	ND	0.05			0.05
13-2	Ethylbenzene	ug/L	ND	1			1
13-2	Fluoranthene	ug/L	ND	0.1			0.1
13-2	Fluorene	ug/L	ND	0.1			0.1
13-2	gamma-BHC	ug/L	ND	0.025			0.025
13-2	gamma-Chlordane	ug/L	ND	0.025			0.025
13-2	Heptachlor	ug/L	ND	0.025			0.025
13-2	Heptachlor epoxide	ug/L	ND	0.025			0.025
13-2	Indeno(1,2,3-cd)pyrene	ug/L	ND	0.1			0.1
13-2	m,p-Xylene	ug/L	ND	2			2
13-2	Methoxychlor	ug/L	ND	0.25			0.25
13-2	Methyl tert-butyl ether	ug/L	ND	1			1
13-2	Methylene chloride	ug/L	ND	5			5
13-2	Naphthalene	ug/L	ND	0.1			0.1
13-2	o-Xylene	ug/L	ND	1			1
13-2	Phenanthrene	ug/L	ND	0.1			0.1
13-2	Pyrene	ug/L	ND	0.1			0.1
13-2	Styrene	ug/L	ND	1			1
13-2	Tetrachloroethene	ug/L	ND	1			1
13-2	Toluene	ug/L	ND	1			1
13-2	Total Xylenes	ug/L	ND	2			2
13-2	Toxaphene	ug/L	ND	0.2			0.2
13-2	trans-1,2-Dichloroethene	ug/L	ND	1			1
13-2	trans-1,3-Dichloropropene	ug/L	ND	1			1
13-2	Trichloroethene	ug/L	ND	1			1
13-2	Trichlorofluoromethane	ug/L	ND	1			1
13-2	Vinyl chloride	ug/L	ND	1			1

TECHNICAL SERVICES AGREEMENT between the
DES PLAINES RIVER WATERSHED WORKGROUP
and
SUBURBAN LABORATORIES, INC. for
WATER CHEMISTRY MONITORING

This is an agreement (Agreement) by and between the DES PLAINES RIVER WATERSHED WORKGROUP, 500 West Winchester Road, Libertyville, Illinois 60048 (DRWW) and SUBURBAN LABORATORIES 1950 S Batavia Avenue, Geneva, IL 60134 (Subcontractor).

PURPOSE

The DRWW wishes to engage the Subcontractor to provide technical services to assist the DRWW in conducting water chemistry monitoring in the Des Plaines River watershed located in central Lake County, Illinois. The water chemistry monitoring will satisfactorily collect and process water column chemistry monitoring samples within the service area. The group has selected approximately 44 sampling locations within the Des Plaines River watershed in Lake County, Illinois.

SERVICES

The Subcontractor will conduct water column chemistry sampling by collecting samples, analyzing the samples collected, and providing the data to the DRWW based on the approved DRWW Quality Assurance Project Plan. The Scope of Services to be provided by the Subcontractor to accomplish the DRWW's objectives for the water column chemistry monitoring is set forth in Attachment A, Suburban Laboratories Quote.

COMPENSATION

1. The Subcontractor agrees to perform the Scope of Services and furnish the items included in the Scope of Services for a fee (Agreement Amount) not to exceed \$66,508 according to the rates in the Project Budget Attachment B.
2. The DRWW agrees to pay the Subcontractor for a total project cost not to exceed \$66,508 using the compensation schedule identified in Attachment B. The final ten percent of the Agreement Amount shall be retained by the DRWW until the project is successfully completed and all deliverables have been received and approved.
3. The Subcontractor shall furnish the DRWW with an itemized invoice on a monthly basis. Invoices shall describe the work completed; show the actual number hours worked by team member; and actual travel and other expenses that have occurred. Payments by the DRWW shall be made within 60 days of receipt of the invoice from the Subcontractor.

SCHEDULE AND DELIVERABLES

All sampling shall be completed by March 30, 2016. The project, including all reporting, shall be completed by April 15, 2016 and proceed according to the schedule details outlined and as follows. Generally, sampling will be conducted at all sites within one week per month and approximately the same week every month.

Sampling Schedule

- July 2015
- August 2015
- September 2015
- November 2015
- March 2016

Project Deliverables:

- Monthly reports including electronic data deliverables (EDDs) and the sample results in an editable Microsoft Excel file.
- A final report consisting 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.

TERMS and CONDITIONS

1. The DRWW may, by written Order, make changes in the scope of work if such changes are within the general scope of the Agreement. If such changes cause an increase or decrease in the Subcontractor's cost or the time required to complete the project, the parties hereto shall agree to an adjustment in the Agreement Amount, prior to issuance of the Change Order. Adjustment of the Agreement Amount shall be based on the estimated change in the number of staff hours required plus any changes in the Subcontractor's expense. The Subcontractor will not be compensated for additional services performed without an approved Change Order.
2. The DRWW may at any time terminate this Agreement in whole or in part by ten day written or telegraphic notice or verbal notice confirmed in writing. Upon termination for convenience of the DRWW, the DRWW will assume responsibility for services rendered and costs incurred prior to notification. Any and all services, property, publications or materials provided during or resulting from the Subcontractor shall be the property of the DRWW.
3. This Agreement shall be governed by and construed according to the laws of the State of Illinois.
4. The Subcontractor agrees to comply with the Conditions/Certifications outlined in Lake County Stormwater Management Commission's (SMC's) grant agreement #3191506 with the Illinois Environmental Protection Agency. The Certifications/Conditions are provided in Attachment C. Please note that "Recipient" refers to SMC, not the Subcontractor.

Paap/Hey Outline - Establishing a Water Quality [Trading] Market

1. Codify construction, operation and maintenance practices
 - a. Establish market constituents
 - i. Nitrogen
 - ii. Phosphorous
 - iii. Carbon
 - iv. Suspended solids
 - v. Dissolved solids
 - vi. Pharmaceuticals
 - b. Incorporate wetland mitigation banking
 - c. Establish techniques, scale, value and authority of flood easements
 - d. Identify regulatory agencies
2. Document financial conditions
 - a. Annualized cost of construction and operation
 - b. Annualized income from various ecosystem functions
3. Evaluate energy budget
4. Develop constituent advocacy association
 - a. Water reclamation districts
 - b. Municipalities
 - c. Watershed planning and management associations
 - i. Des Plaines River Working Group
 - ii. Preserve Lake County
 - d. Forest Preserve Districts
 - e. Professional organizations
 - i. Wetlands Initiative
 - ii. Society of Wetland Managers
 - iii. Society of Floodplain Managers
 - iv. American Society of Civil Engineers
 - v. American Society of Chemical Engineers
 - f. Environmental organization
 - i. Environment Illinois
 - ii. The Nature Conservancy
 - iii. Prairie Rivers Network
 - g. Possible Individuals
 - i. Kathy Ryg
 - ii. Albert Ettinger
 - iii. Kristy Kovarik
5. Establish political and legal support
 - a. Illinois congressional (senators and representatives) endorsement
 - b. Gubernatorial endorsement
 - c. Enabling legislation (for profit and non-for profit)
6. Appeal to the IEPA
7. Appeal to the Pollution Control Board
8. Establish regulatory oversight
 - a. USDA
 - b. Illinois Department of Agriculture
 - c. Army Corps of Engineers
 - d. Illinois Natural History Survey
 - e. Illinois Water Survey
 - f. IEPA
 - g. UDEPA
 - h. USFWL
9. Present example contract for purchase and sale of credits

AMERICAN FARMLAND

INSIDE THIS ISSUE

Water Defenders • Jen Filipiak • Save The Bees • How Water Quality Trading Works



LEFT: A stream on the Ohio farm of Ken Merrick. RIGHT: (Left to right) Bret, Elton and Dale Lowmiller, participants in the pioneering Ohio River Basin water quality trading program.

Water Defenders

A new water quality trading program—the first of its kind in the nation—is helping farmers protect the rivers and streams of the Ohio River Basin.

Elton Lowmiller knew there was a problem that needed fixing on his family’s north-eastern Ohio dairy farm. When it rained hard, water flowed through the farm’s barnyard, carrying cow manure and wastewater from the milkhouse down a hill toward a small stream.

“I was hunting with my cousin one time. He said, ‘You know, I’ve never seen the dogs drink out of that stream,’” Elton recalls. “That was on my mind. I knew we needed to do something.”

The potential pollution of the nearby stream, which drains into the Tuscarawas River, weighed

on Elton, his brother Bret and father Dale. The three men work together on Lowmiller Farms, milking 130 cows. They had implemented many other conservation practices on their farm, including measures to protect against soil erosion. But it was tough to find the money they needed to redirect the flow of water through their farm.

The Lowmillers—along with other family farmers in Ohio, Kentucky and Indiana—recently found the help they needed to make farm conservation improvements through an award-winning pilot program underway in the Ohio River Basin.

There, the Electric Power Research Institute (EPRI), American Farmland Trust and other partners recently established the nation’s first interstate water quality trading market, which allows industries to purchase water quality “credits” from farmers in the watershed. In turn, farmers use the funds to pay for conservation practices that reduce the amount of fertilizer running off their fields and barnyards.

The Lowmillers—working with their local soil and water conservation district—used the funding from the water quality trading program to build a catch basin where barnyard and milkhouse waste is contained and pumped into a lagoon. They established grass waterways to filter water before it reaches the stream, and put in a “heavy-use pad” that helps them keep the barnyard clean.

“The stream is a lot cleaner now,” says Elton. “And the project really made our operation a lot easier.”

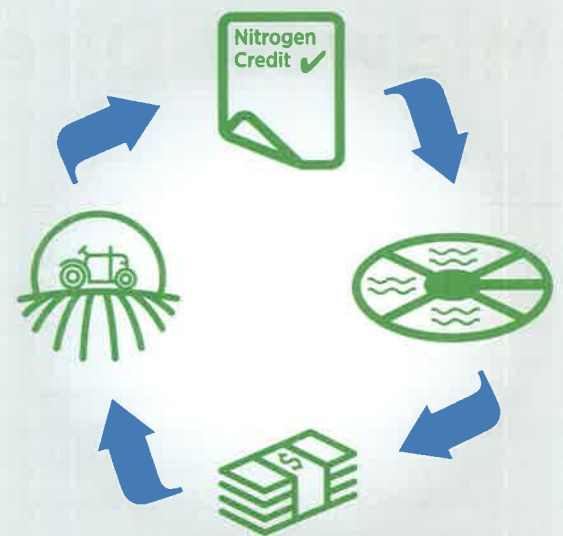
In the first year of the pilot program, 29 farms made improvements that kept an estimated 12,000 pounds of nitrogen and 3,800 pounds of phosphorus out of the Ohio River.

WATER DEFENDERS, continued on page 4

HOW WATER QUALITY TRADING WORKS

A farmer implements a conservation practice that reduces soil erosion and nutrient runoff, generating a financial credit. Possible practices include cover crops, grass waterways, conservation tillage and fencing of livestock from waterways.

A buyer (for instance a municipal wastewater facility that operates under a permit limiting their discharge into a stream) purchases these water quality improvements, or credits, from farmers. The buyer might be doing so to meet their permit requirements, or to improve their overall sustainability.



The entire watershed benefits: the transaction compensates the farmers for the costs of their conservation practices while improving the overall health of the environment.



“This program is unique in that it gets out to the small farmers. You can make a big difference that way.”

—KEN MERRICK, beef farmer, East Rochester, Ohio

FROM THE LEADERSHIP

Winter now blankets our farms and ranches with snow in many parts of the country, where fields lie fallow until spring. But it is not a time of rest for many of the nation's family farmers and ranchers. After the holiday celebrations subside, the new year brings much planning for the months ahead.

Farmers and ranchers use the winter season to crunch numbers and plan budgets, get equipment ready for spring, purchase seed, attend agricultural meetings and workshops, market their products, and tackle chores like hauling grain or feeding livestock.

Here at American Farmland Trust, we're busy this winter too, reviewing our successes in 2015 and setting our sights on our carefully considered priorities for the coming year. Several successes from 2015 have made me especially proud of our hardworking staff at AFT—and of you, our members, for your support that made those and other successes possible.

In 2015, AFT made great strides in protecting our precious land, soil, water and family farmers and ranchers:

- Our project with Electric Power Research Institute to establish the nation's first interstate water quality trading market in the Ohio River Basin was awarded the 2015 United States Water Prize by the U.S. Water Alliance.
- We expanded our national outreach program to women landowners in Maryland and Virginia. So far, our Conservation Learning Circles have taught over 300 women landowners about conservation techniques on their farms.
- In California, AFT drafted and co-sponsored legislation creating the new Sustainable Agricultural Land Conservation Program, which will fund farmland protection using revenue from the state's Global Warming Solutions Act.
- Thanks to efforts by AFT's New York office, the New York state budget included

record levels of funding for farmland protection—including \$15 million for New York's Farmland Protection Program and \$20 million for the protection of Hudson Valley farmland.



- AFT's staff in Washington state worked with local partners to achieve the highest state funding for farmland protection ever—\$14 million, nearly double the previous year's amount.
- AFT's Working Lands Alliance in Connecticut restored over \$35 million in Community Investment Act funding for farmland preservation, farm viability and open space projects.

In 2016, we will continue our work to pioneer the cutting-edge conservation that AFT is known for—and that we have spent decades refining. In the coming year, we will advance our mission to protect farmland, promote environmentally sound farming practices, and keep farmers on the land through a proven mix of programs to:

- **ADVOCATE:** *AFT will continue to be the voice for family farmers.* We will lead the fight to restore state farmland protection funding to pre-recession levels across the country. In states like Maryland, New York, California and other hotspots around the country, we have a strong network of activists ready to take action to protect some of the nation's most threatened family farms.
- **INVESTIGATE:** *The State of America's Farmland.* In the year ahead, we will complete the first phase of our ambitious and comprehensive national initiative to document the emerging threats to U.S. farm and ranch land, and to

identify solutions that reverse these dangerous challenges. This authoritative and once-a-generation assessment will ignite a new conversation on the future viability of America's agricultural resources.

- **EDUCATE:** *Cultivating next generation farmers.* Resources that help new farmers get access to land are sorely lacking. We are literally "writing the book" on how to help first-time farmers get access to land by developing a comprehensive curriculum to train land transition facilitators. Using this resource, we will launch a national network of trainers and service providers to help more first-time farmers start fulfilling careers in agriculture.
- **INNOVATE:** *Growing Food Connections.* We are strengthening local food systems from the ground up in eight communities across the country. These communities are proving grounds for new programs and policies that alleviate hunger while promoting a vibrant future for family farms.
- **COLLABORATE:** *Promoting healthy soil and safeguarding water quality.* By working directly with farmers, we are helping them improve the health of some of the most threatened waterways in America. And by connecting landowners to the right resources, we are protecting the precious soil that is the foundation of the food that feeds us all.

As our partners in the ongoing fight to save the nation's farm and ranch land, we could not do this work without you. Thanks so much for your dedication and support.

Buzz Thompson
Board Chair

AFT VOICES

Jen Filipiak, Associate Midwest Director

Iowa is the birthplace of Aldo Leopold, the famed ecologist and wildlife biologist known as a founder of the modern conservation movement. His landmark 1949 book *A Sand County Almanac* advocated Leopold's concept of a "land ethic"—a responsible relationship between people and the land.

When AFT's Associate Midwest Director Jen Filipiak moved to Iowa for a job with The Nature Conservancy in 2007, she learned firsthand about the intimate connection between farmers and their land.

"When I moved to Iowa, I was surprised at how strong the land ethic was," Jen says. "Farmers were really exhibiting Leopold's land ethic. They have an emotional connection to the land, and they want to be good stewards of the land."

Jen had spent much of her childhood in the urban and suburban environs of Chicago. "I was a typical city kid that didn't really understand what farming was all about," she says. But with

a bow-hunter for a father, she spent a lot of time in the woods searching for antler sheds, bird-watching and examining animal tracks.

"I learned at an early age about ecology and wildlife and natural resources," she says. With degrees in biology and wildlife ecology, Jen's conservation career eventually brought her to Iowa—a state where over 85 percent of the land is in farming.

"That's where my agricultural education came from," she says. "I was impressed by how complex farming is, and how tightly woven farming is to family and community. I knew when I left Iowa that I wanted to keep working on conservation issues with the agricultural community. I have a lot of optimism about farmers as conservation partners."

Since joining AFT in 2013, Jen has brought her optimism to Illinois and Indiana, where she works with farmers on projects that rebuild soil health and improve farm environmental performance.



She leads a new program in Illinois that is training a cadre of soil ambassadors who can reach out to farmers with the latest information about farming practices that support the living world of healthy soil.

In Illinois she also oversees major water quality projects in two agricultural watersheds—the Vermilion River Headwaters and Upper Macoupin Creek—that have been

Save the Bees

A NEW AFT PROJECT HELPS FARMERS PROTECT THE POLLINATING INSECTS THAT WE ALL DEPEND ON.



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NORMA JEAN GARGASZ/ALAMY



DERRELL MCCAIN/ALAMY

One-third of the world's crops depend on pollinators, including these onions in Idaho (LEFT), pears (CENTER), and almonds in California's Central Valley (RIGHT).

We need bees to survive. Without them, we would not be able to produce many foods vital to our health and wellbeing—including berries, fruits, vegetables, almonds and other tree nuts. Virtually one in every three bites of food we eat comes from crops pollinated by bees.

But we've all seen the headlines about how bees and other insect pollinators are in trouble. According to the U.S. Department of Agriculture, the total number of managed honey bee colonies in the U.S. decreased from five million in the 1940s to only 2.5 million today. What's causing the decline? Scientists have yet to determine the cause for sure, but studies point to multiple factors, including climate change, pesticides, disease and habitat loss.

A new project by American Farmland Trust is enlisting conserved farms in the fight to help save bees and other pollinators. With a Conservation Innovation Grant from the U.S. Department of Agriculture's Natural Resources Conservation Service, we will be working to establish an innovative program in Michigan that supports farmers who provide pollinator habitat on protected land.

Farms can help native bees by enhancing and protecting the flowering plants and nest sites that pollinators feed on year-round. Other conservation practices that help bees include minimizing tillage, reducing the use of pesticides and protecting natural areas around farms. The AFT program will help farms pay for the cost of such practices by allowing them to achieve "pollinator credits" that can be sold

to businesses around Michigan that depend on bees, such as food companies.

"A majority of the crops in Michigan are dependent on pollinators," says Brian Brandt, AFT's director of Agricultural Conservation Innovations. "But we have lost the varied habitat for honeybees that we used to have. We need to get more pollinator habitat back in the landscape."

Participating farms will plant selected species that improve pollinator habitat. The program targets farms that have protected their land with conservation easements, or will do so in the future. "I'm hoping we can eventually expand the program to other areas," says Brandt. "At AFT, we're always asking, 'How do we find innovative ways to bring new funding into agriculture to support conservation?' This is one solution."

NEWS FROM AROUND THE COUNTRY

AFT's **FARMLAND INFORMATION CENTER**, with support from Farm Credit, unveiled free online resources (at www.farmlandinfo.org/beginningfarmers) to help beginning farmers with two of their biggest challenges: finding affordable land and accessing start-up capital.

Roger Rohrer, an organic poultry farmer in Lancaster, Pennsylvania, was awarded AFT's **PENNSYLVANIA FARMLAND PRESERVATION LOCAL HEROES AWARD** for his dedication to environmental stewardship and farmland protection.

AFT's **OHIO RIVER BASIN WATER QUALITY TRADING PROJECT**, a partnership with Electric Power Research Institute (see cover story), was awarded \$2 million in public and private funding to expand the scope of the project to improve water quality and reduce greenhouse gases.

The U.S. Department of Agriculture released \$350 million in critically needed funding for the **AGRICULTURAL CONSERVATION EASEMENT PROGRAM (ACEP)**, in a move applauded by AFT. The popular program protects the nation's farmland, ranchland and wetlands.

AFT's Pacific Northwest Office embarked on a listening tour of **OREGON**, meeting with farmers, ranchers and supporters to find out how AFT can help the many communities that are deeply committed to protecting farmland. Read the recap on our blog: www.farmland.org/blog.



KEVIN SHIELDS/ALAMY

A new grant awarded to AFT from the U.S. Department of Agriculture's Beginning Farmer and Rancher Development Program will jumpstart a nationwide **FARMLAND FOR THE NEXT GENERATION** initiative to help beginning farmers and ranchers secure land and succeed in agriculture.

AFT and other members of the **MAINE FOOD FOR THE UMAINE SYSTEM**—a coalition working to build a stronger and more resilient food system in the state—successfully persuaded the University of Maine to source at least 20 percent of its food service from local farms.

At a sold-out **HARVESTING OPPORTUNITIES CONFERENCE** in November,

AFT's New York Office challenged farmers, public officials and concerned citizens to think big about how they can help the next generation of farmers and protect farmland.

AFT's Executive Director of Programs John Larson took to the airwaves urging Congress to reauthorize and fully fund the **LAND AND WATER CONSERVATION FUND**, which protects land for parks as well as helping to conserve our nation's dwindling forest and farm land.

A recent grant from the **NORTH CENTRAL REGION SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION PROGRAM (SARE)** will allow AFT's Midwest office to train "soil ambassadors" who can bring Illinois farmers the latest science on building healthy soils and protecting water quality.

AFT's Deputy State Director for California, Virginia Jameson, delivered comments at the state's Strategic Growth Council in support of \$40 million in funding for the **SUSTAINABLE AG LANDS CONSERVATION (SALC) Program**—the first program in the country that links the protection of agricultural lands to climate change mitigation.



For regular updates about our work around the country, please like American Farmland Trust on Facebook (www.facebook.com/AmericanFarmland)!

WAYS TO GIVE

We rely on the generosity of our members, who care about protecting the nation's farms for future generations. Your generous support helps us save the land and promote a healthy environment. Here are a few ways you can help...

- **Give online.** It is easier than ever to support our critical work and mission. Visit www.farmland.org/donate to make a gift using your credit or debit card. It's quick, secure and hassle free!
- **Give a gift membership.** An AFT membership is a great gift for anyone who loves the land. They'll receive our tote bag

and a one-year subscription to *American Farmland*. Call or go online now.

- **Contribute appreciated securities.** Giving a gift of stock is simple! Transfer stock to AFT to avoid capital gains tax and take a charitable deduction for the full fair-market value. Call (800) 431-1499 or visit www.farmland.org/farmlandforever.
- **Include American Farmland Trust in your estate plans.** Join the Farmland Forever Society by remembering AFT in your will and estate plans. Your legacy contribution will help save America's farm and ranch land for generations to come.

Call (800) 431-1499 for more information.

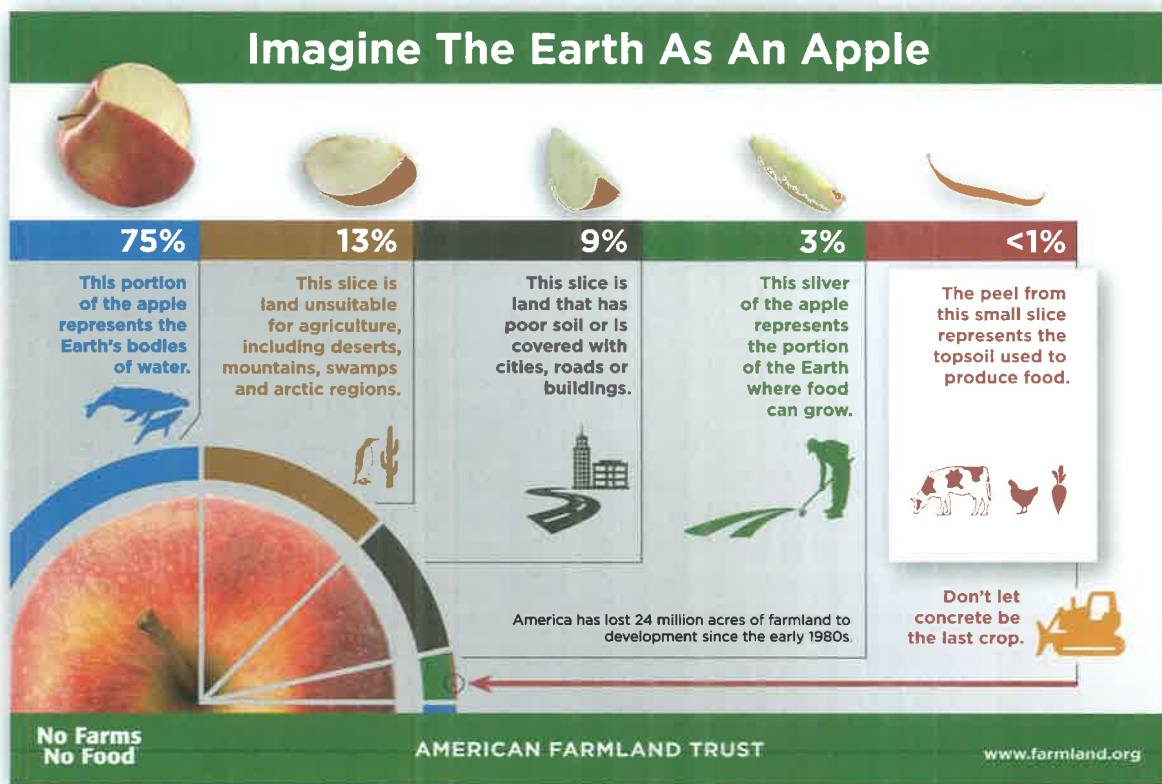
If you decide to include AFT in your will, please be sure to use the following language in your documentation: American Farmland Trust (Tax ID #52-1190211), a nonprofit 501(c)3 with its principal office located at 1150 Connecticut Ave NW, Suite 600, Washington, DC, 20036.

- **Join Our Friends of Family Farmers.** Our monthly giving club is the simplest, most cost-effective way to help save farm and ranch land. Just pledge to give automatically in affordable monthly installments using



your credit or debit card. Call (800) 431-1499 or go to www.farmland.org/Newsletter now to sign up.

If you have questions about how you can support American Farmland Trust, please visit www.farmland.org or call (800) 431-1499.



JEN FILIPIAK, continued from page 2

identified as priorities for reducing pollution in the Mississippi River Basin and, ultimately, the Gulf of Mexico.

With the watershed projects, the goal is to build a coalition within the local farming community to work on the problem of nutrient loss together—primarily by helping farmers improve soil health so that nutrients in their soil are less likely to wash away.

“We’re not just working with farmers, we’re also including their advisors, agricultural retailers, non-farming agricultural landowners and farm managers to work on these solutions,” she says. “Farming is complex, and we need everyone at the table.”

Jen also coordinates Conservation Learning Circles in the Midwest, which bring together women agricultural landowners in small groups where they can talk with agricultural professionals. “Women who own farmland but don’t farm themselves don’t always know that there are conservation programs available to them,” Jen says. “They get very excited.”

In morning sessions, the women talk about conservation and agriculture—especially soil health—and then in the afternoon they visit farms where they can see conservation practices firsthand.

“We say all farming is necessary, and all farming can do better,” Jen says of the environmental ethos that arises from the meetings—and is the driver behind all of her work.

“The project made a great big difference in the farm and my life. You can see the difference in the cattle and how much better they look. I’m really grateful.”

—CLARA BETH CLAXON, beef farmer, Grayson, Kentucky



WATER DEFENDERS, continued from page 1

Nitrogen and phosphorus are nutrients that help plants grow on farms but can cause problems in aquatic environments. In the Ohio River, nutrients from farms and other sources like power plants and leaky sewers contributed to a dangerous outbreak of toxic algae last summer that impacted nearly two-thirds of the river.

The Ohio River flows into the Mississippi River and eventually into the Gulf of Mexico, where nutrient runoff from agriculture and other human activities has led to a massive “dead zone” where a lack of oxygen threatens marine life. That’s why innovative solutions to reduce nutrients in the Mississippi River and its tributaries are greatly needed.

“AFT and our partners think we’ve found part of the solution in the Ohio River Basin Trading Project. At full scale, this program

could have a significant positive impact on the water quality and health of the watershed,” says Brian Brandt, AFT’s director of Agricultural Conservation Innovations, who oversees AFT’s participation in the program.

Leading water quality experts agree. In 2015, the U.S. Water Alliance awarded the project the U.S. Water Prize for “outstanding achievement in the advancement of sustainable solutions to national water challenges.”

For Elton, Bret and Dale, the project was nothing but positive, helping them improve their operation and fulfill their desire to be good environmental stewards. “You’ve got to take care of the ground,” says Bret. “That’s what feeds us. If you take care of the land, it will take care of you.”

For more information on water quality trading, visit www.farmland.org/WQT.

American Farmland Trust

No Farms No Food

Celebrating 35 Years

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1150 Connecticut Avenue, NW
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Washington, DC 20036
(800) 431-1499
www.farmland.org



**Des Plaines River Watershed Workgroup
Executive Board
3/17/2016
1PM - 2PM
Lake County Central Permit Facility
500 W. Winchester Road, Libertyville IL 60048
(2nd Floor SMC Conference Room)**

Outcomes:

- Approve 2015 Annual POTW Monitoring Report
- Discuss Five-Year Workplan Items

Agenda

1. Call the meeting to order
2. Agenda Changes/Approval
3. Approve Previous Meeting minutes
4. Public Comment
5. Action Item: Approve 2015 Annual POTW Monitoring Report/Draft 5-Year Workplan Items
6. Action Item: Discuss/Approve Revised Meeting Schedule
7. Action Item: Financial Report: Ratify Invoices/Dues Receipts/Other
8. Discussion Item: Membership Updates
9. Discussion Item: Committee Reports (Monitoring/Lakes/Impairments)
10. New Business -
11. Next Executive Board April 21st – 2:30PM (per suggested meeting schedule revision)
12. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

2/18/2016

11:00 AM-12:30 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Call the meeting to order: Peter Kolb called the meeting to order at 11:09.
2. Approve Agenda. Peter suggested amending the agenda to discuss the five-year work plan. The motion was made by Paul, seconded by Brian. The motion passed unanimously.
3. Previous Meeting minutes. Michael Talbett made a motion to approve the minutes from the January 6th Executive Board meeting, Paul seconded the motion. The motion passed unanimously.
4. Public Comment: none.
5. Action Item: Approve 2016 Budget. Michael made the motion to approve the FY 2016 budget; Joe seconded the motion. The budget has changed from the annual meeting. Mike Warner adjusted the dues and membership to more closely match what we have received in 2015. We actually received \$230,000. The estimate of future dues is still conservative. The previous budget did not reflect the full Suburban Labs' scope of work. An addition of \$3,000 is needed for data formatting. Their contract also needs to be extended through June 2016 for them to complete their scope of work.
Peter asked that the fiscal year be labeled on the budget. Brian noticed that the June 2016 SL line item was off by \$8,000. It will be changed to \$30,252 and the total in that column changed. The FY2015 adopted budget shows some actual contract numbers instead of the projected numbers. The motion passed unanimously.
6. Action Item: Approve Suburban Labs Amendment. A motion to approve the SL contract amendment made by Brian and seconded by Joe. Mike Warner explained that \$3,000 needs to be added to the contract. The Excel spreadsheet that is part of their deliverable was not in the format accepted by Illinois EPA grant. Additionally, the contract needs to be extended through the end of June 2016 because they got started late. The motion passed unanimously.
7. Discussion Item: Water Quality/Nutrient Trading Future Work Plan Suggestion. Don Hey spoke about developing a nutrient trading program. There was discussion about incorporating this into our 5 year workplan. Don said we need to codify the construction and operation procedures that we are going to use to take contaminants out of the water. We propose n, p, and carbon mostly from air emissions, suspended solids, dissolved solids, pharmaceuticals, and mercury. We need to form a series of organizations to develop enough water quality credits – wetlands large enough to take out the contaminants in a cost effective way. Incorporate wetland mitigation banking and flood control. Need a feasibility study to further understand and document costs of construction, operation, marketing, etc. Treatment wetlands need to be

monitored. Monitor what is coming in and what is going out. Great Lakes Water Quality Commission. Peter said that we have no money in the DRWW budget for projects. Our objective is to identify projects for others to implement. Brian asked who would be the owner of the wetlands. Michael mentioned the Forest Preserve District. Don said he is working with a family that owns agricultural land.

8. Work plan:

Items to include: complete the watershed based plan, complete 2-year data collection monitoring, develop a reduced monitoring plan, provide annual POTW upstream downstream monitoring report, Nutrient Implementation Plan, list permit dates, compliment POTWs nutrient reduction plan with watershed wide nutrient reduction plan. Also include chloride reduction strategy: monitoring – how many samples, when and how much can cost and reduction. Peter stated that a bullet point list with approximate dates would be sufficient.

9. Next Executive Board Meeting March 17th – 1:00PM at CPF. Monitoring Committee at 9:30.

10. Adjourn: Scott made a motion to adjourn. Paul seconded the motion. The motion to adjourn was approved unanimously.

Executive Board Members Present:

Peter Kolb, Lake County Public Works

Brian Dorn, NSWRD

Michael Talbett, Kildeer

Paul Kendzior, Libertyville

Scott Phippen, Lincolnshire

Joe Robinson, NSWRD

Mike Adam, Lake County Health Department

Other Attendees:

Andrea Cline, Geosyntec

Rob Flood, NSWRD

Al Giertych, Lake County Department of Transportation

Don Hey, Wetlands Research Inc.

Austin McFarlane, Lake County Public Works

Paul Kendzior, Libertyville

Sharon Osterby, Lake County Stormwater Management Commission

Kathy Paap, Wetlands Research Inc.

Steve Vella, Libertyville

Mike Warner, Lake County SMC

Patty Werner, Lake County SMC

Mark Willobee, Geosyntec



Des Plaines River Watershed Workgroup 2015 Annual Report

1. Basis for the Formation of the DRWW

The Des Plaines River Watershed Workgroup (DRWW) is a voluntary, dues paying organization with a mission to bring together a diverse coalition of stakeholders to work together to improve water quality in the Des Plaines River and its tributaries in a cost effective manner to meet Illinois EPA requirements. Membership of the DRWW consists of MS4 communities, Publically Owned Treatment Works (POTWs), and other interested parties. The Workgroup consists of Agency members represented by NPDES permit holders, Associate members which are non-permit holding organizations, and individual members. The DRWW will monitor water quality in the river and tributaries, prioritize and implement water quality improvement projects, and secure grant funding to offset the cost. Monitoring data will allow for a greater understanding of the water quality impairments, identify priority restoration activities, and track water quality improvements. The Workgroup is committed to an approach for attaining water quality standards that focuses on stakeholder involvement, monitoring, and locally led decision-making based on sound science.

2. The Des Plaines River Watershed

The Des Plaines River watershed covers over 130,000 acres or just over 200 square miles in Lake County, Illinois. The Des Plaines River starts just west of Kenosha, Wisconsin and flows south through Racine and Kenosha Counties in Wisconsin, and then through Lake, Cook, and Will Counties in Illinois. The river then joins the Sanitary and Ship Canal in Lockport, flows west through Joliet, before converging with the Kankakee River to form the Illinois River. The Illinois River then flows into the Mississippi River, which flows south to the Gulf of Mexico. In Lake County, there are nine subwatersheds that make up the larger Des Plaines River watershed: North Mill Creek, Mill Creek, Newport Drainage Ditch, Bull Creek, Indian Creek, Buffalo Creek, Aptakistic Creek, Upper Des Plaines mainstem and Lower Des Plaines mainstem.

The Des Plaines River watershed includes 33 Lake County municipalities, 12 townships, and two drainage districts. There are eight publically owned treatment facilities that discharge approximately 80 million gallons a day of treated wastewater to the Des Plaines River within Lake County. The majority of the mainstem of the river is bordered by forest preserve and open space.

3. Membership

The DRWW has built a strong membership base by demonstrating value to members. In 2015, the Workgroup has gained the support of 21 members, securing \$230,202 of membership dues, 47,500 of direct grant funds, which is leveraging an additional grant for watershed planning. Membership dues, along with in-kind services and grant money,

fund all activities of the Workgroup. Membership in the group consists of Municipalities, Lake County, publically owned treatment works (POTWs), consulting firms, and environmental not-for-profits. In the next year, the DRWW will work to increase membership through outreach to additional municipalities, townships, park districts, and non-governmental agencies. Meeting schedules are posted on the website and are open to the public.

DRWW Agency Members:

Village of Buffalo Grove	Village of Lake Zurich	Village of Deerfield
Village of Libertyville	Village of Grayslake	Village of Lincolnshire
Village of Green Oaks	Village of Lindenhurst	Village of Gurnee
Village of Kildeer	Village of Vernon Hills	Village of Third Lake
North Shore Water Reclamation District		Lake County
Lake County Forest Preserve District		

DRWW Associate Members:

Cardno JFNew
Lake County Stormwater Management Commission
Sierra Club

4. Executive Committees Role and Responsibilities

Workgroup officers shall include a President, Vice President, Treasurer, and Secretary. All officers must be the Authorized Delegate of an Agency Member. The Workgroup shall be governed by an Executive Board comprised of the four officers and the chairpersons of the three standing committees – Monitoring Committee, Impairments Committee, and Lakes Committee. Each member of the Executive Board shall be entitled to discuss and vote on matters coming before the Board. The immediate past president of the Workgroup shall be an ex-officio, nonvoting member of the Executive Board. A meeting of the Executive Board may be called upon a minimum ten days written notice by either the President or three members of the Executive Board. Four members of the Executive Board present at any meeting thereof shall constitute a quorum. A simple majority vote of a quorum shall control the policies and actions of the Executive Board. The President shall have general supervision of the affairs of the Workgroup and the Executive Board, shall preside at their respective meetings, and have the responsibility of overseeing contracts. The Vice President shall act in the absence of the President. The Treasurer, or his designee, shall receive and deposit all Workgroup monies, pay all bills approved by the Executive Board, and be responsible for all banking and reporting requirements to state and federal agencies. The Secretary, or his designee, shall maintain the records of the Workgroup, keep and distribute minutes and records of attendance of all meetings, and distribute all Workgroup notices and make a report to the membership of all such activities at the Annual Meeting. The President shall serve as the principal spokesperson for the Workgroup and shall represent DRWW in discussions of mutual concern with governmental agencies or associations.

5. Budget

Des Plaines River Watershed Workgroup 2015 BUDGET PROJECTED REVENUE AND COSTS

	FY2015
REVENUE	
Dues - Membership dues	\$ 210,000
Federal/State Grants - Illinois EPA 319 Grant	\$ 47,500
Carryover Addition	
Other	\$ -
Total Revenue	\$ 257,500
EXPENSES	
Consultants - Technical Support	\$ 50,000
Consultants - Monitoring Compilation and Statistics	\$ -
Contractuals - Monitoring Strategy and QAPP Refinement (2015 RFP)	\$ 47,500
Contractuals - Water Chemistry Monitoring - Suburban Labs	\$ 66,508
Contractuals - Sediment Chemistry Analysis - Suburban Labs (2016 ^{2/3} - 2017 ^{1/3})	
Contractuals - Bioassessment Monitoring/Sediment Collection (2016 ^{2/3} - 2017 ^{1/3})	
Carryover	\$ 82,992
Total Expenses	\$ 247,000
Contingency Reserve (5% of Projected Dues Target)	\$ 10,500

6. DRWW Work Groups

a.) Monitoring Committee

- **Water/Sediment Sampling/Analysis Programs**

Contracted with Suburban Laboratories Inc.

- Started with 45 Monitoring Locations
- Three water column collection dates in 2015 (Sept, Oct, Nov)

- **Bioassessment Monitoring Plans**

Contracted with Midwest Biodiversity Institute

- Study Fish, Macroinvertebrates, Habitat
- Currently reviewing Monitoring Plan sample sites from a geometric standpoint
- Sampling to begin May 2016

- **Flow Monitoring Plans**

Contracted with Burns & McDonnell

- Collect Stream Flow Data
- 21 Sites (including existing 6 USGS Sites)
- Allow evaluation of Mass Loadings
- Assessment of Impact of Stream Flow on Biological Diversity

b.) Lake Committee

The committee initiated quarterly meetings in 2016. A summary of the committee's first meeting follows:

- Inventory of lakes in the watershed
 - 94 lakes >6 acres
 - 51 lakes >20 acres
 - Future work will create detailed categorical breakdown (i.e., glacial, wetland, impoundment)

- Monitoring
 - The Lake County Health Department has summary data on most of the lakes. Updated information on water quality and shoreline condition has or will be collected in 2015-2017.
- Identification of data gaps
- Interconnectedness of lakes and streams
 - Chemical and biological

c.) Impairments Committee

The impairments committee is in the formation process, recruiting members from both non-point and point source facilities. A basic concept has been developed on the issues the impairments committee will be addressing once the monitoring results are available. The focus of the committee will be to develop strategies for all DRWW agency members to implement to address EPA water quality mandates. The committee will begin holding regular meetings once the monitoring results are received.

7. Five Year Plan (Draft)

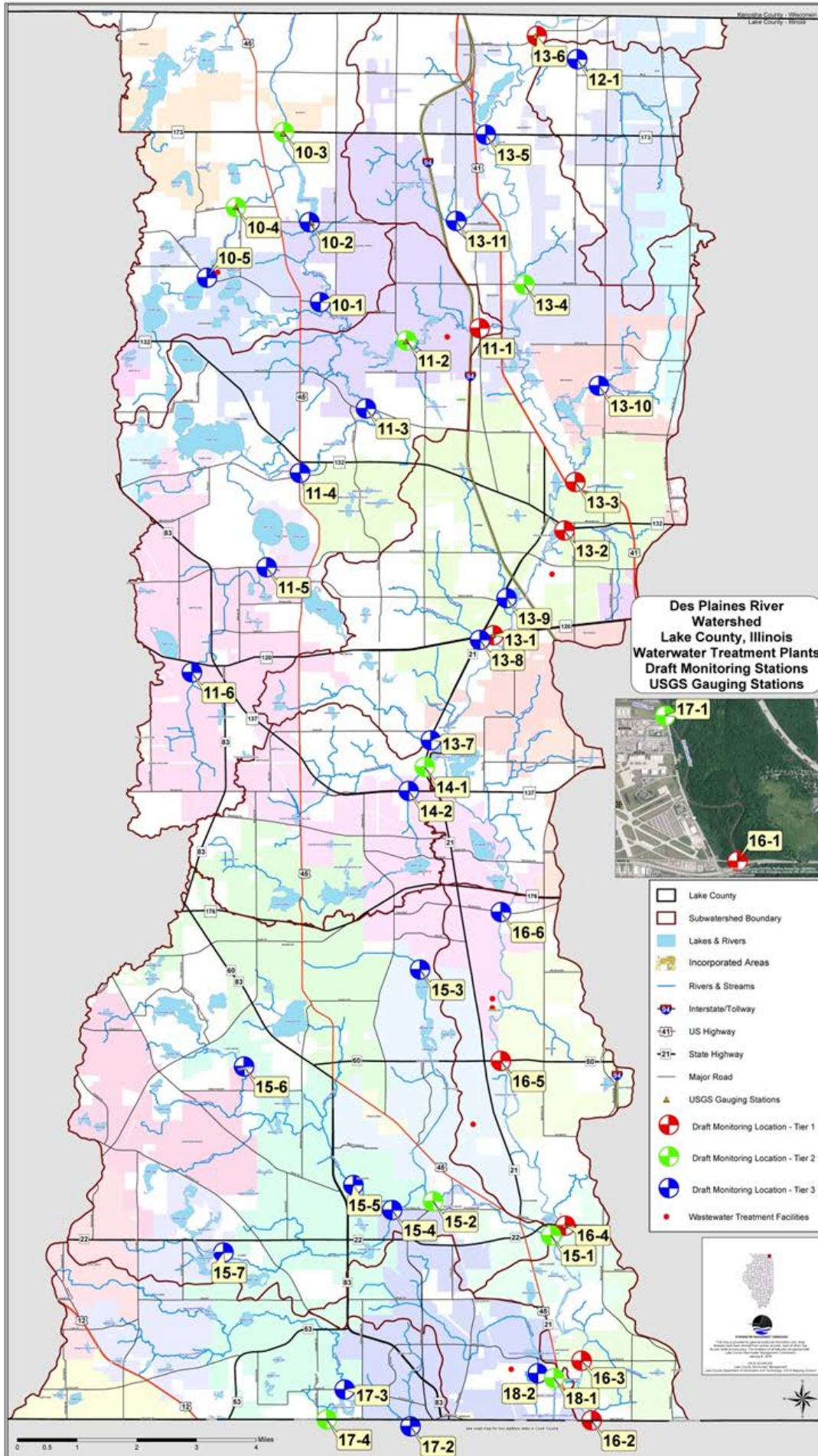
- a. Complete watershed work plan and monitoring effort.
- b. Research Nutrient Trading Programs.
- c. Assess CAW's chloride variance plan and investigate modeling a similar program for use within the watershed.
- d. Revise monitoring program to assess impacts of improvement activities within the watershed.
- e. Prepare and submit to IEPA a Nutrient Reduction Strategy for the Des Plaines River Watershed in Lake County.

8. Watershed Map

Attachment #1 of this document contains a detail map of the watershed and includes a listing of the specific Monitoring Point Locations.

9. Monitoring Data Summary

Attachment #2 of this document contains the analytical data collected. The information collected and submitted from this watershed based monitoring program is intended to satisfy NPDES Permit monitoring requirements (MS4 and POTW Upstream/Downstream Special Condition) for each Membership Agency.



Des Plaines River Watershed Workgroup

2016 Meeting Schedule				Meeting Dates/Times																			
Meeting Type	Recurrence	Regular Date/Time*	Location	*Wednesday January 6th	1/28/16	2/11/16	*Thursday February 18th	3/3/16	3/17/16	4/21/16	4/28/16	5/19/16	6/16/16	7/21/16	7/28/16	8/18/16	9/15/16	10/20/16	10/27/16	11/17/16	12/15/16		
Monitoring Committee	Monthly	3rd Thursday/ 1PM	Lake County SMC Office 500 W Winchester Road Libertyville, IL	Meeting Time 10AM			9:30AM	9:30AM		1PM			1PM	1PM			1PM	1PM				1PM	
Lakes Committee	Quarterly	4th Thursday/ 10AM	Lake County Health Department Office 500 W Winchester Road Libertyville, IL		10AM						10AM				10AM					10AM			
Executive Board	Monthly	3rd Thursday/ 2:30PM	Lake County SMC Office 500 W Winchester Road Libertyville, IL	Meeting Time 11:30AM			11AM	11AM CANCELLED	1PM* Rescheduled	2:30PM				2:30PM	2:30PM				2:30PM	2:30PM			2:30PM
General Membership	Quarterly	3rd Thursday/ Every 3 months 1:30PM	North Shore Water Reclamation District 14770 William Koepsel Dr Gurnee, IL 60031			10AM							1:30PM				1:30PM					1:30PM	

*Please note exceptions to regular meeting dates
SMC will provide light fare for Monitoring Committee and Executive Board Meetings

DRWW

**Des Plaines River Watershed Workgroup-Statement of Account
For the period Feb 1 thru April 30 2016**

500 W Winchester Rd
Libertyville, Illinois 60048
Phone 847 377 7700

4th Quarter

mwarner@lakecountyil.gov
wmorey@lakecountyil.gov

Beginning Balance	\$ 172,523.19	carry from FY2015
Ending Balance	\$ 329,191.69	

	Total Prior to Current Period	Current Period	Total To Date	Received Date	Balance
BEGINNING ACCOUNT BALANCE					\$ 172,523.19
Annual Dues Contributions Received:					
Lake County	\$ 25,000.00	\$ -	\$ 25,000.00	3/8/2016	
Lake County Public Works	\$ 60,000.00	\$ -	\$ 60,000.00	3/8/2016	
Village of Deerfield	\$ 231.00		\$ 231.00	3/14/2016	
Village of Round Lake Beach	\$ 512.00		\$ 512.00	3/14/2016	
Village of Buffalo Grove	\$ 3,722.00	\$ -	\$ 3,722.00	3/14/2016	
NSWRD	\$ 83,126.00		\$ 83,126.00	3/14/2016	
Other Contributions Received					
		\$ -	\$ -		
		\$ -	\$ -		
Total Received:	\$ -	\$ -	\$ 172,591.00		

Expenditures Paid:

**DRWW
Ratification**

Geosyntec #18161019		\$ 8,610.00	\$ 8,610.00	2/11/2016	
Geosyntec #18161051		\$ 7,312.50	\$ 7,312.50	2/11/2016	
		\$ -	\$ -		
		\$ -	\$ -		
		\$ -	\$ -		
Total Expenditures Paid	\$ -	* \$ 15,922.50	\$ 15,922.50		

ENDING ACCOUNT BALANCE					\$ 329,191.69
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* detail attached



Des Plaines River Watershed Workgroup

Executive Board

6/16/2016

2:30PM – 3:30PM

Lake County Central Permit Facility

500 W. Winchester Road, Libertyville IL 60048

(2nd Floor SMC Conference Room)

AGENDA

1. Call the meeting to order
2. Agenda Changes/Approval
3. Approve Previous Meeting minutes - Attached
4. Public Comment
5. Financial Summary Report
6. Action Item: LCFPD/LCDOT Additional Funding IGA/MOU for Expanded Monitoring Study
7. Action Item: Approve Suburban Labs Contract Amendment
8. Action Item: Approve Midwest Biodiversity Institute Contract Amendment
9. Action Item: Approve Geosyntec Professional Services Contract
10. New Business
11. Next EB Meeting July 21st – 2:30PM
12. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

3/17/2016

1:00 PM-2:00 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Call the meeting to order: Peter Kolb called the meeting to order at 1:00 pm.
2. Approve Agenda: Brian Dorn made a motion to approve the agenda. Joe Robinson seconded the motion. The motion passed unanimously.
3. Previous Meeting minutes: Brian made a motion to approve the minutes with the change that Paul Kendzoir was listed on the attendance in the minutes twice and it will be changed to once. Mike Adam seconded the motion. The motion passed unanimously.
4. Public Comment: None.
5. Action Item: Approve 2015 Annual POTW Monitoring Report/Draft 5-Year Workplan Items. Section 7 "Five Year Plan" was removed from the POTW Monitoring Report. March 31, 2020 is when Libertyville's permit expires. The Nutrient Implementation Plan is due six months before permit renewal. Peter asked about title change. Andrea will add introductory paragraph and reference the meeting with Marcia. She will also add the language from the special condition. When this is done she will email around for consent. Mike Warner will email Andrea latest version. Paul Kendzoir made a motion to approve the report with the suggested changes. Michael Talbett seconded the motion. The motion passed unanimously.
6. Action Item: Discuss/Approve Revised Meeting Schedule. Mike W suggested moving meetings to the third Thursday of the month. General membership meetings will be moved to the third Thursday. Joe Robinson made a motion to approve the revised schedule. Paul seconded the motion. The motion passed unanimously.
7. Action Item: Financial Report: Ratify Invoices/Dues Receipts/Other. April 30th the end of the fiscal year. Mike W gave an overview. For additional details see the spreadsheet in the EB packet.
8. Discussion Item: Membership Updates. Mike W talked to the Tollway. They are attended the DP Watershed Plan kick off. They are interested in becoming a DRWW member.
9. Discussion Item: Committee Reports (Monitoring/Lakes/Impairments): Joe gave a report on behalf of the Monitoring Committee. The revised monitoring plan was discussed. The plan is to add seven additional sites to Tier 3 and 18 sites to Tier 4 with field water chemistry, fish, macros, and habitat. Scott Phippen gave the Impairments Committee report. Scott needs additional point source people on the Committee.

10. New Business: Vince Mosca from Hey and Associates said there may be legislative changes that are necessary for the DRWW to move forward with their goals. Vince handed out Wisconsin Water Quality Trading Manual. Peter recommends investigating the Wisconsin method of water quality trading. Possibly taking a field trip to look. Or Ohio. And then look into supporting legislation. George Wells will be invited to present his research on the Des Plaines at next Executive Board meeting.
11. Next Executive Board Meeting April 21st – 2:30PM at CPF.
12. Adjourn: Scott made a motion to adjourn. Paul seconded the motion. The motion to adjourn was approved unanimously.

Executive Board Members Present:

Peter Kolb, Lake County Public Works

Brian Dorn, NSWRD

Michael Talbett, Kildeer

Paul Kendzior, Libertyville

Scott Phippen, Lincolnshire

Joe Robinson, NSWRD

Mike Adam, Lake County Health Department

Other Attendees:

Jim Anderson, Lake County Forest Preserve District

Andrea Cline, Geosyntec

Al Giertych, Lake County Department of Transportation

Don Hey, Wetlands Research Inc.

Vince Mosca, Hey and Associates

Steve Vella, Libertyville

Mike Warner, Lake County SMC

DRWW

**Des Plaines River Watershed Workgroup-Statement of Account
For the period May 1st thru July 30 2016**

500 W Winchester Rd
Libertyville, Illinois 60048
Phone 847 377 7700

1st Quarter

mwarner@lakecountyl.gov
wmorey@lakecountyl.gov

Beginning Balance	\$ 320,277.44
Ending Balance	\$ 326,213.15

	Total Prior to Current Period	Current Period	Total To Date	Received Date	Balance
BEGINNING ACCOUNT BALANCE					\$ 320,277.44
Annual Dues Contributions Received:					
City of Lake Forest		\$ 283.00	\$ 283.00	5/2/2016	
Village of Green Oaks		\$ 782.00	\$ 782.00	5/2/2016	
Village of Gurnee		\$ 6,736.00	\$ 6,736.00	6/3/2016	
Village of Lake Zurich		\$ 1,613.00	\$ 1,613.00	6/3/2016	
Village of Libertyville		\$ 14,488.00	\$ 14,488.00	6/3/2016	
Village of Lindenhurst		\$ 7,595.00	\$ 7,595.00	6/3/2016	
Village of Vernon Hills		\$ 4,120.00	\$ 4,120.00	6/3/2016	
LCSMC		\$ 200.00	\$ 200.00	6/13/2016	
			\$ -		
			\$ -		
Other Contributions Received					
		\$ -	\$ -		
		\$ -	\$ -		
Total Received:	\$ -	\$ 35,817.00	\$ 35,817.00		
Expenditures Paid:					
				DRWW	
				Ratification	
Geosyntec #18161151		\$ 5,467.50	\$ 5,467.50	4/18/2016	
Geosyntec #18161177		\$ 2,872.50	\$ 2,872.50	5/4/2016	
Suburban Labs #132946		\$ 6,619.00	\$ 6,619.00	4/26/2016	
Suburban Labs #133670		\$ 6,298.00	\$ 6,298.00	4/26/2016	
Burns & McDonnell # 89796-1		\$ 7,596.76	\$ 7,596.76	4/4/2016	
Burns & McDonnell # 89796-2		\$ 1,027.53	\$ 1,027.53	6/10/2016	
			\$ -		
			\$ -		
Total Expenditures Paid	\$ -	* \$ 29,881.29	\$ 29,881.29		
ENDING ACCOUNT BALANCE					\$ 326,213.15

Des Plaines River Watershed Workgroup		Adopted FY2015	FY2015 Actual	Approved Budget FY2016	FY2016 Actual	Projected FY2017
REVENUE/Description	Account #					
Dues/Membership dues	775-4220010-46010	\$ 210,000	\$ 230,986	\$ 225,000	\$ 210,705	\$ 210,000
Expendable Carryover Addition	775-4220010-46010			\$ 172,523	\$ 172,523	\$ 89,435
Other State Funds/Illinois EPA 319 Grant	775-4220010-45350	\$ 47,500	\$ -	\$ 47,500	\$ 47,500	
Other (FPD/LCDOT)					\$ 47,707	-
Total Revenue		\$ 257,500	\$ 230,986	\$ 445,023	\$ 478,435	\$ 299,435
EXPENSES/Description						
Consultants/Technical Coordinator (GeoSyntec thru 4/30/16) PO 154955	775-4220010-71150	\$ 50,000	\$ 22,058	\$ 48,506	<u>\$ 95,000</u>	\$ 90,000
Consultants/Technical Coordinator (Post May 1st, 2016)	775-4220010-71150	\$ -	\$ -	\$ 55,000	\$ -	\$ -
<i>Monitoring Statistics, Future Work Program Efforts, Project Prioritization</i>	775-4220010-71150		\$ -		\$ -	-
Field Reconnaissance (Bland)	775-4220010-71150		\$ 149			
Monitoring Strategy and QAPP Refinement (IEPA Reimbursable)	775-4220010-71170	\$ 47,500	\$ -	\$ 47,500	\$ 47,500	-
WQ-Sediment Analysis - (Suburban Labs)	775-4220010-71310	\$ 66,508	\$ 36,256	\$ 33,252	<u>\$ 115,000</u>	
Laboratory Fees/Water Chemistry Monitoring (July 2016 - March 2017)	775-4220010-71310			\$ 45,000		\$ 75,000
Pollutant Load Flow Analysis - (Burns and McDonnell thru 2/1/17)	775-4220010-71310		\$ -	\$ 39,600	\$ 39,600	\$ 13,755
MBI - Bioassessment Monitoring/Sediment Collection (thru 12/31/17) - 1/3 Watershed Each Year After	775-4220010-71310		\$ -	\$ 77,168	<u>\$ 91,900</u>	\$ 103,435
Projected Expenses		\$ 164,008	\$ 58,463	\$ 346,026	\$ 389,000	\$ 282,190
Projected Unexpended Carryover		\$ 199,037	\$ 172,523	\$ 98,997	\$ 89,435	\$ 17,245

**AGREEMENT between the
LAKE COUNTY STORMWATER MANAGEMENT COMMISSION
and LAKE COUNTY FOREST PRESERVE DISTRICT for the
Des Plaines Watershed Workgroup Monitoring Program (DRWW-MP)**

This is an agreement by and between the LAKE COUNTY STORMWATER MANAGEMENT COMMISSION (hereinafter referred to as **SMC**), 500 West Winchester Road, Libertyville, Illinois 60048 and LAKE COUNTY FOREST PRESERVE DISTRICT, (hereinafter referred to as **LCFPD**), 1899 W Winchester Road, Libertyville, Illinois 60048.

PURPOSE AND SCOPE OF WORK

Through this Agreement, the LCFPD agrees to provide forty thousand (\$40,000) of funding to enhance (Increase) the number of sampling locations for the DRWW-MP as shown in the Budget Summary Option 3. The general Scope of Work for the DRWW-MP is described as follows. SMC, as the DRWW administrative agent, will contract to implement the bioassessment program consisting of the collection and assessment of field water column chemistry, fish, macroinvertebrates, and habitat, collection of sediment samples and flow monitoring data. Initial startup tasks include refining the monitoring plan, revising and obtaining Illinois EPA's approval of the Quality Assurance Project Plan (QAPP), and collecting and analyzing background data. The entire effort will be summarized and analyzed in a final report.

SCHEDULE

All sampling shall be completed by October 31, 2016. The project, including all reporting, shall be completed by December 31, 2017 and proceed according to the schedule detail summarized below.

Task 1: QAPP Revisions and Approval	January 1 – 31, 2016
Task 2: Refine Monitoring Plan	January 1 – June 30, 2016
Task 3: Background Data Compilation and Analysis	January 1, 2016 – December 15, 2017
Task 4: Bioassessment Sampling	July 1, 2016 – December 15, 2017
Task 5: Sediment Sampling	October 15, 2016 – December 15, 2017
Task 6: Flow Monitoring	January 1, 2016 – December 15, 2017
Task 7: Project Management and Data Analysis	January 1, 2016 – December 15, 2017
Task 8: Monitoring Draft and Final Report	October 31, 2017 and December 15, 2017

PROJECT DELIVERABLES

- DRWW and Illinois EPA approved monitoring plan.
- Illinois EPA approved QAPP. MBI will supply the technical information to others who will develop and coordinate the final QAPP for submittal to Illinois EPA.
- Monthly progress reports highlighting work accomplished, work planned for the upcoming month, and any issues and proposed resolution.
- Compiled data in approved IEPA format (excel).
- A comprehensive final report detailing the data and conclusions based on the analyses of the data including background and current watershed analysis and the analysis of the results of the water column and sediment chemistry as well as the fish, macroinvertebrate, habitat and field water chemistry data.

DRWW-MP Budget Summary

The cost estimates below are based upon 7 sampling episodes (May-16, June -16, July-16, Aug,16, Sept-16, Nov-16, & Mar-17) for water chemistry, sediment analyses at Tier 1 -3 sites, flow data collection, along with Fish & macroinvertebrate sampling & analyses.

- Option 1 is the original costs of the Monitoring Program
- Option 2 provides for adding 25 additional sites as proposed by MBI. Eighteen (18) of the added sites would become a new Tier 4 site and would include fish & field chemistry analyses along with habitat evaluation (macroinvertebrates would not be included). The other 7-sites would be added as Tier 3 sites.

Des Plaines Watershed Workgroup – LCFPD Monitoring Program Enhancement

- Option 3, as agreed to in this instrument, would be the same as Option 2 with the addition of macroinvertebrate sampling and analyses at each of the 25 sites. Option three is the most desirable option in that it would provide a comprehensive evaluation of the entire watershed. This would be very valuable in the future when assessing improvement measures taken in an effort to improve water quality.

Option	Water	Sediment	Fish/Macro	Flow	Total	Cost Add
Option 1	\$67,338	\$41,265	\$165,000	\$36,000	\$309,603	\$0
Option 2	\$75,525	\$50,435	\$165,000	\$36,000	\$326,960	\$17,357
Option 3	\$75,525	\$50,435	\$195,350	\$36,000	\$357,310	\$47,707
% Increase	12%	22%	18%	0%	15%	15%

COMPENSATION

The LCFPD shall provide forty thousand (\$40,000) to the DRWW through its Administrative Agent (SMC) for costs incurred during the completion of the tasks and within the time period as defined in the Schedule.

The SMC shall invoice the LCFPD for the \$40,000 and apply those funds as shown in Option 3 above; and as the DRWW-MP progresses, shall provide copies of approved contractor invoices for expenditures and documentation of services and deliverables performed.

TERMS AND CONDITIONS

- All preliminary or draft documentation, data and deliverables produced as referenced in this Agreement may be subject to the review by all parties to determine its acceptability in meeting the terms and intent of this Agreement.
- All final documentation, data and deliverables produced as referenced in this Agreement may be subject to the review by all parties to determine its acceptability prior to final delivery.
- All adjustments, additions and/or deletions to this Agreement are subject to the written approval of SMC and the LCFPD.
- This Agreement shall be governed by and construed according to the laws of the State of Illinois.
- This Agreement supersedes any and all other agreements, oral or written, between the parties hereto with respect to the subject matter hereof.

Correspondence related to the PROJECT covered by this Agreement should reference the DRWW-MP and be directed as follows:

LCFPD Contact:	SMC:
Jim Anderson/Leslie Berns	Mike Warner/Patty Werner
Lake County Forest Preserve District	Lake County Stormwater Management Commission
1899 W. Winchester Rd.	500 W. Winchester Road
Libertyville, IL 60048	Libertyville, IL 60048
Email: janderson@lcfpd.org - LBerns@lcfpd.org	Email: mwarner@lakecountyil.gov - pwarner@lakecountyil.gov
Phone: 847-367-6640	Phone: 847-377-7700

 Alex Ty Kovach, Executive Director
 Lake County Forest Preserve

 Date

 Michael Warner, Executive Director
 Lake County Stormwater Management Commission

 Date

MEMORANDUM OF UNDERSTANDING
between
the LAKE COUNTY DIVISION OF TRANSPORTATION
and
the LAKE COUNTY STORMWATER MANAGEMENT COMMISSION
for
the Des Plaines River Watershed Workgroup Monitoring Program (DRWW-MP)

This is a Memorandum of Understanding between the LAKE COUNTY STORMWATER MANAGEMENT COMMISSION (hereinafter referred to as **SMC**), 500 West Winchester Road, Libertyville, Illinois 60048 and the LAKE COUNTY DIVISION OF TRANSPORTATION, (hereinafter referred to as **LCDOT**), 600 WEST Winchester Road, Libertyville, Illinois 60048.

PURPOSE AND SCOPE OF WORK

Through this Memorandum of Understanding, the LCDOT agrees to provide seven thousand seven hundred and seven dollars (\$7,707) of funding to enhance (Increase) the number of sampling locations for the DRWW-MP as shown in the Budget Summary Option 3. The general Scope of Work for the DRWW-MP is described as follows. SMC, as the DRWW administrative agent, will contract to implement the bioassessment program consisting of the collection and assessment of field water column chemistry, fish, macroinvertebrates, and habitat, collection of sediment samples and flow monitoring data. Initial startup tasks include refining the monitoring plan, revising and obtaining Illinois EPA's approval of the Quality Assurance Project Plan (QAPP), and collecting and analyzing background data. The entire effort will be summarized and analyzed in a final report.

SCHEDULE

All sampling shall be completed by October 31, 2016. The project, including all reporting, shall be completed by December 31, 2017 and proceed according to the schedule detail summarized below.

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Task 2: Refine Monitoring Plan	January 1 – June 30, 2016
Task 3: Background Data Compilation and Analysis	January 1, 2016 – December 15, 2017
Task 4: Bioassessment Sampling	July 1, 2016 – December 15, 2017
Task 5: Sediment Sampling	October 15, 2016 – December 15, 2017
Task 6: Flow Monitoring	January 1, 2016 – December 15, 2017
Task 7: Project Management and Data Analysis	January 1, 2016 – December 15, 2017
Task 8: Monitoring Draft and Final Report	October 31, 2017 and December 15, 2017

PROJECT DELIVERABLES

- DRWW and Illinois EPA approved monitoring plan.
- Illinois EPA approved QAPP. MBI will supply the technical information to others who will develop and coordinate the final QAPP for submittal to Illinois EPA.
- Monthly progress reports highlighting work accomplished, work planned for the upcoming month, and any issues and proposed resolution.
- Compiled data in approved IEPA format (excel).
- A comprehensive final report detailing the data and conclusions based on the analyses of the data including background and current watershed analysis and the analysis of the results of the water column and sediment chemistry as well as the fish, macroinvertebrate, habitat and field water chemistry data.

DRWW-MP Budget Summary

The cost estimates below are based upon 7 sampling episodes (May-16, June -16, July-16, Aug,16, Sept-16, Nov-16, & Mar-17) for water chemistry, sediment analyses at Tier 1 -3 sites, flow data collection, along with Fish & macroinvertebrate sampling & analyses.

- Option 1 is the original costs of the Monitoring Program

- Option 2 provides for adding 25 additional sites as proposed by MBI. Eighteen (18) of the added sites would become a new Tier 4 site and would include fish & field chemistry analyses along with habitat evaluation (macroinvertebrates would not be included). The other 7-sites would be added as Tier 3 sites.
- Option 3, as agreed to in this instrument, would be the same as Option 2 with the addition of macroinvertebrate sampling and analyses at each of the 25 sites. Option three is the most desirable option in that it would provide a comprehensive evaluation of the entire watershed. This would be very valuable in the future when assessing improvement measures taken in an effort to improve water quality.

Option	Water	Sediment	Fish/Macro	Flow	Total	Cost Add
Option 1	\$67,338	\$41,265	\$165,000	\$36,000	\$309,603	\$0
Option 2	\$75,525	\$50,435	\$165,000	\$36,000	\$326,960	\$17,357
Option 3	\$75,525	\$50,435	\$195,350	\$36,000	\$357,310	\$47,707
% Increase	12%	22%	18%	0%	15%	15%

COMPENSATION

The LCDOT shall provide seven thousand seven hundred and seven dollars (\$7,707) to the DRWW through its Administrative Agent (SMC) for costs incurred during the completion of the tasks and within the time period as defined in the Schedule.

The SMC shall invoice the LCDOT for the \$7,707 and apply those funds towards the total as shown in Option 3 above; and as the DRWW-MP progresses, shall provide copies of approved contractor invoices for expenditures and documentation of services and deliverables performed.

TERMS AND CONDITIONS

1. All preliminary or draft documentation, data and deliverables produced as referenced in this Memorandum of Understanding may be subject to the review by all parties to determine its acceptability in meeting the terms and intent.
2. All final documentation, data and deliverables produced as referenced in this Memorandum of Understanding may be subject to review by all parties to determine its acceptability prior to final delivery.
3. All adjustments, additions and/or deletions to this Memorandum of Understanding are subject to the written approval of SMC and the LCDOT.



 Paula Trigg, P.E.
 Director of Transportation/County Engineer
 Lake County Division of Transportation



 Date



 Michael Warner, P.E.
 Executive Director
 Lake County Stormwater Management Commission



 Date

TECHNICAL SERVICES AGREEMENT between the
DES PLAINES RIVER WATERSHED WORKGROUP
and
SUBURBAN LABORATORIES, INC. for
WATER CHEMISTRY MONITORING

This is an agreement (Agreement) by and between the DES PLAINES RIVER WATERSHED WORKGROUP, 500 West Winchester Road, Libertyville, Illinois 60048 (DRWW) and SUBURBAN LABORATORIES 1950 S Batavia Avenue, Geneva, IL 60134 (Subcontractor).

PURPOSE

The DRWW wishes to engage the Subcontractor to provide technical services to assist the DRWW in conducting water chemistry monitoring in the Des Plaines River watershed located in Lake County, Illinois. The water chemistry monitoring will satisfactorily collect and process water column chemistry monitoring samples within the watershed. The DRWW has selected approximately 69 sampling locations within the Des Plaines River watershed in Lake County, Illinois.

SERVICES

The Subcontractor will conduct water column chemistry sampling by collecting samples, analyzing the samples collected, and providing the data to the DRWW based on the approved DRWW Quality Assurance Project Plan. The Scope of Services to be provided by the Subcontractor to accomplish the DRWW's objectives for the water column chemistry monitoring is set forth in Attachment A, Suburban Laboratories Quote.

COMPENSATION

1. The Subcontractor agrees to perform the Scope of Services and furnish the items included in the Scope of Services for a fee (Agreement Amount) not to exceed \$67,000 for water column sampling and analysis and \$48,000 for sediment analysis for a total of \$115,000, according to the rates in the Project Budget Attachment B.
2. The DRWW agrees to pay the Subcontractor for a total project cost not to exceed \$115,000 using the compensation schedule identified in Attachment B. The final ten percent of the Agreement Amount shall be retained by the DRWW until the project is successfully completed and all deliverables have been received and approved.
3. The Subcontractor shall furnish the DRWW with an itemized invoice on a monthly basis. Invoices shall describe the work completed; show the actual number hours worked by team member; and actual travel and other expenses that have occurred. Payments by the DRWW shall be made in accordance with the Illinois Local Prompt Payment Act (50 ILCS 505/1 et seq.).

SCHEDULE AND DELIVERABLES

All sampling shall be completed by May 30, 2017. The project, including all reporting, shall be completed by June 15, 2017 and proceed according to the schedule details outlined and as follows. Generally, sampling will be conducted at all sites within one week per month and approximately the same week every month.

Sampling Schedule

- July 2016
- August 2016
- September 2016
- November 2016
- March 2017
- May 2017

Project Deliverables:

- Monthly reports including electronic data deliverables (EDDs) and the sample results in an editable Microsoft Excel file.
- A final report consisting 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.

TERMS and CONDITIONS

1. The DRWW may, by written Order, make changes in the scope of work if such changes are within the general scope of the Agreement. If such changes cause an increase or decrease in the Subcontractor's cost or the time required to complete the project, the parties hereto shall agree to an adjustment in the Agreement Amount, prior to issuance of the Change Order. Adjustment of the Agreement Amount shall be based on the estimated change in the number of staff hours required plus any changes in the Subcontractor's expense. The Subcontractor will not be compensated for additional services performed without an approved Change Order.
2. The DRWW may at any time terminate this Agreement in whole or in part by ten day written or telegraphic notice or verbal notice confirmed in writing. Upon termination for convenience of the DRWW, the DRWW will assume responsibility for services rendered and costs incurred prior to notification. Any and all services, property, publications or materials provided during or resulting from the Subcontractor shall be the property of the DRWW.
3. This Agreement shall be governed by and construed according to the laws of the State of Illinois.

- 4. The Subcontractor agrees to comply with the Conditions/Certifications outlined in Lake County Stormwater Management Commission’s (SMC’s) grant agreement #3191506 with the Illinois Environmental Protection Agency. The Certifications/Conditions are provided in Attachment C. Please note that “Recipient” refers to SMC, not the Subcontractor.
- 5. This Agreement supersedes any and all other agreements, oral or written, between the parties hereto with respect to the subject matter hereof.
- 6. This Agreement shall not be assigned, altered or modified without the express written consent of both parties except as provided in paragraph one above. The Subcontractor shall not reject any reasonable change proposed in the best interest of the project by DRWW.

NOTICES AND COMMUNICATION

All notices and communications given to either party by the other relative to this Agreement shall be addressed to the respective parties as follows:

To the DRWW: Des Plaines River Watershed Workgroup
 500 West Winchester Road
 Libertyville, Illinois 60048
 ATTENTION: Mike Warner, Administrative Agent
 mwarner@lakecountyil.gov

To the Subcontractor: Suburban Laboratories, Inc.
 1950 S Batavia Avenue, Suite 150
 Geneva, IL 60134
 ATTENTION: Kaleb Meihls, Project Manager
 kaleb@suburbanlabs.com

For the DRWW:

Attest:

 Peter Kolb, President
 DRWW

 DRWW

Date: _____

For the Subcontractor:

Attest:

 Dan Galeher, Vice President of Sales and Service
 Suburban Laboratories, Inc.

 Suburban Laboratories, Inc.

Date: _____

ATTACHMENT A

DRWW Water Column Chemistry Monitoring SCOPE OF SERVICES

1. Sampling Schedule

1.1 Tier 1, 2, 3 Water Sampling

Water sampling for Tier 1, 2 and 3 will begin immediately after contract approval. Suburban Labs will sample the 69 sites during the course of one week. The weekly sampling will continue throughout the following months: July, August, September, November, and March and May 2017. These collected samples will be tested for the water quality monitoring parameters listed in Appendix 1. The analytical methods and Suburban Laboratory's Standard Operating Procedures (SOPs) for analyzing the samples are listed in Appendix 2. The reporting limits and the laboratory method detection limits (MDLs) are listed in Appendix 3.

1.2 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.

1.3 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.

2. Field Reporting

2.1 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;
- 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

3. Sample Custody and Handling

3.1 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.

3.2 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.

3.3 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.

A. Project Deliverables

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.

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.

Turnaround Time

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

Appendix A: Water Quality Sampling Parameters

Parameter	DRWW Frequency	Tier 1	Tier 2	Tier 3
<u>Demand</u>		Number of Sample Events		
Chloride	monthly May-Sept, Nov, Mar	6	6	6
Conductivity	monthly May-Sept, Nov, Mar	6	6	6
pH	monthly May-Sept, Nov, Mar	6	6	6
TOC	monthly May-Sept, Nov, Mar	6	0	0
Sulfate	monthly May-Sept, Nov, Mar	6	0	0
TSS	monthly May-Sept, Nov, Mar	6	6	0
Volatile Suspended Solids	monthly May-Sept, Nov, Mar	6	6	0
DO	monthly May-Sept, Nov, Mar	6	6	6
Temperature	monthly May-Sept, Nov, Mar	6	6	6
Turbidity	monthly May-Sept, Nov, Mar	6	6	6
<u>Metals</u>				
Total Hardness	annually under low flow conditions	1	1	0
Iron	annually under low flow conditions	1	0	0
Sodium	annually under low flow conditions	1	0	0
Arsenic	annually under low flow conditions	1	0	0
Manganese	annually under low flow conditions	1	1	0
Mercury	annually under low flow conditions	1	0	0
Copper	annually under low flow conditions	1	0	0
Nickel	annually under low flow conditions	1	0	0
Zinc	annually under low flow conditions	1	0	0
<u>Nutrients</u>				
Ammonia	monthly May-Sept, Nov, Mar	6	6	0
Total Nitrates (NO ₂ + NO ₃)	monthly May-Sept, Nov, Mar	6	6	6
TKN	monthly May-Sept, Nov, Mar	6	6	0
Total phosphorus	monthly May-Sept, Nov, Mar	6	6	6
Dissolved reactive phosphorus	monthly May-Sept, Nov, Mar	6	6	0
<u>Bacteria</u>				
E. coli	monthly May-Sept, Nov, Mar	6	6	6
<u>Water Organics</u>				
PCBs	annually under low flow conditions	1	0	0
Pesticides	annually under low flow conditions	1	0	0
Methoxychlor	annually under low flow conditions	1	0	0
PNAs	annually under low flow conditions	1	0	0
VOCs	annually under low flow conditions	1	0	0
<u>Sediment Metals</u>				
Aluminum	concurrent w/ bioassessment	1	1	1
Arsenic	concurrent w/ bioassessment	1	1	1
Barium	concurrent w/ bioassessment	1	1	1
Beryllium	concurrent w/ bioassessment	1	1	1
Boron	concurrent w/ bioassessment	1	1	1
Cadmium	concurrent w/ bioassessment	1	1	1
Chromium	concurrent w/ bioassessment	1	1	1
Cobalt	concurrent w/ bioassessment	1	1	1

Appendix A (cont.): Water Quality Sampling Parameters

Parameter	DRWW Frequency	Tier 1	Tier 2	Tier 3
<u>Sediment Metals</u>		Number of Sample Events		
Copper	concurrent w/ bioassessment	1	1	1
Fluoride	concurrent w/ bioassessment	1	1	1
Iron	concurrent w/ bioassessment	1	1	1
Lead	concurrent w/ bioassessment	1	1	1
Manganese	concurrent w/ bioassessment	1	1	1
Mercury	concurrent w/ bioassessment	1	1	1
Nickel	concurrent w/ bioassessment	1	1	1
Potassium	concurrent w/ bioassessment	1	1	1
Silver	concurrent w/ bioassessment	1	1	1
Sodium	concurrent w/ bioassessment	1	1	1
Strontium	concurrent w/ bioassessment	1	1	1
Vanadium	concurrent w/ bioassessment	1	1	1
Zinc	concurrent w/ bioassessment	1	1	1
<u>Sediment Organics</u>				
PCBs	concurrent w/ bioassessment	1	1	1
Pesticides	concurrent w/ bioassessment	1	1	1
Methoxychlor	concurrent w/ bioassessment	1	1	1
PNAs	concurrent w/ bioassessment	1	1	1
VOCs	concurrent w/ bioassessment	1	1	1
TKN	concurrent w/ bioassessment	1	1	1
Phosphorus	concurrent w/ bioassessment	1	1	1
Cyanide	concurrent w/ bioassessment	1	1	1
Herbicides (2, 4, D, 2,4,5 TP)	concurrent w/ bioassessment	1	1	1
Phenols	concurrent w/ bioassessment	1	1	1

Appendix B: Standard Operating Procedures

COLLECTION OF STREAM WATER SAMPLES

These methods allow for the collection of grab samples utilizing a high density polyethylene (HDPE) bucket or wide mouth HDPE or glass bottle. This standard operating procedure document (SOP) has been developed to maintain consistent data collection procedures and to ensure the quality of the data collected.

1.0 FIELD EQUIPMENT

The following equipment listed is necessary for sampling procedures.

1. 1-gallon HDPE bucket, nylon rope
2. Distilled or reagent-grade deionized water
3. Sample bottles:
 - a. One 1000 mL HDPE with H_2SO_4 preservative for NH_3-N , TKN and Total Nitrates
 - b. One 1000 mL HDPE unpreserved bottle for BOD, TSS, TDS, Chloride, Sulfate
 - c. One 1000 mL HDPE bottle with HNO_3 preservative for Metals, (including Phosphorous and Mercury)
 - d. Two 1000 mL amber glass bottles unpreserved for Pesticides, PCBs and PNAs
 - e. Three 40 mL VOA vials with HCl preservative for VOCs
4. Disposable gloves
5. Cooler and ice
6. Antibacterial soap
7. Sharpie markers and labels
8. Field books/log sheets/chain of custody
9. Portable pH meter

10. Sampling pole

2.0 PREPARATION

Before samples are collected, sample bottles should be labeled correctly with sampling point, sampling I.D. number, the sampler's initials, and a space for the date and time to be filled in later. Sample bottle lids should also be labeled to prevent contamination between samples.

Coolers and samples bottles should be inspected before samples are collected. If dirt, residual chemicals, or any other types of contaminants are present, the sample bottle should be discarded. The coolers should be washed with mild soap and wiped down if any contaminants are present.

Sampling buckets shall be scrubbed with a solution of soap and water. Make sure the cleaning detergent is free of phosphates (orthophosphate sample).

The sampler's hands should be washed with antibacterial soap prior to sampling events. Disposable gloves will be worn during sample collection, and special care should be taken to avoid touching the inner surface of sample lids or bottles.

3.0 PROCEDURE

Sample bottles should be kept closed until they are filled. At each sample collection site, the sampler will wear a new pair of gloves for decontamination and a new pair for sample collection.

If samples are taken from a bridge, collect the sample from the upstream side of the structure unless otherwise noted in site description maps.

When sample during precipitation events, the sample bucket shall be covered at all times with a lid.

A log-sheet/chain of custody should be maintained during sampling and should include the following information:

- a. Date and time of sample
- b. Signature of collector and transporter
- c. Signature of person who relinquished the sample to lab
- d. Weather conditions during sampling (i.e., air temperature; cloudy, rain, snow)
- e. Time
- f. Sample storage temperature upon receipt in lab
- g. Visual observation of sample
- h. Field measurements such as pH

3.1 Sample Collection HDPE Bucket or Wide Mouth Bottle

The bucket shall be inspected to ensure that it is in good condition. The nylon rope attached should not be frayed or torn.

3.1.1 Decontamination

The bucket and wide mouth bottle must be cleaned before samples are collected and between sampling sites. The equipment shall be cleaned with phosphate-free detergent and blank water. Blank water should be deionized water. The equipment should be scrubbed with detergent and deionized water before the rinsing steps below are followed. Alternatively, a new bottle may be used for each sample.

Step 1 – Blank Water Rinse

- Rinse the inside of the bucket or wide mouth bottle by swirling with blank water.
- Discard the remaining blank water.
- Repeat Step 1.

3.2 Sample Collection Procedure

The stream depth will determine the equipment to be used to collect the sample. To reduce the chance of disturbing the substrate/sediment the following protocols will be followed. Samples may be collected from the bridge with a bucket if the depth is at least twice the height of the bucket. At shallower depths the field technician will use a sampling poll with a wide mouth bottle at the end. As a last resort, the field technician will wade into stream and collect the sample, standing downstream of the collection point so as not to collect kicked up sediment.

Step 1a – River Rinse and Field Measurements from Bucket

- Lower the bucket into the stream and fill.
- Discard the contents.

Step 1b – River Rinse Wide Mouth Bottle

- River rinse by filling the bottle with river water.
- Discard the remaining contents.

Step 2 – Sample Collection - Bucket

- Lower the bucket to mid-depth at center of flow, do not disturb bottom sediment.

Step 2b – Sample Collection - Pole

- Lower the sample bottle attached to the sampling pole to mid-depth at center of flow, do not disturb bottom sediment.

Step 3 – Fill Sample Bottles

Fill each sample bottle. Over filling of sample bottles with preservative should be avoided to prevent loss of preservative.

3.3 Field Measurements

Sample pH must be measured on site within 15 minutes of collection. Follow the laboratory and manufacturer's instructions for calibrating, cleaning and using the pH meter. The pH results shall be recorded on the log-sheet/chain of custody.

4.0 SAMPLE HANDLING, TRANSPORTATION, QUALITY ASSURANCE, AND BLANKS

All samples are placed in a cooler with ice after labeling. Samples are to be transported to the laboratory within the prescribed holding times. All samples will be taken to Suburban Laboratory, Inc.

4.1 Quality Assurance

Field blank and duplicates shall be collected. The laboratory shall adhere to their Quality Assurance Plan Revision 8 for samples received in the lab. Quality control limits and frequency of field quality control samples is specified at the end of this SOP.

4.2 Duplicate Samples

Duplicate samples are to be filled from the same round of stream water. Duplicate samples will be taken for all parameters once per month.

4.3 Field Blank

Sample bottles should be filled with blank water from unopened blank water containers. One field blank should be performed for VOCs and Metals including Phosphorous and Mercury once per year.

5.0 CHAIN OF CUSTODY

Chain of Custody forms must be filled out and accompany all samples to their laboratory. An example is below.

SUBURBAN LABORATORIES, Inc.
 1950 S. Babcock Ave., Geneva, IL 60134
 Tel. 708.544.3260 Fax: 708.544.9587 Toll Free: 800.793.LABS
 www.suburbanlabs.com

CHAIN OF CUSTODY RECORD
 ANALYSIS & METHOD REQUESTED
 Enter an "X" in box below for request

Electronic Version
 Page of

Company Name City State Zip Phone Fax Email Address Project ID / Location Project Manager (Report to) Sample Collection(s)	TURNAROUND TIME REQUESTED <input checked="" type="checkbox"/> Normal <input type="checkbox"/> RUSH* *Additional Rush Charge Applies Date & Time Needed Normal 3-5 business days. Rush work must be pre-approved and additional charges apply. Specify Regulatory Program: <input type="checkbox"/> LUST <input type="checkbox"/> SRP <input type="checkbox"/> SDWA <input type="checkbox"/> 503 Sludge <input checked="" type="checkbox"/> NPDES <input type="checkbox"/> MWRDGC <input type="checkbox"/> Disposal <input type="checkbox"/> Other *Please specify in comment section below.	CONTAINERS GRAB COMP. Qty SIZE & TYPE PRESERVATIVE	COLLECTION DATE TIME MATRIX	ANALYSIS & METHOD REQUESTED Enter an "X" in box below for request	Shipping Method Ice Reporting Level <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 LAB USE ONLY SU Order No. Samples containers supplied by customer? <input type="checkbox"/> Yes Temperature of Received Sample °C Samples received within 24 hours of collection? <input type="checkbox"/> Yes R Condition Date LAB #
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

COMMENTS & SPECIAL INSTRUCTIONS:

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water (SW), Ground Water (GW), Solid Waste (SA), Sludge (U), Wipe (P) **CONTAINER:** 2oz, 4oz, 8oz, 40oz Vial, 900ml L Bar (L) Tube, Glass (G), Plastic (P) **DESERVATOR:** Hydro, HCl, HNO₃, Methanol (MeOH), NaOH, Sodium Borate (Na B), NaFluo

1. Refrigerated By _____ Date _____
 Received By _____ Time _____ Ice Job _____

2. Refrigerated By _____ Date _____
 Received By _____ Time _____ Ice Job _____

3. Refrigerated By _____ Date _____
 Received By _____ Time _____ Ice Job _____

4. Refrigerated By _____ Date _____
 Received By _____ Time _____ Ice Job _____

CONDITION CODES

- Improperly packaged container/cup
- Improper preservation
- Insufficient sample volume
- Headspace not built as for VOCs
- Received past holding time
- Received frozen
- Label conflicts with COC

Submission of samples subject to Terms and Conditions on back. Rev. 2010/08

Please fill out this form completely, print, sign & submit with samples. Keep a copy for your records.

Appendix C: Test Methods and Reporting Limits

Demand	Method	MDL/Reporting Limit
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

Appendix C: (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

ATTACHMENT B

Project Budget – Water Chemistry

PRICE QUOTATION		Quoted Price	Proposed Quantity	Total Tier 1	Proposed Quantity	Total Tier 2	Proposed Quantity	Total Tier 3
Demand								
Chloride	\$ 14.00	67	\$ 938.00	60	\$ 840.00	186	\$ 2,604.00	
Conductivity*	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00	
pH	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00	
TOC	\$ 25.00	67	\$ 1,675.00	60	\$ 1,500.00	0	\$ -	
Sulfate	\$ 20.00	67	\$ 1,340.00	60	\$ 1,200.00	0	\$ -	
TSS	\$ 8.00	67	\$ 536.00	60	\$ 480.00	0	\$ -	
Volatle Suspended Solids	\$ 8.00	67	\$ 536.00	60	\$ 480.00	0	\$ -	
DO	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00	
Temperature	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00	
Turbidity	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00	
Metals								
Total Hardness	\$ 4.00	11	\$ 44.00	10	\$ 40.00	0	\$ -	
Metals (Fe, Na, As, Mn, Hg, Cu, Ni, Zn)	\$ 56.00	11	\$ 616.00	0	\$ -	0	\$ -	
Manganese	\$ 7.00			10	\$ 70.00	0	\$ -	
Nutrients								
Ammonia	\$ 15.00	67	\$ 1,005.00	60	\$ 900.00	0	\$ -	
Total Nitrates (NO2+NO3)	\$ 20.00	67	\$ 1,340.00	60	\$ 1,200.00	186	\$ 3,720.00	
TKN	\$ 28.00	67	\$ 1,876.00	60	\$ 1,680.00	0	\$ -	
Total Phosphorus	\$ 15.00	67	\$ 1,005.00	60	\$ 900.00	186	\$ 2,790.00	
Dissolved Reactive Phosphorus	\$ 30.00	67	\$ 2,010.00	60	\$ 1,800.00	0	\$ -	
Bacteria								
E. Coil	\$ 25.00	67	\$ 1,675.00	60	\$ 1,500.00	186	\$ 4,650.00	
Water Organics								
PCBs/Pesticides	\$ 105.00	11	\$ 1,155.00	0	\$ -	0	\$ -	
Methoxychlor	\$ 100.00	11	\$ 1,100.00	0	\$ -	0	\$ -	
PNAs	\$ 80.00	11	\$ 880.00	0	\$ -	0	\$ -	
VOCs	\$ 90.00	11	\$ 990.00	0	\$ -	0	\$ -	
		Total	\$ 2,255.00	Total	\$ -	Total	\$ -	
* denotes field measurement		Sampling Charge	\$ 3,350.00	Sampling Charge	\$ 3,000.00	Sampling Charge	\$ 9,300.00	
Note 1: Quantity of samples is estimated		Analysis Subtotal	\$ 18,526.00	Analysis Subtotal	\$ 14,090.00	Analysis Subtotal	\$ 18,414.00	
Note 2: Field QC samples billed as actual samples (~15 duplicates and ~15 Field Blanks)		Grand Total	\$ 21,876.00	Grand Total	\$ 17,090.00	Grand Total	\$ 27,714.00	
Note 3: If Low Level Hg (1631) is needed \$120/sample								
Quotation Accepted By:		Grand Total for July 1, 2016 through May 30, 2017 = \$66,690						
Signature	Title							
Name (Print)	Date							

Project Budget – Sediment

SEDIMENT PRICE QUOTATION		Quoted Price	Proposed Quantity	Total Tier 1	Proposed Quantity	Total Tier 2	Proposed Quantity	Total Tier 3
Sediment Metals								
Metals (19)		\$ 152.00	11	\$ 1,672.00	10	\$ 1,520.00	31	\$ 4,712.00
Mercury		\$ 20.00	11	\$ 220.00	10	\$ 200.00	31	\$ 620.00
Fluoride		\$ 15.00	11	\$ 165.00	10	\$ 150.00	31	\$ 465.00
			Total	\$ 2,057.00	Total	\$ 1,870.00	Total	\$ 5,797.00
Sediment Organics								
PCBs/Pesticides		\$ 105.00	11	\$ 1,155.00	10	\$ 1,050.00	31	\$ 3,255.00
Methoxychlor		\$ 100.00	11	\$ 1,100.00	10	\$ 1,000.00	31	\$ 3,100.00
PNAs		\$ 80.00	11	\$ 880.00	10	\$ 800.00	31	\$ 2,480.00
VOCs		\$ 90.00	11	\$ 990.00	10	\$ 900.00	31	\$ 2,790.00
TKN		\$ 28.00	11	\$ 308.00	10	\$ 280.00	31	\$ 868.00
Phosphorus		\$ 15.00	11	\$ 165.00	10	\$ 150.00	31	\$ 465.00
Cyanide (low)		\$ 32.00	11	\$ 352.00	10	\$ 320.00	31	\$ 992.00
Herbicides (2,4,D, 2,4,5 TP)		\$ 250.00	11	\$ 2,750.00	10	\$ 2,500.00	31	\$ 7,750.00
Phenols		\$ 30.00	11	\$ 330.00	10	\$ 300.00	31	\$ 930.00
			Total	\$ 8,030.00		\$ 7,300.00		\$ 22,630.00
* denotes field measurement								
Note 1: Quantity of samples is estimated			Analysis Subtotal	\$ 10,087.00	Analysis Subtotal	\$ 9,170.00	Analysis Subtotal	\$ 28,427.00
Note 2: Field QC samples billed as actual samples (~2 duplicates and ~2 Field Blanks)			Grand Total	\$ 10,087.00	Grand Total	\$ 9,170.00	Grand Total	\$ 28,427.00
Note 3: If Low Level Hg (1631) is needed \$120/sample			Grand Total for Sediment = \$47,684					
Quotation Accepted By:								
Signature		Title						
Name (Print)		Date						

ATTACHMENT C

Terms and Conditions

PRICE QUOTATION

	Quoted Price	Proposed Quantity	Total Tier 1	Proposed Quantity	Total Tier 2	Proposed Quantity	Total Tier 3
<u>Demand</u>							
Chloride	\$ 14.00	67	\$ 938.00	60	\$ 840.00	186	\$ 2,604.00
Conductivity*	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00
pH	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00
TOC	\$ 25.00	67	\$ 1,675.00	60	\$ 1,500.00	0	\$ -
Sulfate	\$ 20.00	67	\$ 1,340.00	60	\$ 1,200.00	0	\$ -
TSS	\$ 8.00	67	\$ 536.00	60	\$ 480.00	0	\$ -
Volatile Suspended Solids	\$ 8.00	67	\$ 536.00	60	\$ 480.00	0	\$ -
DO	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00
Temperature	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00
Turbidity	\$ 5.00	67	\$ 335.00	60	\$ 300.00	186	\$ 930.00
		Total	\$ 6,700.00	Total	\$ 6,000.00	Total	\$ 7,254.00
<u>Metals</u>							
Total Hardness	\$ 4.00	11	\$ 44.00	10	\$ 40.00	0	\$ -
Metals (Fe, Na, As, Mn, Hg, Cu, Ni, Zn)	\$ 56.00	11	\$ 616.00	0	\$ -	0	\$ -
Manganese	\$ 7.00			10	\$ 70.00	0	\$ -
		Total	\$ 660.00	Total	\$ 110.00	Total	\$ -
<u>Nutrients</u>							
Ammonia	\$ 15.00	67	\$ 1,005.00	60	\$ 900.00	0	\$ -
Total Nitrates (NO2+NO3)	\$ 20.00	67	\$ 1,340.00	60	\$ 1,200.00	186	\$ 3,720.00
TKN	\$ 28.00	67	\$ 1,876.00	60	\$ 1,680.00	0	\$ -
Total Phosphorus	\$ 15.00	67	\$ 1,005.00	60	\$ 900.00	186	\$ 2,790.00
Dissolved Reactive Phosphorus	\$ 30.00	67	\$ 2,010.00	60	\$ 1,800.00	0	\$ -
		Total	\$ 7,236.00	Total	\$ 6,480.00	Total	\$ 6,510.00
<u>Bacteria</u>							
E. Coli	\$ 25.00	67	\$ 1,675.00	60	\$ 1,500.00	186	\$ 4,650.00
		Total	\$ 1,675.00	Total	\$ 1,500.00	Total	\$ 4,650.00
<u>Water Organics</u>							
PCBs/Pesticides	\$ 105.00	11	\$ 1,155.00	0	\$ -	0	\$ -
Methoxychlor	\$ 100.00	11	\$ 1,100.00	0	\$ -	0	\$ -
PNA's	\$ 80.00	11	\$ 880.00	0	\$ -	0	\$ -
VOCs	\$ 90.00	11	\$ 990.00	0	\$ -	0	\$ -
		Total	\$ 2,255.00	Total	\$ -	Total	\$ -

* denotes field measurement
 Note 1: Quantity of samples is estimated
 Note 2: Field QC samples billed as actual samples (~15 duplicates and ~15 Field Blanks)
 Note 3: If Low Level Hg (1631) is needed \$120/sample

Sampling Charge	\$ 3,350.00	Sampling Charge	\$ 3,000.00	Sampling Charge	\$ 9,300.00
Analysis Subtotal	\$ 18,526.00	Analysis Subtotal	\$ 14,090.00	Analysis Subtotal	\$ 18,414.00
Grand Total	\$ 21,876.00	Grand Total	\$ 17,090.00	Grand Total	\$ 27,714.00

Grand Total for July 1, 2016 through May 30, 2017 = \$66,680

Quotation Accepted By:

 Signature Title

 Name (Print) Date

SEDIMENT PRICE QUOTATION

Sediment Metals

	Quoted Price	Proposed Quantity	Total Tier 1	Proposed Quantity	Total Tier 2	Proposed Quantity	Total Tier 3
Metals (19)	\$ 152.00	11	\$ 1,672.00	10	\$ 1,520.00	31	\$ 4,712.00
Mercury	\$ 20.00	11	\$ 220.00	10	\$ 200.00	31	\$ 620.00
Fluoride	\$ 15.00	11	\$ 165.00	10	\$ 150.00	31	\$ 465.00
		Total	\$ 2,057.00	Total	\$ 1,870.00	Total	\$ 5,797.00

Sediment Organics

PCBs/Pesticides	\$ 105.00	11	\$ 1,155.00	10	\$ 1,050.00	31	\$ 3,255.00
Methoxychlor	\$ 100.00	11	\$ 1,100.00	10	\$ 1,000.00	31	\$ 3,100.00
PNAs	\$ 80.00	11	\$ 880.00	10	\$ 800.00	31	\$ 2,480.00
VOCs	\$ 90.00	11	\$ 990.00	10	\$ 900.00	31	\$ 2,790.00
TKN	\$ 28.00	11	\$ 308.00	10	\$ 280.00	31	\$ 868.00
Phosphorus	\$ 15.00	11	\$ 165.00	10	\$ 150.00	31	\$ 465.00
Cyanide (low)	\$ 32.00	11	\$ 352.00	10	\$ 320.00	31	\$ 992.00
Herbicides (2,4,D, 2,4,5 TP)	\$ 250.00	11	\$ 2,750.00	10	\$ 2,500.00	31	\$ 7,750.00
Phenols	\$ 30.00	11	\$ 330.00	10	\$ 300.00	31	\$ 930.00
		Total	\$ 8,030.00	Total	\$ 7,300.00	Total	\$ 22,630.00

* denotes field measurement

Note 1: Quantity of samples is estimated

Note 2: Field QC samples billed as actual samples (~2 duplicates and ~2 Field Blanks)

Note 3: If Low Level Hg (1631) is needed \$120/sample

Analysis Subtotal \$ 10,087.00
Grand Total \$ 10,087.00

Analysis Subtotal \$ 9,170.00
Grand Total \$ 9,170.00

Analysis Subtotal \$ 28,427.00
Grand Total \$ 28,427.00

Grand Total for Sediment = \$47,684

Quotation Accepted By:

 Signature Title

 Name (Print) Date



Date: June 8, 2016
To: Des Plaines River Watershed Workgroup Executive Board
From: Andrea Cline, DRWW Technical Advisor
Re: Contract Amendment for Midwest Biodiversity Institute

ACTION REQUESTED: Discussion and Approval of Contract Amendment at 6/16/16 Executive Board

The DRWW entered into a contract with Midwest Biodiversity Institute (MBI) to conduct biological and habitat sampling at 44 sites for \$165,000. The DRWW has added 25 additional sites to the monitoring program. The cost shall be adjusted to \$195,350 to reflect the biological monitoring at these additional sites.

Signature of this agreement amendment cover document will constitute agreement with the additional sites for biological sampling and additional cost associated with this.

For the DRWW:

Attest:

Peter Kolb, President

Date

Signature, Title

For Midwest Biodiversity Institute:

Attest:

Peter Precario
Executive Director

Date

Signature, Title

Task Descriptions	2016				2017-18			
Task 1 - Refine Monitoring Plan	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Project Manager - Review & Modify Plan	\$63.69	40	\$2,547.60		\$65.60	0	\$0.00	
GIS Analyst - Geometric Design Options	\$25.00	24	\$600.00		\$25.75	0	\$0.00	
Direct Labor Costs		64	\$3,147.60			0	\$0.00	
Task 1 Labor Fee (OM 1.5 applied)			\$4,721.40				\$0.00	
Project Manager Travel - Meet with DRWW	\$1,000.00	1	\$1,000.00		\$1,000.00	0	\$0.00	
ODC Subtotal			\$1,000.00				\$0.00	
Task 1 Subtotal				\$5,721.40				\$0.00
Task 2 - QAPP Revisions	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Project Manager - Review & Revise QAPP	\$63.69	16	\$1,019.04		\$65.60	4	\$262.40	
Research Associate - Review & Revise Methods	\$27.05	8	\$216.40		\$27.86	0	\$0.00	
Direct Labor Costs		24	\$1,235.44			4	\$262.40	
Task 2 Labor Fee (OM 1.5 applied)			\$1,853.16				\$393.60	
Task 2 Subtotal				\$1,853.16				\$393.60
Task 3 - Background Data Compilation & Analysis	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Project Manager - Write & Edit Summary Report	\$63.69	16	\$1,019.04		\$65.60	0	\$0.00	
Senior Research Associate - Acquire & Evaluate Data	\$56.34	40	\$2,253.60		\$58.03	0	\$0.00	
GIS Analyst - Assist with Data Acquisition	\$25.00	16	\$400.00		\$25.75	0	\$0.00	
Direct Labor Costs		72	\$3,672.64			0	\$0.00	
Task 3 Labor Fee (OM 1.5 applied)			\$5,508.96				\$0.00	
Task 3 Subtotal				\$5,508.96				\$0.00
Task 4 - Bioassessment Sampling								
Task 4A Mobilization & Demobilization	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Project Manager - Project Management & Oversight	\$63.69	24	\$1,528.56		\$65.60	0	\$0.00	
Fish Crew Leader - Mobilize/Demobilze Equipment	\$27.05	40	\$1,082.00		\$27.86	0	\$0.00	
Macroinvertebrate Crew Leader - Field Prep.	\$30.05	16	\$480.80		\$30.95	0	\$0.00	
Field Technician X2 - Assist Crew Leaders	\$15.86	80	\$1,268.80		\$16.34	0	\$0.00	
Direct Labor Costs		160	\$4,360.16			0	\$0.00	
Task 4A Labor Fee (OM 1.5 applied)			\$6,540.24				\$0.00	
Task 4A Subtotal			\$6,540.24				\$0.00	
Task 4B - Fish/Habitat Sampling	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Fish Crew Leader - Lead Fish Crew (77 sites in 2016)	\$27.05	260	\$7,033.00		\$27.86	0	\$0.00	
Field Technician X2 - Field Sampling Labor	\$15.86	420	\$6,661.20		\$16.34	0	\$0.00	
Field Technician X2 (OT) - Field Samling Labor	\$23.79	100	\$2,379.00		\$24.51	0	\$0.00	
Direct Labor Costs		780	\$16,073.20				\$0.00	
Task 4B Labor Fee (OM 1.5 applied)			\$24,109.80				\$0.00	

Task Descriptions		2016			2017-18			
Task 4B - Fish/Habitat Sampling - ODCs	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Vehicle & Equipment Use - Vehicle, Boats, E-Fishing Gear	\$500.00	4	\$2,000.00		\$500.00	0	\$0.00	
Vehicle Mileage - Travel to sites	\$0.575	1400	\$805.00		\$0.575	0	\$0.00	
Supplies - miscellaneous items, preservatives	\$1,000.00	2	\$2,000.00		\$1,000.00	0	\$0.00	
Lodging/Food/Misc. - Daily allowance per person	\$125.00	45	\$5,625.00		\$125.00	0	\$0.00	
ODC Subtotal			\$10,430.00				\$0.00	
Task 4B Subtotal			\$34,539.80				\$0.00	
Task 4C - Macroinvertebrate Sampling	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Macroinvert. Crew Leader - Lead Macro. Crew (69 sites)	\$30.05	196	\$5,889.80		\$30.95	0	\$0.00	
Field Technician - Field Sampling Labor	\$15.86	160	\$2,537.60		\$16.34	0	\$0.00	
Field Technician (OT) - Field Sampling Labor	\$23.79	36	\$856.44		\$24.51	0	\$0.00	
Direct Labor Costs		392	\$9,283.84	Increase over base		0	\$0.00	
Task 4C Labor Fee (OM 1.5 applied)			\$13,925.76	\$5,186.16			\$0.00	
Vehicle & Equipment Use - Vehicle	\$300.00	3.5	\$1,050.00		\$300.00	0	\$0.00	
Vehicle Mileage - Travel to sites	\$0.575	1800	\$1,035.00		\$0.575	0	\$0.00	
Field Supplies - miscellaneous items, preservatives	\$1,000.00	3	\$3,000.00		\$1,000.00	0	\$0.00	
Lodging/Food/Misc. - Daily allowance per person	\$125.00	32	\$4,000.00		\$120.00	0	\$0.00	
ODC Subtotal			\$9,085.00	\$3,295.00			\$0.00	
Task 4C Subtotal			\$23,010.76	\$8,481.16			\$0.00	
Task 4D - Biological Laboratory	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Fish Vouchers - i.d. verifications per QAPP	\$27.05	0	\$0.00		\$27.86	24	\$668.64	
Macroinvertebrate Sample Sorting & QA - sort samples	\$27.05	0	\$0.00		\$27.86	560	\$15,601.60	
Macroinvertebrate Taxonomy & QA - i.d. samples	\$30.05	0	\$0.00		\$30.95	630	\$19,498.50	
Direct Labor Costs		0	\$0.00			1214	\$35,768.74	Increase Over Base
Task 4D Labor Fee (OM 1.5 applied)			\$0.00				\$53,653.11	\$19,035.75
Lab Supplies - preservatives, slides, containers	\$1,000.00	0	\$0.00		\$1,000.00	3	\$3,000.00	
Lab Equipment Usage - Binocular & microscopes	\$150.00	0	\$0.00		\$150.00	7	\$1,050.00	
Macroinvertebrate QA/QC (n = 4)	\$400.00	0	\$0.00		\$400.00	7	\$2,800.00	
ODC Subtotal			\$0.00				\$6,850.00	\$2,350.00
Task 4D Subtotal			\$0.00				\$60,503.11	\$21,385.75
Task 4 Subtotal				\$64,090.80				\$60,503.11
Task 5 - Sediment Chemistry Sampling	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Chemical Crew Leader - Lead Sediment Crew	\$27.05	96	\$2,596.80		\$27.86	0	\$0.00	
Field Technician X 1 - Field Labor	\$15.86	80	\$1,268.80		\$15.86	0	\$0.00	
Field Technician (OT) - Field Labor	\$23.79	16	\$380.64		\$24.51	0	\$0.00	
Direct Labor Costs		192	\$4,246.24			0	\$0.00	
Task 5 Labor Fee (OM 1.5 applied)			\$6,369.36				\$0.00	

Task Descriptions

2016

2017-18

Task 5 - Sediment Chemistry Sampling - ODCs	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Equipment Use - Vehicle	\$300.00	2	\$600.00		\$300.00	0	\$0.00	
Vehicle Mileage - Travel to sites	\$0.575	1,200	\$690.00		\$0.575	0	\$0.00	
Lodging/Food/Misc. - Daily allowance per person	\$125.00	20	\$2,500.00		\$125.00	0	\$0.00	
ODC Subtotal Task 5			\$3,790.00				\$0.00	
Task 5 Subtotal				\$10,159.36				\$0.00
Task 6 - Project Management and Data Analysis								
Task 6A - Project Management	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Principal Investigator - Project Management & Oversight	\$63.69	12	\$764.28		\$65.60	8	\$524.80	
Fish Crew Leader - Track Progress	\$27.05	6	\$162.30		\$27.86	0	\$0.00	
Macroinvertebrate Crew Leader - Track Progress	\$30.05	6	\$180.30		\$30.95	0	\$0.00	
Direct Labor Costs		24	\$1,106.88			8	\$524.80	
Task 1 Labor Fee (OM 1.5 applied)			\$1,660.32				\$787.20	
Task 6A Subtotal			\$1,660.32				\$787.20	
Task 6B - Data Management	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Research Associate - Fish & Habitat Entry	\$27.05	32	\$865.60		\$27.86	0	\$0.00	
Research Associate - Macroinvertebrate Entry	\$27.05	0	\$0.00		\$27.86	52	\$1,448.72	
Research Assoc. - POTW Loadings & Water Chemistry Data	\$27.05	40	\$1,082.00		\$27.86	0	\$0.00	
Direct Labor Costs		72	\$1,947.60			0	\$1,448.72	Increase Over Base
Task 6B Labor Fee (OM 1.5 applied)			\$2,921.40				\$2,173.08	\$167.16
Task 6B Subtotal			\$2,921.40				\$2,173.08	\$167.16
Task 6C - Data Analysis	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Sr. Res. Assoc. - POTW Loadings	\$30.05	0	\$0.00		\$30.95	32	\$990.40	
Sr. Res. Assoc. - Water Column & Sediment Chemical WQ	\$56.34	0	\$0.00		\$58.03	32	\$1,856.96	
Sr. Res. Assoc. - Fish & Macroinvertebrate IBIs	\$56.34	0	\$0.00		\$58.03	32	\$1,856.96	
Sr. Res. Assoc. - Habitat & Field Chemistry	\$56.34	0	\$0.00		\$58.03	32	\$1,856.96	
Sr. Res. Assoc. - Use Attainability & Attainment	\$30.05	0	\$0.00		\$30.95	40	\$1,238.00	
Sr. Res. Assoc. - Causes & Sources	\$56.34	0	\$0.00		\$58.03	60	\$3,481.80	
Direct Labor Costs		0	\$0.00			228	\$11,281.08	
Task 6C Labor Fee (OM 1.5 applied)			\$0.00				\$16,921.62	
Task 6C Subtotal			\$0.00				\$16,921.62	
Task 6 Subtotal				\$4,581.72				\$19,881.90
Task 7 - Monitoring Report	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Sr. Res. Assoc. - Introduction/Study Area/Methods	\$30.05	0	\$0.00		\$30.95	24	\$742.80	
Sr. Res. Assoc. - Chemical WQ Results	\$56.34	0	\$0.00		\$58.03	60	\$3,481.80	
Sr. Res. Assoc. - Habitat Quality	\$56.34	0	\$0.00		\$58.03	32	\$1,856.96	

Task 7 - Monitoring Report (continued)	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal	Unit Cost	Est. Project Units	Cost Estimate	Task Subtotal
Sr. Res. Assoc. - Biological Assemblage Assessment	\$56.34	0	\$0.00		\$58.03	52	\$3,017.56	
Sr. Res. Assoc. - Discussion & Conclusions	\$30.05	0	\$0.00		\$30.95	60	\$1,857.00	
Project Manager - Review & Editing	\$63.69	0	\$0.00		\$58.03	60	\$3,481.80	
Direct Labor Costs		0	\$0.00			288	\$14,437.92	Increase Over Base
Task 7 Labor Fee (OM 1.5 applied)			\$0.00				\$21,656.88	\$348.18
Project Manager Travel - Present Report to DRWW	\$0.00	0	\$0.00		\$1,000.00	1	\$1,000.00	
ODC Subtotal			\$0.00				\$1,000.00	
Task 7 Subtotal				\$0.00				\$22,656.88
Total 2016 & 2017 Upper Desplaines R. Bioassessment				\$91,915.40				\$103,435.49
Grand Total 2016-17 Upper Desplaines Alternate Plan								\$195,350.89

Over \$165K = \$30,350.89

Estimate Includes:

- One sampling pass for fish at 69 sites in 2016
- IEPA multihabitat invert sampling at 69 sites in 2016
- QHEI at all sites
- No sampling for reference sites - suggest adding to plan
- Full data analysis and report per established format

Total Increase Over Base
\$30,382.25

Bugs Field \$8,481.16
Bugs Lab \$21,385.75
Bugs Data \$167.16
Bugs Report \$348.18
\$30,382.25

**MASTER PROFESSIONAL SERVICES AGREEMENT
BETWEEN
GEOSYNTEC CONSULTANTS, INC.**

AND

Des Plaines River Watershed Workgroup

This Master Professional Services Agreement ("Agreement") is made effective June 16, 2016 by and between Des Plaines River Watershed Workgroup ("Client") with a mailing or registered address of 500 W. Winchester Road, Libertyville, IL 60048 and **Geosyntec Consultants, Inc.** ("Consultant/Engineer" or "C/E") and its subsidiaries and affiliates¹ with a mailing or registered address of 1420 Kensington Road, Suite 103; Oak Brook, Illinois 60523.

This Agreement shall cover Services performed by C/E as authorized in mutually acceptable Service Orders.

NOW, THEREFORE, in consideration of the promises set forth below, the parties hereby agree as follows:

1. SERVICE ORDERS

The Scope of Services ("Services") and the schedule and charges for the Services are to be set forth in a written Service Order or other mutually acceptable form of written authorization to this Agreement ("Service Order"). The terms and conditions of this Agreement shall apply to each Service Order, except to the extent expressly modified by the Service Order. Unless otherwise stated in the Service Order, the method of charging for the Services shall be on a time and materials basis and based on the Rate Schedule in effect when the Services are performed, unless otherwise provided in C/E's proposal. The rates shall be subject to annual adjustment based on the mutual consent of the parties. The rates are inclusive of all taxes except such value added, sales, service or withholding taxes that are imposed in some jurisdictions, for which such taxes shall be reimbursable by Client. Where charges are "not to exceed" a specified sum either as a contract total or by task, C/E shall notify Client before such total or specified task sum is exceeded and shall not continue to provide the Services beyond such sum unless Client authorizes an increase in the sum. . Rates for days of actual testimony at depositions, trials, or hearings will be two times the rate shown on the Rate Schedule.

2. PAYMENT CONDITIONS

C/E shall periodically submit invoices to Client." Payment by Client to C/E hereunder shall be in full compliance with the governing statutory requirements of the Local Government Prompt Payment Act. (50 ILCS 505/1 et seq.).

3. NOT USED

4. RECOGNITION OF RISK

Client recognizes that opinions relating to environmental, geologic, and geotechnical conditions are based on limited data and that actual conditions may vary from those encountered at the times and locations where data are obtained, and that the limited data results in uncertainty with respect to the interpretation of these conditions, despite the use of due professional care. It is further recognized that the state of practice, particularly with respect to contaminated site and waste conditions, is changing and evolving, and, further, that certain of the governmental regulations relating to hazardous waste sites purport to require achievement of results which cannot be accomplished in an absolute sense (e.g., the construction of entirely impermeable liners).

5. STANDARD OF CARE

C/E shall be obligated to comply with applicable professional standards of care in the performance of the Services but does not guarantee results. C/E shall also comply with all applicable state, federal, and local laws, executive orders, rules, and regulations.

6. NOT USED

7. INDEMNIFICATION

If any claim is brought against Client and/or C/E, its employees, agents, and subcontractors (hereinafter for purposes of this Section 7 referred to collectively as "C/E"), by a third party, relating in any way to services under this Agreement, including all Service Orders, then C/E and Client shall each indemnify the other against any loss or judgment on a comparative responsibility basis under comparative negligence principles (Client responsibility to include that of its agents, employees, and other contractors).

¹ Engineering services in Michigan are performed by Geosyntec Consultants of Michigan, Inc., in New York by Beech and Bonaparte Engineering P.C., and in North Carolina, engineering and geology services are provided by Geosyntec Consultants of North Carolina, P.C. Services of such affiliate(s) shall be billed by Geosyntec Consultants, Inc. on behalf of the affiliate.

8. INSURANCE

C/E shall maintain during the term of this Agreement the following minimum insurance coverage:

- (i) **Workers' Compensation Employer's Liability** - Statutory
- 1,000,000 per incident or as required by law
- (ii) **Commercial General Liability or Public Liability Insurance** - 1,000,000 per occurrence or as required by law
- (iii) **Comprehensive Automobile Liability** - 1,000,000 combined single limit
- (iv) **Professional Liability** - 1,000,000 per claim

C/E shall provide Client with an insurance certificate, and an insurer endorsement, listing Client (LCSMC and County of Lake) as an Additional Insured on the Commercial General Liability and Automobile Liability, and shall be on a primary, non-contributory basis, for all policies provided by C/E hereunder.

9. RIGHT OF ENTRY

Client grants to C/E, and, if the project site is not owned by Client, warrants that permission has been granted for, a right of entry from time to time by C/E, its employees, agents, and subcontractors, upon the project site for the purpose of providing the Services.

10. HAZARDOUS SUBSTANCES

All nonhazardous samples and by-products from sampling processes in connection with the Services shall be disposed of by C/E in accordance with applicable law; provided, however, that any and all such materials, including wastes, that cannot be introduced back into the environment under existing law without additional treatment, and all hazardous wastes, radioactive wastes, hazardous materials, or hazardous substances ("Hazardous Substances") related to the Services, shall be packaged in accordance with applicable law by C/E and turned over to Client for appropriate shipping and disposal. C/E shall not arrange or otherwise dispose of Hazardous Substances in connection with this Agreement. C/E, at Client's request, may assist Client in identifying appropriate alternatives for off-site treatment, storage or disposal of the Hazardous Substances, but C/E shall not make any independent determination relating to the selection of a treatment, storage, or disposal facility nor subcontract such activities through transporters or others. Client shall sign all necessary manifests for the disposal of Hazardous Substances. If Client insists upon the signing of such manifests by C/E's agents or employees, such signing shall be as Client's agent so that C/E will not be considered to be a generator, transporter, or disposer of such Hazardous Substances, and Client shall indemnify C/E against any claim or loss resulting from such signing and from C/E's non-negligent handling of Hazardous Substances. If unanticipated Hazardous Substances or conditions are encountered, C/E may suspend work for safety reasons until mutually agreeable arrangements are made, which may involve amendments to this Agreement.

11. CONFIDENTIALITY

Both parties acknowledge that C/E's documents and dealings related to this Agreement are subject to the Illinois Open Meetings Act (5 ILCS 120/1 et seq.) and the Illinois Freedom of Information Act (5 ILCS 140/1 et seq.). All documents related to the publication of an agenda in compliance with the Illinois Open Meetings Act shall be submitted by the C/E to the Client by noon one calendar week preceding the date of the meeting.

12. USE OF DOCUMENTS

All work product prepared by C/E pursuant to this Agreement, including, but not limited to, policies, reports, analysis, plans, designs, calculations, work drawings, studies, photographs, models, written correspondence from C/E to subcontractors and recommendations shall be the property of the Client. C/E shall deliver the work product to Client upon completion of C/E's work, distribution of final or draft work products, or termination of the Agreement, whichever comes first. C/E may retain copies of such work product for its records; however, C/E may not use, print, share, disseminate, or publish any work product related to this Agreement without the consent of Client. All work product is subject to the Illinois Freedom of Information Act (5 ILCS 140/1 et seq.).

13. CLIENT RESPONSIBILITY

Client shall: (1) provide C/E, in writing, all information relating to Client's requirements for the project; (2) give C/E prompt written notice of any suspected deficiency in the Services; and (3) with reasonable promptness, provide required approvals and decisions. When the Services include on-site activities, Client shall also (4) correctly identify the location of subsurface structures, such as pipes, tanks, cables, and utilities; and (5) notify C/E of any potential hazardous substances or other health and safety hazards or conditions known to Client existing on or near the project site.

14. DELAYS AND FORCE MAJEURE

In the event that C/E field or technical work is interrupted due to causes outside of its control, C/E shall be equitably compensated (in accordance with C/E's current Rate Schedule) for the additional labor, equipment, and other charges associated with maintaining its work force and equipment available during the interruption, and for such similar charges that are incurred by C/E for demobilization and subsequent remobilization.

Except for the foregoing provision, neither party shall hold the other responsible for damages or delays in performance caused by force majeure, acts of God, or other events beyond the reasonable control of the other party. Delays within the scope of this Section which cumulatively exceed forty-five (45) days shall, at the option of either party, make the applicable Service Order subject to termination for convenience or to renegotiation.

15. TERMINATION

Either party to this Agreement may terminate this Agreement, with or without cause, upon thirty (30) days prior written notice to the other Party. Any Services or Work completed as of that termination date shall be delivered to Client by C/E, and shall be paid for by Client in accordance with Paragraph 2 hereof. Any Services or Work partially completed shall not continue after the date of termination, but shall be invoiced by C/E and paid for by Client to the extent of the partially completed portion of the Service or Work.

16. ASSIGNMENTS

Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.

17. VALIDITY AND GOVERNING LAW

This Agreement is governed by the laws of the State of Illinois.

18. NO THIRD-PARTY RIGHTS

This Agreement shall not create any rights or benefits to parties other than Client and C/E. No third party shall have the right to rely on C/E's opinions rendered in connection with the Services without C/E's written consent which may be conditioned on the third party's agreement to be bound to acceptable conditions and limitations similar to this Agreement.

19. INTEGRATED WRITING

This Agreement constitutes a final and complete repository of the agreements between Client and C/E. It supersedes all prior or contemporaneous communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement. Modifications of this Agreement shall not be binding unless made in writing and signed by an Authorized Representative of each party.

20. NOTICES, SIGNATURES, AND AUTHORIZED REPRESENTATIVES

The following signatories of this Agreement are the Authorized Representatives of Client and C/E for the execution of this Agreement. Each Service Order shall set forth the name and address of the respective Authorized Representatives of the parties for the administration of that Service Order. Any information or notices required or permitted under this Agreement or any Service Order shall be deemed to have been sufficiently given if in writing and delivered either personally or by mail to the undersigned representative or any other Authorized Representative identified in the applicable Service Order. Notice given by mail shall also be transmitted by facsimile at the time of mailing.

CLIENT

CONSULTANT/ ENGINEER

Signature

Signature

Typed or Printed Name

Susan K. Hill

Typed or Printed Name

Title

Vice President

Title

Date of Signature

Date of Signature

NON-DISCRIMINATION AND AFFIRMATIVE ACTION - Required Disclosure for Projects Performed in US

C/E is an Equal Opportunity (EO) and Affirmative Action Employer and unless exempt, shall abide by the EO clauses set forth at 41 CFR §60-1.4(a), 41 CFR §60-250.5(a), 41 CFR §60-300.5(a), and 41 CFR §60-741.5(a). **These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, creed, religion, color, sex, physical or mental disability, medical condition, genetic information, national origin, age, marital status, domestic partner status, sexual orientation, gender identity, citizenship status, weight, height, arrest record, protected veteran status or any other group status protected by law. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, creed, religion, color, sex, physical or mental disability, medical condition, genetic information, national origin, age, marital status, domestic partner status, sexual orientation, gender identity, citizenship status, weight, height, arrest record, protected veteran status or any other group status protected by law.** We shall also abide by the provisions of, 41 CFR §61-250.10 and 41 CFR §61-300.10 (which relate to veterans' employment reports); and of 29 CFR Part 471, Appendix A to Subpart A (posting of employee notice). All of these clauses are incorporated by reference as terms and conditions of this agreement and are binding to Subcontractors/Vendors. Subcontractors/Vendors may be required to develop their own written affirmative action programs and/or otherwise comply with the regulations of 41 CFR Part 60.

Service or Change Order

Effective Date: 6/16/16

This Service or Change Order (“Order”) shall, upon execution of the parties, be incorporated into the Professional Services Agreement between **Des Plaines River Watershed Workgroup** (“Client”) and **Geosyntec Consultants, Inc.** (“Consultant/Engineer” or “C/E”) dated June 16, 2016.

Project #: TBD Service Order Change Order

The form of currency for this Service Order is USD.

Authorized Representatives:

For Client:

Name: Peter Kolb

Address: Des Plaines River Watershed Workgroup

500 W. Winchester Road, Suite 201, Libertyville, IL 60048

Telephone #: 847.377.7125

Email Address: pkolb@lakecountyil.gov

For C/E:

Name: Susan Hill, P.E.

Address: 1420 Kensington Rd., Suite 103, Oak Brook, IL 60523

Telephone #: 630-203-3340

Email Address: shill@Geosyntec.com

Scope of Services and Schedule:

C/E will perform the services in accordance with the scope and schedule set forth in C/E’s proposal dated 6/8/2016 (“Proposal”) or on separate pages attached to this Service Order and incorporated herein.

Rates and Price:

The total price for this Service Order is:

\$108,600 on a time and materials basis which will not be exceeded without Client written consent.

_____ on a lump sum/fixed price basis.

For time and materials services, C/E will invoice Client at the rates set forth in the Agreement. If rates are not included in the Agreement, C/E will invoice Client in accordance with its Proposal and/or current standard rates.

The terms and conditions of the Professional Services Agreement referenced above shall apply to this Service Order. Any modification to this Order must be approved in writing by authorized representatives of the parties.

Acceptance of the terms of this Service Order is acknowledged by the following signatures of the Authorized Representatives.

CLIENT

Signature

Michael Warner

Typed or Printed Name

Executive Director

Title

Date of Signature

CONSULTANT/ ENGINEER

Signature

Susan K. Hill

Typed or Printed Name

Vice President

Title

Date of Signature

June 10, 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 with Alternate End Date of December 1, 2016

Dear Mr. Kolb:

Geosyntec Consultants (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 from July 1, 2016 through April 30, 2017 with an alternate end date of December 1, 2016 and the development of a database and web browser tool for management of monitoring data. 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. The technical coordinator will work closely with all participating entities, reporting to the DRWW Executive Board and membership. Geosyntec appreciates the opportunity to continue serving DRWW and is therefore discounting its standard rate for the technical advisor role from \$180/hour to \$150/hour for this work. We will also develop a relational database and web browser tool to provide the backbone for monitoring data management, access, and analysis. Database development and web browser application will be completed on a time and materials basis according to the rate structure attached, in an amount not to exceed, as detailed below.

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 by providing technically-based input to the Monitoring Committee, Burns & McDonnell, Midwest Biodiversity Institute, Suburban Labs, and other entities as needed. Work items to be completed under this task include assistance in monitoring site finalization; contract adjustment assistance for current contracts; future request for proposals development for monitoring contractors; completion of the map book of monitoring site locations including a map depicting site location specifics including parking, an aerial photograph, and other pertinent site location information; and other work items as directed by the DRWW.

Additionally, 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 the development of a MS4 monitoring plan and report. The monitoring report to provide support for the Publically Owned Treatment Works (POTWs) members to comply with the upstream downstream condition in their NPDES permits is due March 2017. Assistance will be provided in the development of the report.

The deliverable consists of finalizing the monitoring sites (Excel spreadsheet and map book). The map book will be completed within one month of contract execution. Other potential deliverables include contracts, requests for proposals, an MS4 monitoring plan and annual report, and a POTW annual monitoring report. Timelines for potential deliverables will be determined upon the task being assigned.

Task 2 – Illinois EPA Section 319 Grant Related Support: Lake County Stormwater Management Commission (SMC) has received grant funding from Illinois Environmental Protection Agency's (Illinois EPA) 319 program, using the DRWW monitoring data as match. Qualifying for the match requires Illinois EPA approval of a monitoring plan and Quality Assurance Project Plan (QAPP), which has been submitted to the agency for review. Geosyntec will continue to provide support in this effort by addressing review agency comments and making revisions as needed. Labor associated with this effort will be summarized in a separate monthly memorandum and Excel spreadsheet accounting for dates, personnel, hours, and notes for grant reporting purposes. The deliverable is the revised QAPP and the completion data is dependent on receipt of review comments, but will generally be no more than one month after comments are received.

Task 3 – 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 meetings as requested, providing technical support, assisting the administrative support in securing guest speakers for meetings, drafting meeting minutes for those meetings attended, and drafting one page quarterly summaries of DRWW activities intended for distribution to member organizations' staff and elected officials. Deliverables include draft meeting minutes and draft quarterly summaries. Draft meeting minutes will be completed within one week of the meeting and draft quarterly summaries will be available two weeks before a general membership meeting.

Task 4 – Outreach and Membership Recruitment: The DRWW currently represents only a subset of the watershed within the service area. There is potential of additional agency, associate, and individual members to join the DRWW. Geosyntec will help develop a strategy, PowerPoint presentation, and supporting materials to present to potential members. Deliverables consist of a written outreach strategy, a PowerPoint presentation highlighted the work and accomplishments of the DRWW, and supporting materials, as requested. The timeline for completion of the deliverables is two months from contract initiation.

Task 5 – Relational Database Development: Geosyntec will develop a relational database in Microsoft Access that will allow the DRWW to use data collected in a functional, time saving manner. The database development task will include both the development of the structure of the database (tables, fields, relationships), as well as the set of forms and other objects that will serve as the user interface for the database.

To develop the database structure, Geosyntec will review current data formats with the intent of categorizing the data to identify unique datasets and types of data that will result in distinct tables in the database, as well as identifying those datasets with content overlap that could reside in a table or tables that are populated jointly with other data sources. Geosyntec will develop a database schema based in Microsoft Access that is capable of containing the types of data provided and any future datasets that are of the same content and format. The resulting database will provide the framework for which future queries and data management functions are based upon.

The database's user interface (UI) will provide a method for users to interact with the database without a requiring specific knowledge or training on how the inner components of the database work. The UI will contain basic functionality that allows the database to be populated from predefined data transfer formats (such as electronic data deliverable (EDD) files produced by analytical laboratories). A set of forms will guide users through the data entry procedures that will ensure that valid values and overall data integrity are maintained within the database. The UI will also provide basic functionality to extract data from the database using customized "canned" queries and formatting procedures, for example to produce a set of data for a specific data range at a specific river mile.

Geosyntec's final deliverable will consist of a database designed to contain and organize the referenced data sources, as well as tools to facilitate adding data to the database and extracting (querying) data from the database. Geosyntec will not populate the database with data from the data sources as part of this scope of services, except when necessary to test the input/output functionality. Once Geosyntec has all input needed to create the database, the database can be completed within eight weeks.

Task 6 – Database Online Interface: Geosyntec will work with the DRWW to develop a functional web-based tool to be hosted on the DRWW website (www.drww.org) that will allow for an internet-based query of the data published from the DRWW database developed in Task 1 to a 3rd party hosted online database platform. Data queries will be performed through either a retrieve by list interface, or an interactive map that will allow for searching for specific sampling sites presented on a map. The page to support the web-based tool will be created, the page designed, parameter and map-based query interfaces developed, and functionality testing completed.

Geosyntec's final deliverable will consist of a designed page on the DRWW website with both a retrieve by list and map-based interfaces that are able to retrieve data from the third party hosted database (containing data published from the database designed in Task 5), similar to the Geosyntec designed webpage for the DuPage River Salt Creek Workgroup (<http://www.drscw.org/Database/retrievedata.html>). A small recurring hosting fee will apply to maintain the third party platform. Once Geosyntec has all input needed to create the database online interface, the database online interface can be completed within eight weeks.

ASSUMPTIONS

In preparing this proposal, Geosyntec has attempted to provide the DRWW 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, meeting scheduling, minutes of meetings not attended, non-technical communication, and website management.
- Compliance with the Illinois Open Meetings Act other than commitments outlined within this scope of services and the following master professional service agreement and work order will be the responsibility of DRWW.

- Except as listed above, all other Illinois EPA Section 319 grant requirements are the responsibility of DRWW.
- Membership billing and other DRWW financial matters is the responsibility of DRWW.
- The Scope of Work, including the database development, will be provided on a time and materials basis.

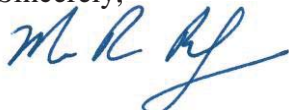
PROFESSIONAL SERVICES FEE

Geosyntec's proposed professional services fees for the proposed SOW shall be performed on a time and material basis with an estimated budget of **\$95,000** as outlined below, for the period of July 1, 2016 through April 30, 2017. Alternatively, a five-month cost of **\$59,800** for the time period of July 1, 2016 through December 1, 2016 is provided below. Budget 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 July 1, 2016-April 30, 2017	Cost July 1-December 1, 2016
1) Monitoring Program Development and Support	\$22,000	\$9,000
2) Illinois EPA Section 319 Grant Related Support	\$8,400	\$8,400
3) Executive Board, Committees, and Meetings Support	\$20,000	\$9,000
4) Outreach and Membership Recruitment	\$20,000	\$8,800
5) Relational Database Development	\$9,300	\$9,300
6) Database Online Interface	\$15,300	\$15,300
Total	\$95,000	\$59,800

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



Des Plaines River Watershed Workgroup

Executive Board – No action requested

6/28/2016

12:30PM – 1:30PM

Lake County Public Works

650 W. Winchester Road, Libertyville IL 60048

AGENDA

1. Call the meeting to order
2. Agenda Changes/Approval
3. Public Comment
4. FYI: Financial Summary Information
5. Presentation/Discussion Item: Technical Coordinator Options
6. New Business
7. Next EB Meeting July 21st – 2:30PM
8. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

June 28, 2016

12:30 p.m.

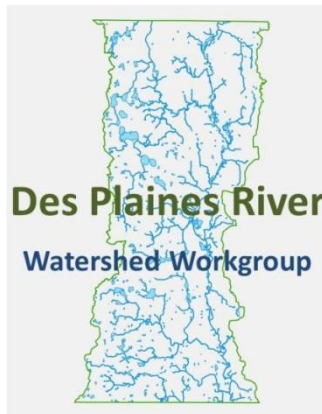
Lake County Public Works Dept., 650 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Peter Kolb called a special meeting of the Des Plaines River Watershed Workgroup (DRWW) Executive Board to order at 12:30 p.m. at the Lake County Public Works Department, 650 Winchester Road, Libertyville, IL. Board Members Present at the meeting were Peter Kolb, LC Public Works (LCPW); Brian Dorn and Joe Robinson, North Shore Water Reclamation District; Michael Adam, LC Health Dept.; Pete Kendzior, Libertyville; Walter Dittrich, Lincolnshire; Mike Warner, LC Stormwater Management Commission (SMC) and Michael Talbett, Kildeer. Also present were Patty Werner, SMC and Austin McFarlane, LCPW.
2. Public Comment: None
3. Board members discussed the present budget and the impact of current administrative costs on the sustainability of the DRWW program. Reducing administrative expenses from \$90,000/yr to \$50,000/yr would make the program sustainable. Members explored various means of reducing administrative costs. Among the options was hiring someone to provide value-centered leadership with environmental experience and the ability to deal with governmental bodies on a part-time basis (less than 1,000 hrs/yr). A consensus was reached that the part-time option warranted further investigation. A job description will be prepared and presented to the Executive Board at the next meeting on July 21, 2016 and possible action to approve a job search may be taken at that meeting.
4. Adjourn: The meeting was adjourned at 1:54 pm.

Respectfully submitted,

Michael Talbett



Des Plaines River Watershed Workgroup

Executive Board

9/15/2016

2:30PM – 3:30PM

Lake County Central Permit Facility

500 W. Winchester Road, Libertyville IL 60048

(2nd Floor SMC Conference Room)

AGENDA

1. Call the meeting to order
2. Agenda Changes/Approval
3. Approve Previous Meeting minutes - Attached
4. Public Comment
5. Financial Summary Report
6. Action Item: Review Panel Selection – Technical Coordinator
7. Discussion Item – IEPA WQ Credit Program Coordination
8. Discussion Item – Leadership Transition Timeline
9. New Business
10. Next EB Meeting October 20th – 2:30PM
11. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

6/16/2016

2:30 PM-4:00 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Call the meeting to order: Peter Kolb called the meeting to order at 2:30 pm.
2. Approve Agenda: Paul Kendzior made a motion to approve the agenda. Michael Talbett seconded the motion. The motion passed unanimously.
3. Previous Meeting minutes: Brian Dorn made a motion to approve the minutes with the change that Paul Kendzior's name was misspelled. Scott Phippen seconded the motion. The motion passed unanimously.
4. Public Comment: None.
5. Financial Summary Report. Mike Warner recommended the fiscal year be changed to match the fund date at the next Executive Board meeting. The fund date is the same as the County's fiscal year which is December 1-November 30. The problem arises at the end of the fiscal year - rollovers take time to process it because the Board needs to vote to approve that. This would require a change in the bylaws. Only new money is presented on the financial summary. The budget should be shown from the beginning of the fiscal year, not just new money. Lincolnshire, Third Lake, and LCFPD are missing. Scott Phippen will look into Lincolnshire. Mike Warner mentioned that Lake County SMC is doing a lot of work with the watershed plan and next year the group will have a large project list before them.
6. Action Item: LCFPD/LCDOT Additional Funding IGA/MOU for Expanded Monitoring Study. Mike Warner said that the money will be used to expand SL's and MBI's contracts. Brian Dorn made a motion to approve the MOU between SMC and LCFPD. Paul Kendzior seconded the motion. The motion approved unanimously. Michael Talbett made a motion to approve the MOU with LCDOT. Joe Robinson seconded the motion. The motion approved unanimously.
7. Action Item: Approve Suburban Labs Contract Amendment. Joe Robinson provided a summary from the Monitoring Committee. The Committee recommends the approval of the SL contract for \$115,000 for water column chemistry and sediment chemistry. Scott Phippen made a motion to approve the contract. Mike Adam seconded the motion. The motion passed unanimously.
8. Action Item: Approve Midwest Biodiversity Institute Contract Amendment. Joe Robinson said the Monitoring Committee recommended the approval of the contract amendment with MBI. Michael Talbett made the motion to accept the amendment with the condition that MBI changes the 77 sites on the cost estimate spreadsheet to 69 sites. Paul Kendzior seconded the motion. The motion passed unanimously.

9. Action Item: Approve Geosyntec Professional Services Contract. Mike Warner talked through the new contract for Geosyntec. All changes have been finalized except the indemnification clause. Andrea Cline will change work order monetary value to match the scope of work. Brian Dorn said the work should be restricted to technical tasks. The group can cut at least \$50,000 out by cutting out administrative and holding the database tasks over to next year. Brian thinks we need Geosyntec's assistance on technical tasks. Andrea was directed to reduce Task 3, cut out Task 4. Task 4 is something they can do themselves. Tasks 5 and 6 can be deferred until next fiscal year, until we have the data. Scott Pippen is hesitant to cut anything until we can figure out who will fill that role and stated that the contract is for an amount not to exceed. Peter Kolb recommended that Tasks 5 and 6 be taken out. Mike Warner suggested a six-month contract and mentioned that it is public funds and we have an obligation to the public. Michael Talbett mentioned that Andrea should be directed to initiate each task. Scott Pippen would feel comfortable with a six-month contract and stated that the group is still evolving. Peter Kolb pointed out that it is actually a five-month contract and that he is in favor of that option which comes to \$32,500, Tasks 5 and 6 deferred, subject to Tasks 1-4 for the amounts in the Scope of Services and to a mutual agreed upon indemnification clause with Task 4 not initiated until directed by the board. Scott Pippen made the motion. Paul Kendzior seconded the motion. The motion passed unanimously.
10. New Business: Peter Kolb asked Mike Warner to give an update periodically regarding the Des Plaines River Watershed-Based Plan.
11. Next Executive Board Meeting July 21st – 2:30PM at CPF.
12. Adjourn: Mike Adam made a motion to adjourn. Joe Robinson seconded the motion. The motion to adjourn was approved unanimously.

Executive Board Members Present:

Peter Kolb, Lake County Public Works

Brian Dorn, NSWRD

Michael Talbett, Kildeer

Paul Kendzior, Libertyville

Scott Pippen, Lincolnshire

Joe Robinson, NSWRD

Mike Adam, Lake County Health Department

Leslie Berns, Lake County Forest Preserve District

Other Attendees:

Jim Bakk

Andrea Cline, Geosyntec

Wally Diettrich, Village of Lincolnshire

Wendy Morey, Lake County SMC

Steve Vella, Libertyville

Mike Warner, Lake County SMC

DRWW

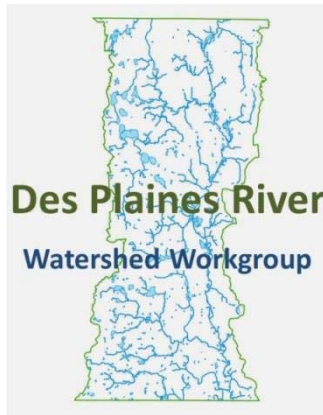
**Des Plaines River Watershed Workgroup-Statement of Account
as of 9/13/16**

wmorey@lakecountyil.gov
mwarner@lakecountyil.gov

500 W Winchester Rd
Libertyville, Illinois 60048
Phone 847 377 7700

	Current Period	Total To Date	Received Date	Balance
Revenues				
Annual Dues Contributions Received:				
Lake County	\$ 25,000.00	\$ 25,000.00	3/16/2016	
Lake County Public Works	\$ 60,000.00	\$ 60,000.00	3/16/2016	
Village of Deerfield	\$ 231.00	\$ 231.00	3/16/2016	
Village of Round Lake Beach	\$ 512.00	\$ 512.00	3/16/2016	
Village of Buffalo Grove	\$ 3,722.00	\$ 3,722.00	3/16/2016	
NSWRD	\$ 83,126.00	\$ 83,126.00	3/16/2016	
Village of Kildeer	\$ 2,297.00	\$ 2,297.00	4/6/2016	
Sierra Club	\$ 200.00	\$ 200.00	4/6/2016	
City of Lake Forest	\$ 283.00	\$ 283.00	5/4/2016	
Village of Green Oaks	\$ 782.00	\$ 782.00	5/4/2016	
Village of Gurnee	\$ 6,736.00	\$ 6,736.00	6/8/2016	
Village of Lake Zurich	\$ 1,613.00	\$ 1,613.00	6/8/2016	
Village of Libertyville	\$ 14,488.00	\$ 14,488.00	6/8/2016	
Village of Lindenhurst	\$ 7,595.00	\$ 7,595.00	6/8/2016	
Village of Vernon Hills	\$ 4,120.00	\$ 4,120.00	6/6/2016	
LCSMC	\$ 200.00	\$ 200.00	6/13/2016	
Village of Lincolnshire	\$ 1,847.00	\$ 1,847.00	7/13/2016	
Christopher Burke	\$ 200.00	\$ 200.00	7/13/2016	
LCFPD	\$ 12,941.00	\$ 12,941.00	8/17/2016	
Other Contributions Received				
LCFPD	\$ 40,000.00	\$ 40,000.00	9/1/2016	
LCDOT	\$ 7,707.00	\$ 7,707.00	9/1/2016	
Total Received:	\$ 273,600.00	\$ 273,600.00		

		Pay Date	
Expenditures Paid:			
Geosyntec #18161019	\$ 8,610.00	2/11/2016	\$ 8,610.00
Geosyntec #18161051	\$ 7,312.50	2/11/2016	\$ 7,312.50
Geosyntec #18161111	\$ 11,411.25	4/21/2016	\$ 11,411.25
Geosyntec #18161151	\$ 5,467.50	4/18/2016	\$ 5,467.50
Geosyntec #18161177	\$ 2,872.50	5/4/2016	\$ 2,872.50
Suburban Labs #132946	\$ 6,619.00	4/26/2016	\$ 6,619.00
Suburban Labs #133670	\$ 6,298.00	4/26/2016	\$ 6,298.00
Burns & McDonnell # 89796-1	\$ 7,596.76	4/4/2016	\$ 7,596.76
Burns & McDonnell # 89796-2	\$ 1,027.53	6/10/2016	\$ 1,027.53
Geosyntec #18161225	\$ 6,442.50	6/15/2016	\$ 6,442.50
MBI #1352	\$ 12,314.64	7/1/2016	\$ 12,314.64
Suburban Labs #136152	\$ 9,306.00	8/2/2016	\$ 9,306.00
Suburban Labs #136627	\$ 9,932.00	8/2/2016	\$ 9,932.00
Geosyntec # 18161285	\$ 6,785.26	8/20/2016	\$ 6,785.26
	\$ -		\$ -
Total Expenditures Paid	\$ 101,995.44		\$ 101,995.44
ENDING ACCOUNT BALANCE			\$ 171,604.56



Des Plaines River Watershed Workgroup

Executive Board

10/20/2016

2:30PM – 3:30PM

Lake County Central Permit Facility

500 W. Winchester Road, Libertyville IL 60048

(2nd Floor SMC Conference Room)

AGENDA

1. Call the meeting to order
2. Agenda Changes/Approval
3. Approve Previous Meeting minutes - Attached
4. Public Comment
5. Financial Summary Report
6. Discussion Item – Monitoring Program Updates
7. Discussion Item – 2016 DRWW Accomplishments Report – November GM Meeting
8. Action Item: Review Panel Selection – Technical Coordinator Contract Discussion and Approval
9. Discussion Item – November Election of DRWW Officers
10. New/Other Business
11. Next Meeting (General Membership Meeting - November 17th at Lake County Public Works Training Facility)
12. Executive Session - None
13. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

9/15/2016

2:30 PM-4:00 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Call the meeting to order: Peter Kolb called the meeting to order at 2:30 pm.
2. Approve Agenda: Paul Kendzior made a motion to approve the agenda. Michael Talbett seconded the motion. The motion passed unanimously.
3. Previous Meeting minutes: Brian Dorn made a motion to approve the minutes. Scott Pippen seconded the motion. The motion passed unanimously.
4. Public Comment: None.
5. Financial Summary Report. Mike Warner presented the year-to-date fiscal report. Questions and discussions occurred, and changes in the financial report format were requested. Questions on new member contributions (CBBEL, Lake Forest, Round Lake Beach) or any members that did not renew this year (Cardno, Third Lake, Grayslake). Several members agreed to follow up and make outreach calls for outstanding dues.
6. Action Item: Review Panel Selection – Technical Coordinator. Mike Warner had stated the number of candidate submittals were at 14 the time of meeting. He gave an overview of the reduction to a short list of 5. EB input on those dropped the short list to 4 candidates, short list was unanimously approved. Selection Committee of (Robinson, Adam, Kendzior, Anderson, Warner, Werner) was established. Request was to try and hold all interviews in one block to be efficient with everyone's time. Input on selection criteria and emphasis was given by board.
7. Discussion Item – IEPA WQ Credit Program Coordination. Board comments centered on IEPA water department chief (Sanjay) and proposing future discussions with him and his staff once the Technical Coordinator (TC) gets on board. Should be part of the new TC tasks as well as development of a workplan, a monitoring data – database, and specific nutrient issues direction (CAWS?).
8. Discussion Item – Leadership Transition Timeline. Discussion that both Peter Kolb (President) and Scott Pippen (Impairments Committee Chair) are retiring. Elections are scheduled for the November General Membership meeting (to be held at the new Public Works Training Facility), which both retiring members will likely be at and can pass the torch to new designees for the role.
9. New Business: Peter Kolb asked Mike Warner to include a standing agenda item for (Other) and (Executive Session)
10. Next Executive Board Meeting October 20th – 2:30PM at CPF.
11. Adjourn: Mike Adam made a motion to adjourn. Joe Robinson seconded the motion. The motion to adjourn was approved unanimously.

Executive Board Members Present:

Peter Kolb, Lake County Public Works

Brian Dorn, NSWRD

Michael Talbett, Kildeer

Paul Kendzior, Libertyville

Scott Pippen, Lincolnshire

Joe Robinson, NSWRD

Mike Adam, Lake County Health Department

Other Attendees:

Jim Anderson, Lake County Forest Preserve District

Austin McFarlane

Patty Werner, Lake County SMC

Phil Perna, LCPWD

Mike Warner, Lake County SMC

DRWW

Des Plaines River Watershed Workgroup-Expense-Rev 500 W Winchester Rd
For Period Dec 2015 - Oct 12 2016

Libertyville, Illinois 60048

Phone 847 377 7700

mwarner@lakecountyil.gov

wmorey@lakecountyil.gov

Revenues Received	Current Period	Total To Date	Received Date	
Carryover	\$ 172,523.00	\$ 172,523.00	3/16/2016	
Lake County	\$ 25,000.00	\$ 25,000.00	3/16/2016	
Lake County Public Works	\$ 60,000.00	\$ 60,000.00	3/16/2016	
Village of Deerfield	\$ 231.00	\$ 231.00	3/16/2016	
Village of Round Lake Beach	\$ 512.00	\$ 512.00	3/16/2016	
Village of Buffalo Grove	\$ 3,722.00	\$ 3,722.00	3/16/2016	
NSWRD	\$ 83,126.00	\$ 83,126.00	3/16/2016	
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Village of Green Oaks	\$ 782.00	\$ 782.00	5/4/2016	
Village of Gurnee	\$ 6,736.00	\$ 6,736.00	6/8/2016	
Village of Lake Zurich	\$ 1,613.00	\$ 1,613.00	6/8/2016	
Village of Libertyville	\$ 14,488.00	\$ 14,488.00	6/8/2016	
Village of Lindenhurst	\$ 7,595.00	\$ 7,595.00	6/8/2016	
Village of Vernon Hills	\$ 4,120.00	\$ 4,120.00	6/6/2016	
LCSMC	\$ 200.00	\$ 200.00	6/13/2016	
Village of Lincolnshire	\$ 1,847.00	\$ 1,847.00	7/13/2016	
Christopher Burke	\$ 200.00	\$ 200.00	7/13/2016	
LCFPD	\$ 12,941.00	\$ 12,941.00	8/17/2016	
Other Contributions Received				
LCFPD	\$ 40,000.00	\$ 40,000.00	9/1/2016	
LCDOT	\$ 7,707.00	\$ 7,707.00	9/1/2016	
Total Received:	\$ 446,123.00	\$ 446,123.00		

Expenditures Paid:	DRWW Ratification		
Geosyntec #18161019	\$ 8,610.00	\$ 8,610.00	2/11/2016
Geosyntec #18161051	\$ 7,312.50	\$ 7,312.50	2/11/2016
Geosyntec #18161111	\$ 11,411.25	\$ 11,411.25	4/21/2016
Geosyntec #18161151	\$ 5,467.50	\$ 5,467.50	4/18/2016
Geosyntec #18161177	\$ 2,872.50	\$ 2,872.50	5/4/2016
Suburban Labs #132946	\$ 6,619.00	\$ 6,619.00	4/26/2016
Suburban Labs #133670	\$ 6,298.00	\$ 6,298.00	4/26/2016
Burns & McDonnell # 89796-1	\$ 7,596.76	\$ 7,596.76	4/4/2016
Burns & McDonnell # 89796-2	\$ 1,027.53	\$ 1,027.53	6/10/2016
Geosyntec #18161225	\$ 6,442.50	\$ 6,442.50	6/15/2016
MBI #1352	\$ 12,314.64	\$ 12,314.64	7/1/2016
Suburban Labs #136152	\$ 9,306.00	\$ 9,306.00	8/2/2016
Suburban Labs #136627	\$ 9,932.00	\$ 9,932.00	8/2/2016
Geosyntec # 18161285	\$ 6,785.26	\$ 6,785.26	8/20/2016
Geosyntec # 18161299	\$ 2,171.25	\$ 2,171.25	10/?/16
MBI #1372	\$ 22,228.76	\$ 22,228.76	?
Geosyntec # 18161262	\$ 6,389.63	\$ 6,389.63	?
Geosyntec # 18161263	\$ 2,282.25	\$ 2,282.25	?
Geosyntec # 18161332	\$ 4,307.25	\$ 4,307.25	
Total Expenditures Paid	\$ 139,374.58	\$ 139,374.58	
ENDING ACCOUNT BALANCE			\$306,748.42

Des Plaines River Watershed Workgroup 2016 (May 1st 2016 - April 30th 2017) BUDGET -PROJECTED REVENUE/COSTS								
REVENUE/Description	Account #	FY2015 Actual	Approved Budget FY2016	FY2016 Actual	Projected FY2017	Projected FY2018	Projected FY2019	
Dues/Membership dues	775-4220010-46010	\$ 230,986	\$ 225,000	\$ 225,893	\$ 210,000	\$ 210,000	\$ 210,000	
Expendable Carryover Addition	775-4220010-46010		\$ 172,523	\$ 172,523	\$ 306,749	\$ 234,559	\$ 185,804	
Other State Funds/Illinois EPA 319 Grant	775-4220010-45350	\$ -	\$ 47,500	\$ -				
Other (FPD/LCDDOT)				\$ 47,707				
Total Revenue		\$ 230,986	\$ 445,023	\$ 446,123	\$ 516,749	\$ 444,559	\$ 395,804	
EXPENSES/Description								
Consultants/Technical Coordinator (GeoSyntec thru 4/30/16) PO 154955	775-4220010-71150	\$ 22,058	\$ 48,506	\$ 64,052	\$ 90,000	\$ 90,000	\$ 90,000	
Consultants/Technical Coordinator (Post May 1st, 2016)	775-4220010-71150	\$ -	\$ 55,000	\$ -	\$ -	\$ -	\$ -	
Consultants/Monitoring Statistics and Prioritization (Future)	775-4220010-71150	\$ -		\$ -			\$ 27,000	
Field Reconnaissance (Bland)	775-4220010-71150	\$ 149						
Monitoring Strategy and QAPP Refinement (IEPA Reimbursable)	775-4220010-71170	\$ -	\$ 47,500	\$ 8,624				
WQ-Sediment Analysis - (Suburban Labs - July 2016 - April 2017)	775-4220010-71310	\$ 36,256	\$ 33,252	\$ 32,155				
Laboratory Fees/Water Chemistry Monitoring (July 2016 - March 2017)	775-4220010-71310	\$ -	\$ 45,000		\$ 75,000	\$ 75,000	\$ 75,000	
Pollutant Load Flow Analysis - (Burns and McDonnell thru 2/1/17)	775-4220010-71310	\$ -	\$ 39,600	\$ -	\$ 13,755	\$ 13,755		
MBI - Bioassessment Monitoring/Sediment Collection (thru 12/31/17)	775-4220010-71310	\$ -	\$ 77,168	\$ 34,543	\$ 103,435	\$ 80,000	\$ 80,000	
Projected Expenses		\$ 58,463	\$ 346,026	\$ 139,374	\$ 282,190	\$ 258,755	\$ 272,000	
Projected Unexpended Carryover		\$ 172,523	\$ 98,997	\$ 306,749	\$ 234,559	\$ 185,804	\$ 123,804	Dues Dependent
		\$ 230,986		\$ 446,123				
		\$ 58,463		\$ 139,374				
		\$ 172,523		\$ 306,749				

	A	B	C	D	E	F	G	H	I
1	ACCOUNT NUMBER	DRWW	Budget	PM	PO			TOTAL PAID 2016	Remaining
2	775-4220010-71150	Geosyntec & Consultants	19,800	MW					19,800
3	775-4220010-71150	Geosyntec	83,706	MW	154955			64,052	19,654
4		Total 71150	103,506					64,052	39,454
5									
6	775-4220010-71170	MBI & Burns and McDonnell-Monitoring Strategy & QAPP Refinement ILEPA Reimbursable(2015 RFP)	38,876	MW				0	38,876
7	775-4220010-71170	Burns & McDonnell	8,624	MW	162821			8,624	0
8	775-4220010-71170	MBI							
9	775-4220010-71170	Geosyntec							
10		Total 71170	47,500					8,624	38,876
11									
12	775-4220010-71310	Suburban Labs-Laboratory Fees /Water Chemistry Monitoring	45,000	MW				0	45,000
13	775-4220010-71310	Suburban Labs-Laboratory Fees /Water Chemistry Monitoring	33,252	MW	162822			32,155	1,097
14									
15	775-4220010-71310	Burns & McDonnell-Pollutant Load Flow Analysis	39,600	MW				0	39,600
16	775-4220010-71310	MBI-Bioassessment/sediment collection	77,168	MW	164167			34,543	42,625
17									
18		Total 71310	195,020					66,698	128,322
19									
20		DRWW EXPENSE-TOTAL DRWW	346,026					139,375	206,651
21									
22	775-4220010-48010		0					-52.80	52.80
23	775-4220010-48011		0					-7.85	7.85
24									
25	775-4220010-46010	DRWW-MEMBERSHIP FEES REVENUE	397,523					446,123	(48,600)
26	775-4220010-45350	DRWW-STATE FUNDS-EPA 319 GRANT REVENUE	47,500						47,500
27		TOTAL REVENUE	445,023					446,123	(1,100)
28									

CONSULTING SERVICES AGREEMENT
between the
DES PLAINES RIVER WATERSHED WORKGROUP
and
[REDACTED]
for
TECHNICAL COORDINATOR SERVICES

This is an agreement (Agreement) by and between the DES PLAINES RIVER WATERSHED WORKGROUP, 500 West Winchester Road, Suite 201, Libertyville, Illinois 60048 (DRWW) and [REDACTED] (Consultant).

PURPOSE

The DRWW is a consortium of publicly owned wastewater treatment works, local governments, citizen advocacy groups, and professional firms focused on improving water quality in the Des Plaines River watershed. The DRWW formed in response to USEPA and IEPA regulatory mandates and has taken a shared services approach to most efficiently and economically achieve the challenges put forth in POTW and MS4 permit requirements. Both IEPA and USEPA have recognized the benefits of a watershed-based approach to addressing water quality issues in the Des Plaines River by allowing DRWW members to collaboratively use shared data to comply with their individual permit conditions.

The DRWW is a data-driven, forward-thinking, organization that analyzes and implements strategies to achieve Clean Water Act (CWA) goals in the Des Plaines River Watershed. This contract is for the DRWW Consultant at a work effort level expectation of approximately 1084 hours during the 13-month contract time period with those hours dedicated to forwarding the mission of the DRWW as generally described in the scope of services.

SCOPE OF SERVICES

The Consultant will work with the DRWW Executive Board, Committees, Members, Administrative Group (SMC) and regulatory agencies. The Consultant will work as part of a team, including an administrative support group, to implement; a comprehensive monitoring program (aquatic life, physical habitat, dissolved oxygen, water column and sediment chemistry and chloride management strategies); watershed planning and assessment activities; nutrient removal planning; nutrient trading programs, and to pursue and manage grant and funding opportunities related to the work of the DRWW. The following tasks are not listed in priority order and it is not envisioned this task list would be completed through this contract period, but represents an ongoing and projected list of tasks the Consultant would provide.

- A. Meeting Attendance: Executive Board, Committees and General Membership meetings
- B. Comprehensive Monitoring Program: Work as part of a team to:
 - 1) QAPP Coordination: Assist SMC administrative support staff and DRWW with the QAPP coordination; including coordination with consultants and SMC on updating QAPPs for the monitoring program, pertaining to additional parameters to sample for lakes, streams, and flow monitoring.
 - 2) Monitoring Work Plan: Coordinate with SMC administrative support staff, DRWW and subconsultants on development of the monitoring data needs, locations, maps and schedule.
 - 3) Subcontractor Management: Develop scopes of work, assist with procurement processes to engage needed support services, coordinate subcontractor work efforts and deliverables, including but not limited to; water chemistry monitoring, fish and macroinvertebrate sampling, database development, flow monitoring, other consulting or subcontractor services that are identified and approved by the Executive Board.
 - 4) Monitoring Data - Database Options: Present monitoring data database and geospatial options to the Executive Board, coordinate decision point on optimal tools for DRWW based on data collected, user-friendliness, financial, and other criteria as defined by the DRWW, and manage the development of a database and subcontracts as necessary. The DRWW work plan would define the goals, timeline, and budget for the monitoring database.
- C. Development and Coordination of DRWW Work Plan: Coordinate with the Executive Board and prepare a work plan, including DRWW action items for 2017 and long term goals and objectives for the next three to five

years. The work plan will be a living document and outline for the DRWW compatible with the watershed plan for the next three to five years.

D. Watershed Assessment Activities

- 1) Technical Review of Watershed Assessment: Based on the watershed assessment data gathered through watershed planning and monitoring efforts, assist SMC administrative support staff with preliminary technical review of assessment data and provide comments for completeness.
 - 2) Review of Watershed Plan Documents: Preliminary review assistance of draft watershed plan documents and provide comments. Provide review assistance of the final draft of the watershed plan prepared by SMC administrative support staff for submittal to the IEPA.
- E. Regulatory and Granting Agency Coordination: Represent the DRWW in coordination with IEPA, USEPA, and other regulatory agencies or granting sources to further the mission and goals of the DRWW, including but not limited to; a nutrient trading program, POTW and MS4 permit conditions and standards, grant opportunities, TMDL issues, and specific water quality parameter concerns.
- F. Meeting Support Services: Coordination with the SMC administrative support staff for meetings with the DRWW, including Executive Board meetings, Monitoring committee meetings, Lakes committee meetings, and quarterly meetings of the General Membership. Prepare meeting agendas, meeting minutes; meeting materials and coordination of or provision of presentations.
- G. Website Coordination: Coordination with SMC administrative support staff of website announcements of meeting content, news or other media information. Print material will be generated by SMC.
- H. Educational Outreach and Membership Development: Coordination with SMC administrative support staff of an educational and stakeholder outreach program. Provide strategic leadership regarding potential future group partnerships and members. Coordination with SMC administrative support staff of public notices, press releases, and email announcements to promote the DRWW goals and objectives.
- I. Freedom of Information Act/Open Meetings Act: Copy all correspondence to SMC, the DRWW designated FOIA officer. To ensure no conflicts with OMA deadlines, a final draft of all meeting materials shall be transmitted to SMC one calendar week ahead of each meeting.
- J. Attendance at Conferences or training sessions: The DRWW may request the Consultant to attend relevant conferences and trainings with respect to the purpose of this Agreement.

The DRWW, with agreement of the Consultant, may develop general consultant assistance tasks that do not fall within the exact description of tasks A. thru J. listed above but will forward the overall mission and goals of the DRWW. This Agreement will then be amended in accordance with the Terms and Conditions, below.

COMPENSATION

1. The Consultant agrees to perform the work outlined in the Scope of Services for a fee (Agreement Amount) not to exceed \$54,200 at a rate of \$50/hour. The Consultant will determine her own work schedule through the contract time period which lasts approximately 13 months.
2. The Consultant shall furnish the DRWW with an itemized invoice at a minimum, on a monthly basis. Invoices shall describe the work completed; show the number hours worked on a per task basis; and DRWW approved reimbursable expenses (e.g.; out of town travel, lodging, meals, specialized software) that have been incurred. Payments by the DRWW shall be made within 45 days of receipt and approval of the Consultant's invoice.
3. DRWW agrees that reasonable pre-Agreement expenses for requested services rendered and costs incurred may be invoiced by the Consultant in the first monthly invoice.

AGREEMENT TIME FRAME


This Agreement will run from the date both parties sign it and continue through November 30th 2017.

TERMS AND CONDITIONS

1. The DRWW may issue written changes in the scope of work, with written agreement of both parties, if such changes are within the general scope of the Agreement. The Consultant will not be compensated for services performed outside of the Scope of Work, without an approved Change Order.
2. The Consultant when prioritizing tasks will take final direction from the DRWW Executive Board, but may use professional judgement and advice from the DRWW President, DRWW Members or SMC administrative support staff.
3. The DRWW or Consultant may at any time terminate this Agreement in whole or in part by a thirty day written, electronic or verbal notice confirmed in writing. Upon termination, for convenience of the DRWW, the DRWW will assume responsibility for services rendered and costs incurred prior to notification. Any and all services, property, publications or materials provided during or resulting from the Consultant shall be the property of the DRWW.
4. This Agreement shall be governed by and construed according to the laws of the State of Illinois.
5. This Agreement supersedes any and all other agreements, oral or written, between the parties hereto with respect to the subject matter hereof.
6. This agreement shall not be assigned, altered or modified without the express written consent of both parties except as provided in paragraph one above. The Consultant shall not reject any reasonable change that is proposed solely in the best interest of the DRWW.

NOTICES AND COMMUNICATION

All notices and communications given to either party by the other relative to this agreement shall be addressed to the respective parties as follows:

<p>To the DRWW: Des Plaines River Watershed Workgroup 500 West Winchester Road, Suite 201 Libertyville, Illinois 60048 ATTENTION: Mike Warner mwarner@lakecountyil.gov</p>	<p>To the Consultant: </p>
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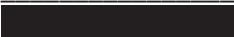
For the DRWW:

 Peter Kolb, President
 Des Plaines River Watershed Workgroup

Date: _____

Attest:

For the Consultant:

 Proprietor

Date: _____

Attest:



Des Plaines River Watershed Workgroup

Executive Board

12/15/2016

2:30 – 3:30 PM

Lake County Central Permit Facility

500 W. Winchester Road, Libertyville IL 60048

Agenda

1. Call the meeting to order
2. Roll Call
3. Approve Previous Meeting minutes
4. Public Comment
5. Contract Extension for Burns & McDonald
6. Nominations for DRWW Officers
7. Budget and Membership fees for 2017
8. Workplan for the DRWW
9. Suburban Labs Contract
10. Staffing for Suburban Labs Data Formatting
11. Monitoring Committee Update
12. Lakes Committee Update
13. Impairments Committee Update
14. Old Business
15. Other Business
16. Next Executive Board Meeting January 19, 2017
17. Adjourn



Des Plaines River Watershed Workgroup

Executive Board

12/15/2016

2:30 PM-3:30 PM

Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048

Meeting Minutes

1. Call the meeting to order: Michael Talbett called the meeting to order at 2:30 pm.
2. Roll Call – see attendee list below.
3. Previous Meeting minutes: Peter Kolb made a motion to approve the minutes. Paul Kendzior seconded the motion. The motion passed unanimously.
4. Public Comment: None.
5. Contract Extension for Burns & McDonnell for Flow Monitoring services. Brian O'Neill from B&M attended the Monitoring Committee meeting on 12/15/16 and explained the scope of work they are proposing for 2017, he said he would have a proposal for the monitoring committee to review by Jan. 5, 2017. No action until the proposal comes in.
6. Nominations for DRWW Officers and a Member at Large. After some discussion, it was agreed to nominate: Brian Dorn (NSWRD) for President, Al Giertych (LCDOT) for Vice-President and Jim Anderson (LCFPD) for Member at Large. Amended By-Law language will be provided and discussed at the January 19, 2017 meeting.
7. Budget and Membership Fees for 2017. Al requested that the dues schedule be reviewed at the next meeting. It was mentioned that currently none of the Townships in the watershed are members. Al suggested we reach out to Warren Twp first. Peter asked if the group thought that the membership dues for townships be increased from \$200 to \$500? Joe was wondering how we can offer Continuing Education Credits (CEC's) to folks who attend our meetings, like the DRSCW does? Al suggested we consider linking the DRWW to the Municipal Advisory Committee – a MS4 group.
8. DRWW Workplan – Beth shared some ideas she has for the group – including adding education and watershed experiences for the DRWW members. Peter pointed out that the workplan needs to cover goals for some period into the future – like 5 years. He said the first 2 years the DRWW has been collecting data, next we need to push the permitting piece. Funding for projects, POTWs are spending millions of dollars in capital improvements, then secure the permit so watershed projects can be done in lieu of capital improvements. Michael stated that the MS4 communities need to be shown the benefit they are getting from the DRWW to justify their dues. Someone commented that the DRWW's strong relationship with the regulatory community is a benefit to MS4's. Mike W sketched out the Workplan tracks on the dry-erase board: Planning and Grants/WQ Improvement Projects; Regulatory; Education/Leadership; and Monitoring/Data Handling. Accomplishments for each year, 2015-2018. It was noted that Cindy Skrukud meets with IEPA 1x/month, and maybe we should consider doing the same. Joe noted

that if the majors get down to 1 ppm it will solve the Gulf hypoxia problem. Everyone is interested to see the permit language that the DRSCW negotiated with IEPA. The DRSCW got IEPA to refund the fines and dues money to them. It was suggested we invite Steve McCracken to come speak.

9. Suburban Labs Contract – need more clarification on which sampling sites were the extra 7 that were to be added to SL’s contract.
10. Staffing for Suburban Labs (SL) Data Formatting – Joe made a motion to authorize funding to hire an intern to format SL data not to exceed \$2,000. Mike A seconded the motion. The motion passed unanimously.
11. Monitoring Committee Update – Joe provided a summary. There is a conference call scheduled with Chris Yoder for Jan 12 to discuss how to divide up the watershed into thirds and then 25 or so sampling locations within each of the thirds. The monitoring committee asked Clint Bailey of USGS to prepare a cost estimate to add continuous conductance and temperature data with monthly chloride samples taken to correlate the data. Burns and McDonnell (B&M) Contract Extension – Brian O’Neill, project manager for B&M attended the meeting to discuss the scope of the flow monitoring extension and said he would get the monitoring committee a written proposal in early January. Mike W. suggested that a DRWW monitoring committee member be assigned to co-manage each contractor with Beth Adler. He suggested Jim Bland co-manage B&M, Mike Adam co-manage SL, and Joe Robinson co-manage MBI. This was agreed upon by Jim, Mike and Joe. There was discussion about the need for an intern to be hired to format data coming from Suburban Labs.
12. Lakes Committee Update – Mike A gave an update. Shoreline assessments have been completed.
13. Impairments Committee Update – None
14. Old Business – None
15. Other Business – Joe stated that Larry (Tempel Farms) is concerned with improving the water quality on his property, so we should try to get him to participate with DRWW. He suggested we support Larry with IEPA and his project.

Executive Board Members Present:

Peter Kolb, Applied Technologies
Michael Talbett, Kildeer
Paul Kendzior, Libertyville
Joe Robinson, NSWRD
Mike Adam, Lake County Health Department
Tom Morthorst, Village of Third Lake
Steve Vella, Libertyville

Other Attendees:

Beth Adler, DRWW Technical Coordinator
Mike Warner, Lake County SMC
Patty Werner, Lake County SMC