CITY COUNCIL
ATLANTA, GEORGIA

14-R-3292

A RESOLUTION BY CITY UTILITIES COMMITTEE AUTHORIZING THE MAYOR TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR FOR FC-6004007858, WATER QUALITY AND WATER QUANTITY LONG TERM MONITORING NETWORK, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED SEVENTY-EIGHT THOUSAND DOLLARS AND ZERO CENTS ($578,000.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER 5051 (WATER & WASTEWATER REVENUE FUND) 170201 (DWM WASTEWATER TREATMENT & COLLECTIONS) 5222002 (REPAIR & MAINTENANCE-EQUIPMENT) 4310000 (SANITARY ADMINISTRATION) IN THE FOLLOWING AMOUNTS: FY2014 - $ 289,000.00 AND FY2015 - $ 289,000.00; AND FOR OTHER PURPOSES.

Workflow List:

Jo Ann Macrina	Completed	03/03/2014 1:28 PM
Patrick McShane	Completed	03/03/2014 1:35 PM
Finance	Completed	03/04/2014 8:41 AM
Procurement	Completed	03/04/2014 4:12 PM
Adam Smith	Completed	03/04/2014 4:24 PM
Mayor's Office	Completed	03/04/2014 4:30 PM
Office of Research and Policy Analysis	Completed	03/05/2014 11:42 AM
City Utilities Committee	Pending	
Atlanta City Council	Pending	
Mayor's Office	Pending	

Certified by Presiding Officer	Certified by Clerk
Mayor’s Action *See Authentication Page Attachment*	

LEGISLATION HISTORY – BLUE BACK

A RESOLUTION BY CITY UTILITIES COMMITTEE AUTHORIZING THE MAYOR TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR FOR FC-6004007858, WATER QUALITY AND WATER QUANTITY LONG TERM MONITORING NETWORK, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED SEVENTY-EIGHT THOUSAND DOLLARS AND ZERO CENTS ($578,000.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER 5051 (WATER & WASTEWATER REVENUE FUND) 170201 (DWM WASTEWATER TREATMENT & COLLECTIONS) 5222002 (REPAIR & MAINTENANCE-EQUIPMENT) 4310000 (SANITARY ADMINISTRATION) IN THE FOLLOWING AMOUNTS: FY2014 - $ 289,000.00 AND FY2015 - $ 289,000.00; AND FOR OTHER PURPOSES.

WHEREAS, the City of Atlanta ("City") is improving its wastewater system under a consent decree program that will result in improved water quality in streams that flow through its boundaries; and

WHEREAS, the City has instituted a program known as "Clean Water Atlanta," one of the components of which is to monitor water quality of major streams and rivers in Atlanta, and has commenced a long term water quality and water quantity monitoring program through an Intergovernmental Agreement with United States Geological Survey, United States Department of Interior ("USGS"); and

WHEREAS, the City entered into an Intergovernmental Agreement with the USGS for FC-6004007858, Water Quality and Water Quantity Long Term Monitoring Network to maintain and operate water monitoring equipment, on behalf of the Department of Watershed Management, pursuant to Resolution No. 09-R-1942 ; and

WHEREAS, the Department of Watershed Management desires to enter into a subsequent Intergovernmental Agreement with the USGS for FC-6004007858, Water Quality and Water Quantity Long Term Monitoring Network to maintain and operate water monitoring equipment; and

WHEREAS, Sections 2-1602 and 2-1604 of the Procurement Code of the City of Atlanta authorize Intergovernmental Agreements with other public entities; and

WHEREAS, the U.S. Geological Survey, United States Department of Interior is a public entity; and

WHEREAS, the Commissioner of the Department of Watershed Management and the Chief Procurement Officer have recommended an Intergovernmental Agreement with the USGS for FC-6004007858, Water Quality and Water Quantity Long Term Monitoring Network to maintain and operate water monitoring equipment in an amount not to exceed Five Hundred Seventy-Eight Thousand Dollars and Zero Cents ($578,000.00).

THE CITY COUNCIL OF THE CITY OF ATLANTA, GEORGIA, HEREBY RESOLVES, that the Mayor, or his authorized designee, is authorized to enter into an Intergovernmental Agreement with

United States Geological Survey, United States Department of Interior FC-6004007858, Water Quality and Water Quantity Long Term Monitoring Network in an amount not to exceed Five Hundred Seventy-Eight Thousand Dollars and Zero Cents ($578,000.00) to maintain and operate water monitoring equipment;

BE IT FURTHER RESOLVED, the term of the Intergovernmental Agreement is for one (1) year with three (3) one (1) year renewal options to be exercised at the City's sole discretion;

BE IT FURTHER RESOLVED, that the Chief Procurement Officer, in consultation with the City Attorney, is directed to prepare all appropriate documents for execution by the Mayor, or his authorized designee;

BE IT FURTHER RESOLVED, that the Intergovernmental Agreement will not become binding on the City, and the City will incur no obligation or liability under it until it has been executed by the Mayor, attested to by the Municipal Clerk, approved as to form by the City Attorney and delivered to United States Geological Survey, United States Department of Interior;

BE IT FURTHER RESOLVED, that the FY 2015 funding portion of the Agreement shall be subject to and expressly contingent upon the City's adoption and approval of the FY 2015 budget and the appropriation of sufficient funds to the associated funding sources; and

BE IT FINALLY RESOLVED, that all contracted work will be charged to and paid from Fund Department Organization and Account Number 5051 (Water & Wastewater Revenue Fund) 170201 (DWM Wastewater Treatment & Collections) 5222002 (Repair & Maintenance-Equipment) 4310000 (Sanitary Administration) in the following amounts: FY2014 - $289,000.00 and FY2015 - $289,000.00.

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE **ATTN: CANDACE L. BYRD**

Dept.'s Legislative Liaison: Maisha L. Wood

Contact Number: 404-546-3625

Originating Department: Watershed Management

Committee(s) of Purview: City Utilities

Chief of Staff Deadline: February 21, 2014

Anticipated Committee Meeting Date(s): M arch 11, 2014

Anticipated Full Council Date: March 17, 2014

Legislative Counsel's Signature:

Commissioner's Signature:

Chief Financial Officer:

Chief Information Officer Signature (*for IT Procurements*) n/a

Chief Procurement Officer Signature:

CAPTION

A RESOLUTION AUTHORIZING THE MAYOR OR HIS DESIGNEE TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR FOR FC-6004007858, WATER QUALITY AND WATER QUANTITY LONG TERM MONITORING NETWORK WITH UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED SEVENTY-EIGHT THOUSAND DOLLARS AND NO CENTS ($578,000.00) ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT; ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER 5051 (WATER & WASTEWATER REVENUE FUND) 170201 (DWM WASTEWATER TREATMENT & COLLECTIONS) 5222002 (REPAIR & MAINTENANCE-EQUIPMENT) 4310000 (SANITARY ADMINISTRATION) IN THE FOLLOWING AMOUNTS: FY2014 - $ 289,000.00 AND FY2015 - $ 289,000.00; AND FOR OTHER PURPOSES.

FINANCIAL IMPACT: (if any) ($578,000.00)

Mayor's Staff Only

Received by CPO: _____ (date) **Received by LC from CPO:** _____ (date)

Received by Mayor's Office: 2-21-14 (date) **Reviewed by:** _____ (date)

Submitted to Council: _____ (date)

Part II: Legislative White Paper: (This portion of the Legislative Request Form will be shared with City Council members and staff)

A. To be completed by Legislative Counsel:

Committee of Purview: City Utilities

Caption: **A RESOLUTION AUTHORIZING THE MAYOR OR HIS DESIGNEE TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR FOR FC-6004007858, WATER QUALITY AND WATER QUANTITY LONG TERM MONITORING NETWORK WITH UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED SEVENTY-EIGHT THOUSAND DOLLARS AND NO CENTS ($578,000.00) ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT; ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER 5051 (WATER & WASTEWATER REVENUE FUND) 170201 (DWM WASTEWATER TREATMENT & COLLECTIONS) 5222002 (REPAIR & MAINTENANCE-EQUIPMENT) 4310000 (SANITARY ADMINISTRATION) IN THE FOLLOWING AMOUNTS: FY2014 - $ 289,000.00 AND FY2015 - $ 289,000.00; AND FOR OTHER PURPOSES.**

Council Meeting Date: March 17, 2014

Requesting Dept.: Watershed Management

B. To be completed by the department:

1. Please provide a summary of the purpose of this legislation (Justification Statement).

The purpose of this legislation is to request the Mayor to enter into an Intergovernmental Joint Funding Agreement with the U.S. Geological Survey, United States Department of Interior for Water Quality and Water Quantity Long Term Monitoring Network, on behalf of the Department of Watershed Management, in an amount not to exceed $ 578,000.

Funding for the first service year will be split by fiscal year, FY2014 - $289,000 and FY2015 - $289,000.

The term of the agreement shall be for one (1) year with three (3) one (1) year renewal options at the sole discretion of the City.

2. Please provide background information regarding this legislation.

The scope of work for this project includes operation and maintenance of water-quantity and water-quality monitoring instruments; collection and analysis of water-quality samples; processing, quality assuring, and publishing data. The watersheds monitored in the City of Atlanta include Peachtree Creek, Nancy Creek, Proctor Creek, Utoy Creek, South River, and Intrenchment Creek.

The data collected for the long-term monitoring program can be used for the following:

1) **Identifying sources of impairment**—identifying sources of water-quality impairment can be a difficult and time-consuming task. The long-term monitoring program will provide real-time measures of stream water-quality that can be used to identify periods when point sources of pollution are active. The monitoring can also be used to narrow the location of sources and to determine relations between specific types of land use and water-quality impairment.

2) **Determining trends in water quality, particularly with respect to upgrades in wastewater infrastructure**—The COA has completed work on the Nancy Creek and East CSO tunnels. Completion of work on the West CSO tunnel is projected within a few years. The combined effects of these tunnels should be observable in such measures of water quality as pH, dissolved oxygen, specific conductance, and turbidity. Water quality samples are used to calculate loadings, or the total mass of material transported by a stream for a specific period. Long-term changes in the loadings of constituents such as dissolved nitrogen and phosphorus should be observed as sewage overflows are reduced through the implementation of infrastructure improvements and other programs such as CMOMs. Currently, long-term constituent monitoring is being done only in the South River watershed.

3) **Supplement existing water-quality monitoring programs**—The monitoring program can be used to support work required by the COA for NPDES storm-water permits and monitoring required for the SSO Consent Decree. Data from 9 sites will be used to meet MNGWPD requirements for long-term monitoring.

4) **Provide information to the City, State, and public that can be used to make management decisions that affect water quality**—The monitoring program can be used to determine the effects of different watershed management and infrastructural improvements on water quality. The monitoring data will be key to understanding if programs are working or not. In addition, state agencies can determine if programs that are effective in Atlanta would be applicable to other municipalities and urban areas in Georgia.

3. <u>If Applicable/Known:</u>

(a) **Contract Type:** Intergovernmental Joint Funding Agreement

(b) **Source Selection:** N/A

(c) **Bids/Proposals Due:** N/A

(d) **Invitations Issued:** N/A

(e) **Number of Bids:** N/A

(f) **Proposals Received:** N/A

(g) **Bidders/Proponents:** N/A

(h) **Term of Contract:** One (1) year with three (3) one (1) year renewal options

4. **Fund Account Center (*Ex. Name and number*):**

FY-2014 - $289,000
FDOA: 5051 (Water & Wastewater Revenue Fund), 170201 (DWM Wastewater Treatment & Collections), 5222002 (Repair & Maintenance-Equipment), 4310000 (Sanitary Administration)

FY-2015 - $289,000
FDOA: 5051 (Water & Wastewater Revenue Fund), 170201 (DWM Wastewater Treatment & Collections), 5222002 (Repair & Maintenance-Equipment), 4310000 (Sanitary Administration)

PATEO: N/A

5. Source of Funds:

Fiscal Impact: Legislation will result in a reduction in an amount not to exceed $ 578,000. FY-2014 - $289,000 and FY-2015 - $289,000

FDOA:

PATEO:

7. Method of Cost Recovery: N/A

Examples:

a. ***Revenues generated from the permits required under this legislation will be used to fund the personnel needed to carry out the permitting process.***

b. ***Money obtained from a local assistance grant will be used to cover the costs of this Summer Food Program.***

_____ **(Approval Recommended)**
Jo Ann J. Macrina, PE; Commissioner

This Legislative Request Form Was Prepared By: Yunior Galardy

Kasim Reed
MAYOR

CITY OF ATLANTA
DEPARTMENT OF WATERSHED MANAGEMENT
72 Marietta Street, N.W.
ATLANTA, GEORGIA 30303

Jo Ann J. Macrina, PE
COMMISSIONER

MEMORANDUM

To: Michael Geisler, Deputy Commissioner, Office of Financial Administration
Department of Watershed Management

From: Jo Ann J. Macrina, PE; Commissioner
Department of Watershed Management

Date: January 23, 2014

Re: Intergovernmental Joint Funding Agreement with U.S. Geological Survey, United States Department of Interior for Water Quality and Water Quantity Long Term Monitoring Network in an amount not to exceed $578,000.
Cycle 5 / Full Council Date of March 3, 2014

The purpose of this memorandum is to request legislation for the Mayor to enter into an Intergovernmental Joint Funding Agreement with the U.S. Geological Survey, United States Department of Interior for Water Quality and Water Quantity Long Term Monitoring Network, on behalf of the Department of Watershed Management, in an amount not to exceed $ 578,000.

The term of the agreement shall be for one (1) year with three (3) one (1) year renewal options at the sole discretion of the City.

The following accounts will fund this project:

FY-2014 - $289,000
FDOA: 5051 (Water & Wastewater Revenue Fund), 170201 (DWM Wastewater Treatment & Collections), 5222002 (Repair & Maintenance-Equipment), 4310000 (Sanitary Administration)

FY-2015 - $289,000
FDOA: 5051 (Water & Wastewater Revenue Fund), 170201 (DWM Wastewater Treatment & Collections), 5222002 (Repair & Maintenance-Equipment), 4310000 (Sanitary Administration)

If you have any questions or need any additional information, please contact COA Project Manager Karen Schroeder at 404-546-1153 or Kschroeder@atlantaga.gov .

Thank you for your assistance with this matter.

Attachments
CC: Kimberly Parmer, DWM
Cynthia Lunn, DWM
Demetris Johnson, DWM

Kasim Reed
MAYOR

CITY OF ATLANTA
DEPARTMENT OF WATERSHED MANAGEMENT
72 Marietta Street, N.W.
ATLANTA, GEORGIA 30303

Jo Ann J. Macrina, PE
COMMISSIONER

MEMORANDUM

To: Adam L. Smith, Chief Procurement Officer
Department of Procurement

From: Jo Ann J. Macrina, PE, Commissioner
Department of Watershed Management

Cc: Margaret Tanner, Deputy Commissioner
Kimberly Parmer, Director
Keith Brooks, Deputy Chief Procurement Officer
Delmarie Griffin, Contract Administrator, Sr.
Maisha Land-Wood, Legislative Manager
Cynthia Lunn, Watershed Procurement Manager
Nicole Weems, Contracting Officer, Sr.

Date: February 07, 2014

Re: Legislative Request for Authorization to Enter into an Intergovernmental Joint Funding Agreement with U.S. Geological Survey, United States Department of Interior for Water Quality and Water Quantity Long Term Monitoring Network in an amount not to exceed $578,000.00.

Please prepare the appropriate Legislative Summary for **Cycle 7 (April 21, 2014)** to approve the above referenced services, in an amount not to exceed Five Hundred Seventy Eight Thousand Dollars and No Cents **($578,000.00)**

These services shall be charged to and paid from:

FY-2014 - $289,000.00
FDOA: 5051 (Water & Wastewater Revenue Fund), 170201 (DWM Wastewater Treatment & Collections), 5222002 (Repair & Maintenance-Equipment), 4310000 (Sanitary Administration)

FY-2015 - $289,000.00
FDOA: 5051 (Water & Wastewater Revenue Fund), 170201 (DWM Wastewater Treatment & Collections), 5222002 (Repair & Maintenance-Equipment), 4310000 (Sanitary Administration)

Requisition No.21402652 is included in this packet.

If you have any additional questions, please contact Nicole Weems, Contracting Officer, Sr. at (404) 546-3639.

Project Work Plan

City of Atlanta Water-Quality Monitoring Program

August 5, 2013

U.S. Geological Survey

USGS
1770 Corporate Drive
Norcross, GA 30093

Phone 678 924 6700
Fax 678 924 6710

Project Description

In December 2002, the City of Atlanta (COA) and U.S. Geological Survey (USGS) began a program to monitor water quality for Atlanta-area streams. The development of this program reflected the city's need to monitor the effects of ongoing wastewater treatment infrastructure upgrades and wastewater management programs on water quality. The COA/USGS monitoring program was designed to provide both a comprehensive view of water quality and to allow the determination of stream loads (fluxes) of constituents, sources of contaminants, and changes over time. Since 2011, the program has been focused on collection of real-time water-quality parameters and streamflow at 11 sites, water-quality sample collection at 2 sites, and quarterly bacteria sampling at 9 sites to meet the needs for the City of Atlanta's Watershed Protection Plan and the Metropolitan North Georgia Water Planning District (MNGWPD). The purpose of this document is to describe the scope of work and associated costs for calendar year 2014.

Project History and Benefits

Since the program's inception in 2002, the USGS has monitored real-time streamflow and water-quality at 8 stations and streamflow-only at 2 stations. Water-quality samples were originally collected at 21 stations. Currently, the program collects real-time streamflow and water-quality data at 11 stations, and water-quality sample collection for chemical analysis is limited to two sites on the South River. Real-time streamflow and water quality monitoring is ongoing at all 11 stations. Bacteria samples are collected and analyzed on a quarterly basis at 9 sites.

The data collected by the monitoring program and analyses of the data have been used for the following purposes:

1. **Real-time streamflow data**—A USGS flood-tracking chart has been prepared that allows Atlanta area property owners who live near streams to predict flood levels using information provided by the National Weather Service (NWS) and historical information on floods. Real-time flow and precipitation data collected by USGS as part of the LTMP are used by NWS to provide flood predictions and warnings for Atlanta streams.

2. **Real-time water-quality data**—The USGS has been able to support the COA Department of Watershed Management with the observation and location of potential and actual sewage spills. Data also have been used by COA to better manage water treatment at CSO facilities, which enhances water quality downstream of discharges.

3. **Bacteria sample analyses**—Analysis of USGS data provided the basis for the formulation of new bacteria target levels that were implemented as part of the updated monitoring program required for the Consent Decree. Ongoing analyses of data are used to update bacteria levels used to trigger investigations.

4. **Water-quality data and analyses**—Summaries of USGS data and interpretive analysis were used by COA contractors to develop a Watershed Management Plan that is required for stormwater NPDES permitting.

Project Objectives

The scope of work for this project includes operation and maintenance of water-quantity and water-quality monitoring instruments; collection and analysis of water-quality samples; processing, quality assuring, and publishing data. The watersheds monitored in the City of Atlanta include Peachtree Creek, Nancy Creek, Proctor Creek, Utoy Creek, South River, and Intrenchment Creek.

The data collected for the long-term monitoring program can be used for the following:

1) **Identifying sources of impairment**—identifying sources of water-quality impairment can be a difficult and time-consuming task. The long-term monitoring program will provide real-time measures of stream water-quality that can be used to identify periods when point-sources of pollution are active. The monitoring can also be used to narrow the location of sources and to determine relations between specific types of land use and water-quality impairment.

2) **Determining trends in water quality, particularly with respect to upgrades in wastewater infrastructure**—The COA has completed work on the Nancy Creek and East CSO tunnels. Completion of work on the West CSO tunnel is projected within a few years. The combined effects of these tunnels should be observable in such measures of water quality as pH, dissolved oxygen, specific conductance, and turbidity. Water quality samples are used to calculate loadings, or the total mass of material transported by a stream for a specific period. Long-term changes in the loadings of constituents such as dissolved nitrogen and phosphorus should be observed as sewage overflows are reduced through the implementation of infrastructure improvements and other programs such as CMOMs. Currently, long-term constituent monitoring is being done only in the South River watershed.

3) **Supplement existing water-quality monitoring programs**—The monitoring program can be used to support work required by the COA for NPDES storm-water permits and monitoring required for the SSO Consent Decree. Data from 9 sites will be used to meet MNGWPD requirements for long-term monitoring.

4) **Provide information to the City, State, and public that can be used to make management decisions that affect water quality**—The monitoring program can be used to determine the effects of different watershed management and infrastructural improvements on water quality. The monitoring data will be key to understanding if programs are working or not. In addition, state agencies can determine if programs that are effective in Atlanta would be applicable to other municipalities and urban areas in Georgia.

Project Approach

The USGS proposes to include the following tasks in the monitoring program:

Task 1. **Collect continuous, real-time monitoring of streamflow and water-quality parameters**—Monitoring equipment are currently installed at 11 sites to provide data on discharge (stream flow), temperature, pH, conductivity, turbidity, and dissolved oxygen. Measurements are made at 15-minute intervals and transmitted at near real-time to the USGS office in Atlanta. Field-deployed equipment requires constant monitoring and maintenance to ensure high-quality data.

Task 2. **Collect water-quality samples using automatic and manual techniques**—Water samples are collected during baseflow conditions and storms. Most transport of dissolved and suspended constituents that can affect water quality occurs during stormwater runoff events. A limited number of water-quality samples are collected during baseflow (low-flow) periods. Quality-control samples also are collected in the field. Water-quality samples will be collected at 2 sites for monitoring of infrastructure improvements and at 9 sites for the MNGWPD (table 1).

Task 3. **Analysis of water and sediment samples**—Samples to be analyzed for dissolved constituents (major ions, nutrients, metals, organic carbon) at the USGS National Water Quality Laboratory. Samples for bacteria will be analyzed at the USGS Water Science Center Bacteria Laboratory.

Task 4. **Perform analysis of quality control/quality assurance data and manage data base**—Water quality and quantity data will be continuously monitored to determine if the data meets quality standards. Sample contamination issues will be addressed in field or laboratory procedures. Reviews of data by local, Regional, and National USGS personnel will be completed.

Task 5. **Maintenance of real-time data available on the internet**—After transmission to the USGS office in Atlanta, all real-time water quality and quantity data are made available on the internet. These data are monitored at least daily to insure that instrumentation are functioning properly and to identify potential point source releases or sewage spills.

Task 6. **Annual publication of data**—The USGS publishes an annual internet-based report that includes all data collected in the state of Georgia.

Task 7. **Project Management**—Oversight and project team supervision will be provided. Liaison with COA, COA contractors, and technical advisory committees is accomplished. Project workplans and billing documents are prepared.

Roles and Responsibilities

The LTMP has multiple levels of oversight including: COA oversight, USGS internal project management, and a Technical Advisory Committee (TAC) (figure 1).

The USGS LTMP chief is responsible for project planning, technical oversight, liaison with the COA, project staffing, and project financial/logistical support. The USGS field chief is responsible for coordination of all field operations including maintenance of instruments, sample collection, supervision of field teams, sample processing, and data entry. The USGS has an intensive program of procedural and data review that involves the Georgia Water Science Center, as well as USGS Regional and Headquarters personnel. Each laboratory used for the COA project has an intensive QA/QC program and participates in external quality assurance programs. Typically, all the water-quality projects and the laboratories in the USGS Georgia Water Science Center are reviewed every three years by USGS Branch of Quality Assurance, Headquarters, and Regional staff. The most recent review was held in 2013. All data are reviewed on an annual basis by USGS Georgia Water Science Center staff.

The COA project has a Technical Advisory Committee (TAC), which is chaired by Sally Bethea, the Executive Director of the Upper Chattahoochee Riverkeeper Organization. The TAC members include individuals from the Upper Chattahoochee Riverkeeper, Georgia Environmental Protection Division, U.S. Environmental Protection Agency, Georgia Institute of Technology, Georgia State University, and Cobb-Marietta Water Authority. The group meets approximately quarterly to obtain information on program progress and potential problems and to discuss any changes to the program. The purpose of the TAC is to provide technical oversight and external review for the COA project.

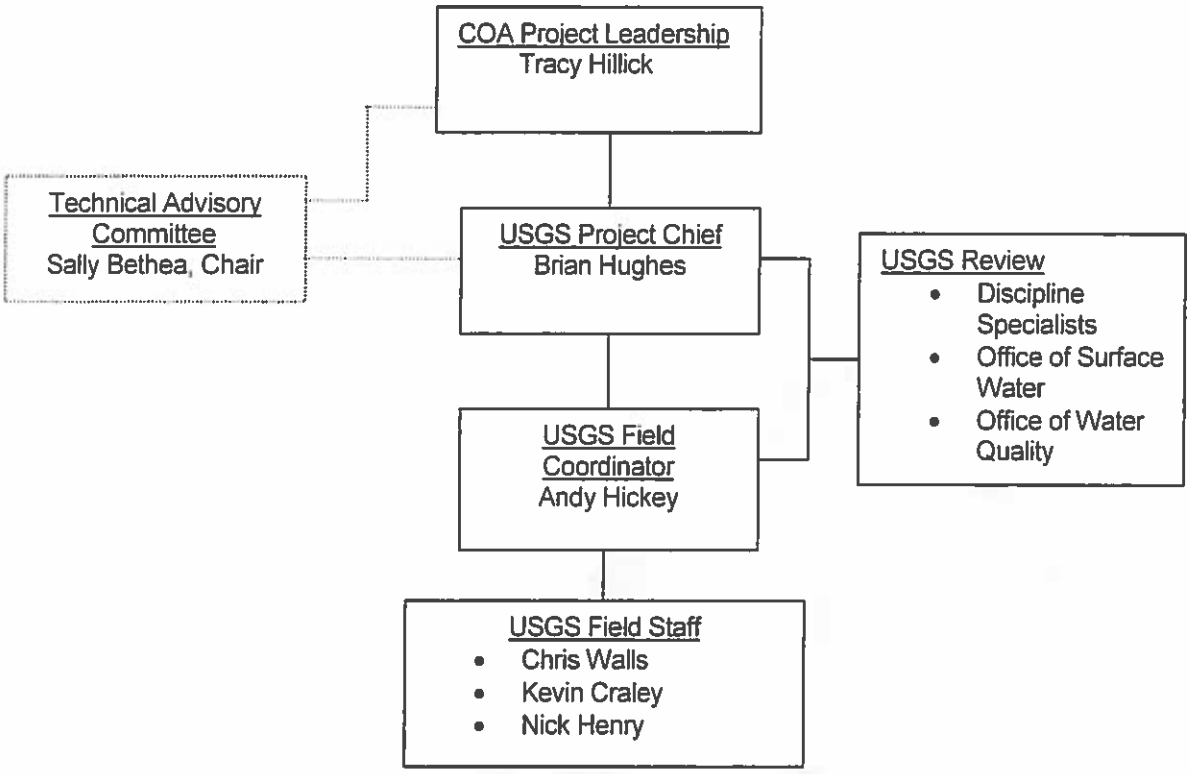

Figure 1.—Long-Term Monitoring Project Organization

Scope of Work

The scope of work for this project includes installation, operation, and maintenance of water-quantity and water-quality monitoring instruments; collection and analysis of water-quality samples; and processing, quality assuring, and publishing data. The watersheds monitored in the City of Atlanta include Peachtree Creek, Nancy Creek, Proctor Creek, Clear Creek, Sugar Creek, Utoy Creek, South River, and Intrenchment Creek.

Task 1—Collect continuous, real-time monitoring of streamflow and water-quality parameters

Sampling Network Design

The current sampling network for the COA project consists of 11 long-term monitoring stations (figure 2, table 1). Each of these stations is instrumented to monitor the following parameters: stage (water level), discharge, pH, conductivity, temperature, dissolved oxygen, and turbidity. Rainfall is currently monitored at 9 of the sites. For 2014, we will sample 9 monitoring stations for the MNGWPD (figure 2, table 1).

Field Measurements and Instrument Calibration

All field instrumentation is checked as needed; this includes cleaning, calibration, and maintenance. The real-time sensors are checked to determine that they are measuring current conditions accurately by calibrating with known standards and comparing with sensors calibrated each field day under laboratory conditions. Discharge at instrumented sites is measured at least six times per year to establish and check the stage/discharge relation. This relation is used to convert real-time stage measurements to discharge data. One year of data collection typically is needed to develop a site-specific stage-discharge relation, assuming there are no complicating factors such as backwater conditions. Once a discharge rating is developed for a site, subsequent measurements are used to check or adjust the rating if channel morphology has changed.

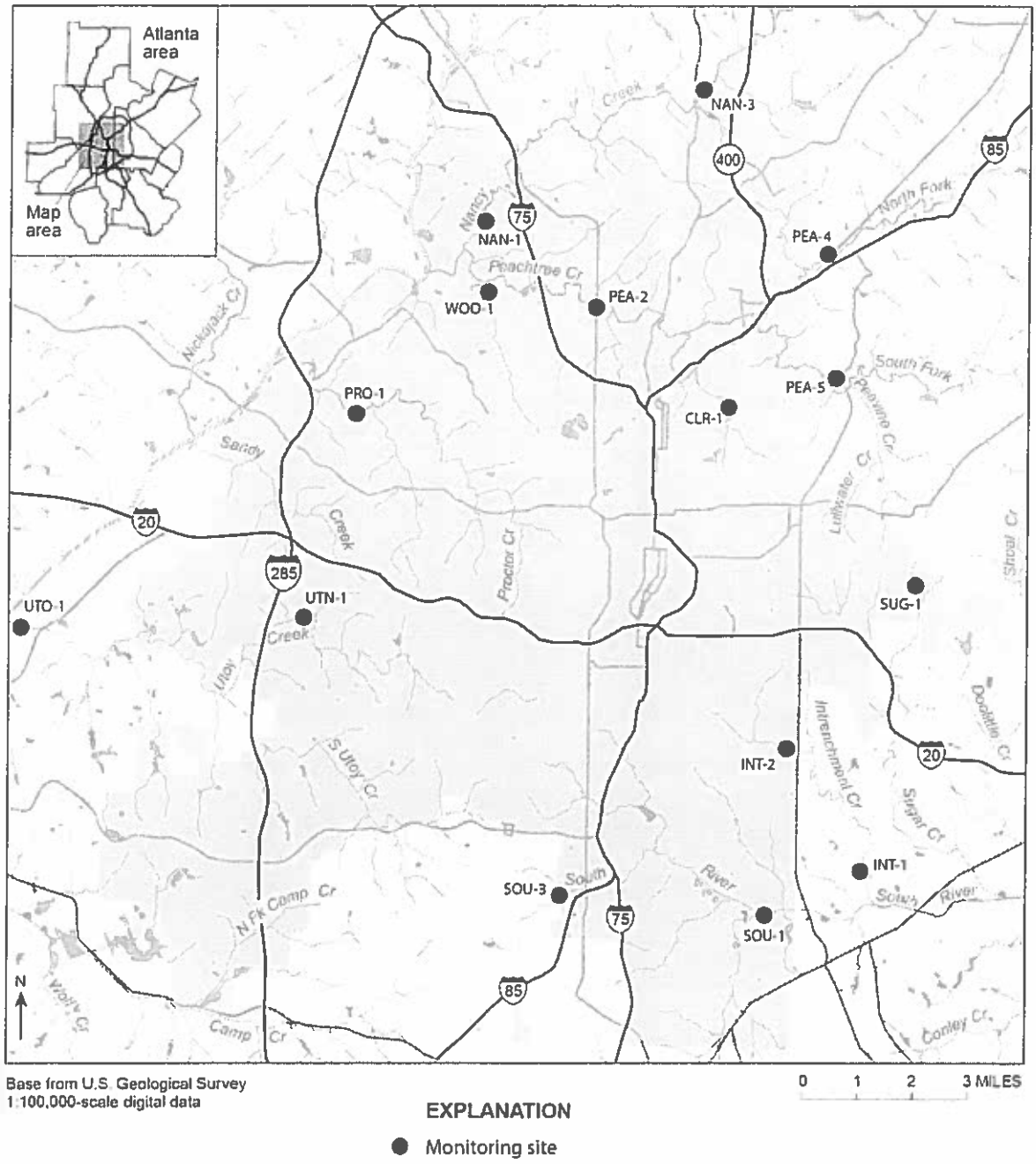

Figure 2. Location of sampling sites for the City of Atlanta Long-Term Water-Quality Monitoring Program 2014.

Table 1. Site information and planned numbers of samples for the City of Atlanta Long-Term Water-Quality Monitoring Program in 2014.

Station Number	Site Name	Site Type	Field ID	Number of Environmental Samples
02203700	Intrenchment Creek @ Constitution Road	Real-time SW/QW	INT-1	0
02336410	Nancy Creek @ W. Wesley Road	Real-time SW/QW	NAN-1	0
02336360	Nancy Creek @ Rickenbacker Dr.	Real-time SW/QW and MNGWPD	NAN-3	24
02336300	Peachtree Creek @ Northside Dr.	Real-time SW/QW and MNGWPD	PEA-2	24
02336120	NF Peachtree Creek @ Buford Hwy.	Real-time SW/QW	PEA-4	0
02336240	South Fork Peachtree Creek @ Johnson Rd.	Real-time SW/QW	PEA-5	0
02336526	Proctor Creek @ James Jackson Pkwy.	Real-time SW/QW and MNGWPD	PRO-1	24
02203655	South River @ Forrest Park Rd.	Real-time SW/QW and ISCO	SOU-1	52
02203603	South River @ Springdale Rd.	Real-time SW/QW and ISCO	SOU-3	26
02336728	Utoy Creek @ Great Southwest Pkwy.	Real-time SW/QW	UTO-1	0
02336313	Woodall Creek @ Defoors Ferry Road	Real-time SW/QW and MNGWPD	WOO-1	24
023362773	Clear Creek @ Piedmont Avenue	MNGWPD	CLR-1	24
02203679	Intrenchment Creek @ Woodland Avenue	MNGWPD	INT-2	24
02203811	Sugar Creek @ Hosea Williams Drive	MNGWPD	SUG-1	24
02336658	North Utoy Creek @ Peyton Road	MNGWPD	UTN-1	24

Task 2– Collect water-quality and sediment samples using automatic and manual techniques

Collection of automatic samples

Water-quality samples will be collected at 2 stations (table 1) for the period covered by this work plan to assess the effects of stormwater infrastructure improvements on water quality. Previously in this program, most samples were collected on a hydrologic basis in order to determine relations between sediment and chemical constituents and flow conditions, as well as to determine if surrogates such as conductivity or turbidity could be

used to estimate chemical constituent concentrations. Such relations have been established, so there is no longer a need to collect discrete samples over the storm hydrograph, nor as frequently during baseflow conditions. Therefore, the majority of environmental samples will be collected using automated samplers and will be composite, flow-weighted samples that represent stormwater runoff conditions. A limited number of baseflow samples also will be collected.

Additional samples will be collected at 9 stations to provide data for the City of Atlanta's Watershed Protection Plan as required by the Metropolitan North Georgia Water Planning District. One site on the South River (SOU-1) is sampled for both watershed infrastructure improvements and MNGWPD.

Task 3– Chemical analysis of water samples

Chemical analysis of water column constituents at infrastructure improvement sites (SOU-1 and SOU-3)

The analytical scheme for water samples includes the following major groups of constituents:

1. **Major Ions** — Calcium, magnesium, sodium, potassium, fluoride, chloride, bromide, sulfate, and bicarbonate are derived from natural weathering processes and atmospheric deposition. Highly significant relations typically exist among major ion concentrations in surface waters and groundwater due to the water-quality evolution from natural processes. However, human activities can alter these relations by the addition of contaminants and the alteration of water pathways resulting in a mixture of solutes from natural and human sources. Urbanization alters the hydrologic pathways by the construction of impervious surfaces (buildings, driveways, walkways, and roads) and the channelization of existing drainages. Wastewater, and often treated water, contains higher concentrations of some solutes, in particular, sulfate, chloride, sodium, calcium, and potassium, and relations among major ion concentrations in streams containing wastewater are different compared with natural or unimpacted water.

2. **Nutrients** — Nitrogen, phosphorus, and carbon compounds typically are associated with point- and nonpoint source urban and stormwater runoff including treated and untreated sewage. These constituents can derive from the breakdown of organic waste (for example, lawn clippings and kitchen waste) and natural sources of organic detritus such as trees, shrubs, and grasses. Another major source of nutrients is from fertilizer applications on residential and commercial sites. Excess nutrient loadings can result in artificially enhanced biological growth (eutrophication) in downstream impoundments and lead to problems with dissolved oxygen levels in streams and reservoirs.

3. **Trace elements** — Silver, lead, zinc, copper, cadmium, and mercury typically are associated with point- and non-point source urban and stormwater runoff including treated wastewater and have been identified as a cause for stream reach impairment in COA basins. For example, silver is associated with photography and has been found in treated wastewater. Copper, lead, and zinc are associated with plumbing and plumbing fixtures.

Also, zinc is a component of automobile tires and asphalt shingle roofs where it is used as an algaecide and to prevent mildew. Runoff from roads, areas containing tires such as landfills, and asphalt roofs can result in elevated zinc concentrations in streams.

4. **Sediment (concentrations in water)** — In excess, suspended sediment represents a major physical cause of impaired stream reaches in COA basins. In addition, suspended sediment represents a significant carrier for a wide variety of chemical constituents including trace elements, nutrients, and persistent hydrophobic organic compounds.

The scheme for analysis of samples collected for the infrastructure improvement monitoring part of the COA program is outlined in table 2. We plan to collect 26 composite flow-weighted samples at each of the 2 sites during the 12 months covered by this work plan. This will result in a total of 52 complete chemical analyses. The actual number of samples collected may vary from the target due to the frequency and quantity of rainfall and subsequent runoff during the year.

Table 2. Number of water-quality analyses to be conducted for wastewater infrastructure improvement samples collected for the City of Atlanta Long-Term Water-Quality Monitoring Program for 2013.

Analysis Types	Number of Analyses		
	Automated Samples	QA/QC Samples	Total
Dissolved Major Ions, Nutrients, and Trace Metals, and suspended sediment	52	6	58

Analysis of water column constituents at Metropolitan North Georgia Water-Quality Monitoring Sites

Field Parameters – The following parameters will be measured in the field at each sampling site:

Table 3. Number of water-quality analyses to be conducted for environmental samples collected for the Metropolitan North Georgia Water Planning District part of the City of Atlanta Long-Term Water-Quality Monitoring Program for 2014.

Constituent Measured	Wet-Weather Samples per Season per Site[1]	Dry-Weather Samples per Season per Site[1]
Air and Water Temperature	3	1
pH	3	1
Turbidity	3	1
Total Suspended Solids	3	1
Odor	3	1
Color	3	1
Floatables	3	1
Conductivity	3	1

[1]Seasons are defined as; Summer (May-July), Fall (August-October), Winter (November-January), Spring (February-April).

In addition, a total of 16 samples at will be collected and analyzed at the Georgia Water Science Center Bacteria Laboratory for fecal coliform during each season at the 9 MNGWPD sampling sites. The MNGWPD defines wet-weather samples as being collected within 8 hours of a storm event that produce 0.1 inches or greater of precipitation; dry-weather samples are collected more than 72 hours after the most recent storm that produces 0.1 inches or greater precipitation.

Task 4—Perform analysis of quality control/quality assurance and manage data

Quality control/quality assurance

Water-quality sample collection and analysis is subject to errors resulting from numerous sources. These can include operational errors such as mislabeling samples, sample contamination, improper preservation, or laboratory equipment instability or failure. In order to determine the accuracy of water-quality data, quality-control samples are collected and analyzed. The samples typically consist of blanks, replicates, and spikes. Blanks are used to determine potential equipment contamination, if any, and consist of analysis of dionized/distilled water. Replicates are splits of the same sample that are analyzed separately to determine the reproducibility of data. Spikes contain a known

concentration of a chemical constituent and are used to determine the accuracy of laboratory methods and the effects of the water matrix on chemical constituents. Approximately 10 percent of the samples analyzed for the LTMP will be QA/QC samples. Analyses of these samples will provide information on errors and help to correct potential problems with data.

Manage data

USGS field personnel will analyze all the continuous data, and apply any necessary corrections (e.g., deleting outliers, editing data; correcting for variable shifts in the real-time data and/or the stage/discharge relation) on an approximately weekly basis. Field measurements and results of chemical analyses conducted at USGS laboratories will be stored in the USGS National Water Information System (NWIS) database, which is linked to the Georgia Water Science Center NWISWeb internet page for real-time data display. These data will be permanently archived as a matter of public record. All data will be checked and reviewed annually by qualified USGS hydrologists in preparation for publication. The USGS also will perform an external review at least once every three years to ensure national consistency through the use of approved techniques and protocols.

Task 5—Maintenance of real-time data available on the internet

Real-time data will be publicly accessible, through the USGS NWISWeb internet website, which automatically displays all parameters collected and transmitted from each continuous monitoring site. Discrete water-quality data will be uploaded annually to the USGS NWISWeb internet site. More frequent retrievals can be made upon request.

Task 6—Review and publication of data

All data will be reviewed annually and published on the USGS interactive National Water Information (NWIS) website. The website includes all the environmental data collected by USGS in the state of Georgia. Data are checked for errors, summarized in tables, and made available for download. Data are available more frequently by request and are archived in perpetuity.

Task 7—Project management

This task includes the labor and expenses necessary to plan and coordinate project activities, supervise project staff, conduct periodic briefings/meetings with COA and COA contractors, and prepare proposals and other project documentation including billing documents.

Long-Term Plans

The activities of high-density, urban populations such as in Atlanta will necessarily have an effect on water quality. The extent to which these effects are mediated depend on the

types of land-use practices, the type of storm and sanitary sewer infrastructure, and the management and condition of the infrastructure. The management of factors that control water-quality in urban areas is an ongoing and often difficult task. Because of the magnitude of the task, the increasing population, and continuing land-use changes in the Atlanta Metropolitan area, a water-quality monitoring program is likely to be a routine part of the COA's operations for the foreseeable future.

The USGS Georgia Water Science Center contributes to a wide variety of water and ecological monitoring and research studies throughout the state of Georgia and the Southeastern U.S. The LTMP can be modified to fit with the City of Atlanta's changing needs for water-quality information. Changes could include but are not limited to:

1. Either expanding or reducing the scope of sampling and other data collection activities to include additional/fewer sites, number of chemical constituents measured, and/or frequency of sample collection.

2. Preparation of interpretive reports to document changes in hydrology or water quality.

3. Special studies to investigate specific water-quality problems.

Project Costs

The current scope of work covers from January 1, 2014 to December 31, 2014. The costs are broken down by task in table 3 below.

Table 3.—Project costs by task.

Task	Description	Cost	Percentage of Total Cost	Total Labor Hours
1	Real-Time Monitoring	$288,176	40%	5,148
2	Sample Collection	$93,779	13%	1,528
3	Chemical Analyses	$28,855	4%	0
	Bacteria Analyses	$21,641	3%	340
4	QA/QC and Data Management	$64,924	9%	1,240
5	Real-Time Internet Data	$72,137	10%	1,196
6	Annual Data Review and Publication	$108,206	15%	1,518
7	Project Management	$43,282	6%	520
	Project Total	$721,000	100%	10,192
	USGS Share of Cost	$142,000	20%	
	COA Share of Cost	$578,000	80%	

As part of the joint-funding agreement associated with this scope of work, the USGS has agreed to provide $142,000 in cost share for the project; therefore the cost of the project for the COA for the period January 1, 2014 - December 31, 2014 will be $578,000.

Appendix A—Presentation and Publications

Presentations

Horowitz, A.J., Elrick, K.A., Smith, J.J. 2005, The Design, Implementation, and Initial Results from a Water Quality Monitoring Network for Atlanta, Georgia, USA, IAHS VII Scientific Assembly, Symposium on Sustainable Water Management Solutions for large Cities. Foz do Iguacu, Brazil, 4/2005.

Horowitz, A.J., 2005, Some Initial Sediment-Associated Trace Element Results from the City of Atlanta, GA, Water-Quality Monitoring Network, Georgia Water Resources Conference, Athens, GA, 4/2005.

Horowitz, A.J., 2005, The City of Atlanta Water-Quantity and Water-Quality Monitoring Program, Atlanta Geological Society, 8/2005.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2007. Results From the City of Atlanta Water-Quantity and Water-Quality Monitoring Program: Suspended Sediment, Trace Element, and Nutrient Fluxes, 2004–2005, Georgia Water Resources Conference, Athens, Georgia, March, 2007.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2007, Measuring the Fluxes of Suspended Sediment, Trace Elements, and Nutrients for the City of Atlanta, USA: Insights on the Global Water Quality Impacts of Increasing Urbanization, XXIV General Assembly of IUGG, Perugia, Italy, July, 2007.

Horowitz, A.J., 2007, An Introduction to the City of Atlanta and the U.S. Geological Survey's Water Quantity and Water Quality Monitoring Program, Joint Georgia Planning Association/Georgia Association of Landscape Architects Spring Meeting, Atlanta, Georgia, March 2007.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2007, Measuring the Fluxes of Suspended Sediment, Trace Elements, and Nutrients for the City of Atlanta, USA: Insights on Developing and Maintaining a Large-Scale Urban Water-Quality Monitoring Program, U.S.G.S. National Water-Quality Workshop, Galveston, Texas, November, 2007.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2009, An Update on Sediment Studies Associated with the City of Atlanta Long-Term Monitoring Program, Georgia Water Resources Conference, Athens, Georgia, (submitted)

Hughes, W.B., 2004, Urban Hydrology in Georgia: A Delicate Mix of Science and Politics: USGS Eastern Region Data Conference, Raleigh, North Carolina, June 15, 2004.

LaFontaine, J.H. 2006, Automatic Sampling for Emerging Contaminants: 2006 USGS Eastern Region Data Conference, Louisville, KY.

LaFontaine, J.H., 2006, Flood-Tracking Chart for Chattahoochee River Basin in Metropolitan Atlanta, Georgia: 2006 National Water-Quality Monitoring Conference, San Jose, CA.

LaFontaine, J.H., 2007, Flood-Tracking Char Chart for Chattahoochee River Basin in Metropolitan Atlanta, Georgia: 2007 Georgia Water Resources Conference, Athens, GA.

LaFontaine, J.H., 2007, Hydrologic Characteristics of Watersheds in Metropolitan Atlanta, Georgia 2003-2006, 2007 USGS National Surface-Water Conference, St. Louis, MO.

LaFontaine, J.H., 2007, Flood-Tracking Char Chart for Chattahoochee River Basin in Metropolitan Atlanta, Georgia: 2007 National Hydrologic Warning Council, Savannah, GA.

LaFontaine, J.H. 2008, Hydrologic Characteristics of Watersheds in Metropolitan Atlanta, Georgia 2003-2007, 2008 Chider Conference, Tunica, MS.

Publications

Aulenbach, B.T., Bacteria holding-time experiments for the City of Atlanta Water-Quality monitoring program: (journal article in review)

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2005, Some Initial Sediment-Associated Trace Element Results from the City of Atlanta, Water-Quality Monitoring Network, In Proceedings of the 2005 Georgia Water Resources Conference, April 25 – 27, 2005 (ed. K.J. Hatcher), The University of Georgia, Athens, GA, CD-ROM, 6 p.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2005, Design, Implementation, and Initial Results from a Water-Quality Monitoring Network for Atlanta, Georgia, U.S.A.. In Sustainable Water Management Solutions for Large Cities (ed. Savic, D.A., Bertoni, J.C., Marino, M.A., and Savanije, H.H.G.), IAHS Publication 293, 245 – 256.

Horowitz, A.J. and Hughes, W.B., 2006, The U.S. Geological Survey and City of Atlanta Water-Quality and Water-Quantity Monitoring Network. U.S. Geological Survey Fact Sheet 2005-3126, 4p.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2007. Results From the City of Atlanta Water-Quantity and Water-Quality Monitoring Program: Suspended Sediment, Trace Element, and Nutrient Fluxes, 2004–2005, In: (ed. Rasmussan, Todd; Carroll. G.D., and Georgakakos, Aris) Proceedings of the 2007 Georgia Water Resources Conference, Athens, Georgia, March, 2007, CD-ROM, 10 p.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2007. Measuring the Fluxes of Suspended Sediment, Trace Elements, and Nutrients for the City of Atlanta, U.S.A.: Insights on the Global Water Quality Impacts of Increasing Urbanization, In: (ed. Webb, B.W. and De Boer, D.) Proceedings of the IAHS Symposium on Water Quality and Sediment Behavior of the Future: Predictions for the 21st Century, IAHS Publication 314, 57 – 70.

Horowitz, A.J., Elrick, K.A., and Smith, J.J., 2008. Monitoring Urban Impacts on Suspended Sediment, Trace Element, and Nutrient Fluxes Within the City of Atlanta, Georgia, U.S.A.: Program Design, Methodological Considerations, and Initial Results, Hydrological Processes , 22, 1473 – 1496.

Horowitz, A.J., 2009, Monitoring Sediment and Sediment-Associated Chemistry and Annual Fluxes in Urban Environments: Lessons From the City of Atlanta, Georgia, U.S.A. Water Quality Monitoring Program, Journal of Soils and Sediments (in review).

Horowitz, A.J., 2009, An update on sediment studies associated with the City of Atlanta Long-Term Monitoring Program: *in*, Proceeding of the 2009 Georgia Water Resources Conference, April 27-29, 2009, University of Georgia, Athens, Georgia, CD-ROM.

Joiner, J.K., 2003, New water-quality monitoring efforts in Metropolitan Atlanta, Georgia: *in*, Hatcher, K.J. (ed.), Proceedings of the 2003 Georgia Water Resources Conference, April 23-24, 2003, University of Georgia, Athens, Georgia, CD-ROM.

LaFontaine, J.H. and Hillick, T.A., 2003, Overview of the City of Atlanta water-quality monitoring network: 2004 Water Environment Federation Technical Exhibition and Conference, October 2-6, 2004, New Orleans, Louisiana

LaFontaine, J.H., McCallum, B.E., Stamey, T.C., and Wipperfurth, C.J., 2006, Flood-tracking chart, Chattahoochee River Basin in Metropolitan Atlanta, Georgia: U.S. Geological Survey General Information Product 34, 1 sheet.

LaFontaine, J.H., 2009, Hydrologic characteristics of watersheds in Metropolitan Atlanta: *in*, Proceeding of the 2009 Georgia Water Resources Conference, April 27-29, 2009, University of Georgia, Athens, Georgia, CD-ROM.

Lawrence, S.J., 2009, Occurrence of organic wastewater compounds in the urban streams of Atlanta, Georgia, 2003-2006: *in*, Proceeding of the 2009 Georgia Water Resources Conference, April 27-29, 2009, University of Georgia, Athens, Georgia, CD-ROM.

Peters, N.E., 2005, Preliminary analysis of the water quality variability of urban streams, Atlanta, Georgia, May 2003-October 2004: *in*, Hatcher, K.J. (ed.), Proceedings of the 2005 Georgia Water Resources Conference, April 25-27, 2005, University of Georgia, Athens, Georgia, CD-ROM.

Peters, N.E., Frick, E.A., Painter, J.A., and Hillick, T.A., 2004, Organic wastewater compounds in urban streams, Atlanta, Georgia: National Ground-Water Association.

Appendix B—Water-Quality Analyses

Trace Elements in Water

Aluminum
Cadmium
Chromium
Copper
Lead

Manganese
Nickel
Silver
Zinc

Major Ions and Nutrients in Water

Nitrogen, ammonia
Nitrogen, ammonia and organic nitrogen
Nitrogen, nitrite
Nitrogen, nitrate
Phosphorus, orthophosphate
Dissolved phosphorus
Total phosphorus
Sulfate
Chloride
Sodium
Calcium
Magnesium

Major Ions and Nutrients in Water (cont.)

Potassium
Iron
Silica
Alkalinity

Other Water-Quality Measures

Suspended Sediment concentration

Checkout: Review and Submit Requisition

Requisition 21402652: Total 289,000.00 USD

Created By	**Weems, Nicole D**
Creation Date	**07-Feb-2014 09:19:10**
Description	**Intergovernmental Joint Funding Agreement with U.S. Geological Survey, United States Department of Interior for Water Quality and Water Quality Long Term Monitoring Network -FY14**
Justification	

Requisition Attachments

File Name	Type	Description	Category	Last Updated By	Last Updated	Usage	Update	Delete	Publish to Catalog
Legislative Request for COA-USGA Intergovernmental Joint Funding Agreement.pdf	File	COA-USGS JOINT FUNDING AGREEMENT	Internal to Requisition	26871	07-Feb-2014	One-Time			

Lines

Details	Line	Description	Cost Center	Unit	Quantity	Price	Amount (USD)	Attachments
Show	1	Intergovernmental Joint Funding Agreement with U.S. Geological Survey, United States Department of Interior for Water Quality and Water Quality Long Term Monitoring Network -FY14	170201	LOT	289000 1	USD	289,000.00	
						Total	**289,000.00**	

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the City of Atlanta has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

6471C
Federal Work Authorization User Identification Number

May 2009
Date of Authorization

Name of Contractor: U.S Geological Survey

Name of Project: City of Atlanta Agreement 14ESGAM00000026

Name of Public Employer: City of Atlanta

I hereby declare under penalty of perjury that the forgoing is true and correct.

Executed on February, 10, 2014 in Norcross (city), Georgia (state)

Brian E. McCallum
Signature of Authorized Officer or Agent

Brian E. McCallum
Printed name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE
ME ON THIS THE 10th DAY OF February, 2014

Crystal D. Williams
NOTARY PUBLIC
My Commission Expires: August 14 2016

CRYSTAL STALLWORTH NOTARY PUBLIC DEKALB COUNTY, GEORGIA MY COMMISSION EXPIRES AUGUST 14, 2016

LEGISLATIVE SUMMARY
FC- 6004007858, U.S. Geological Survey, United States Department of Interior for Water Quality & Water Quantity Long Term Monitoring Network

CAPTION

A RESOLUTION AUTHORIZING THE MAYOR OR HIS DESIGNEE TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR FOR FC-6004007858, WATER QUALITY AND WATER QUANTITY LONG TERM MONITORING NETWORK WITH UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED SEVENTY-EIGHT THOUSAND DOLLARS AND NO CENTS ($578,000.00) ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT; ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER 5051 (WATER & WASTEWATER REVENUE FUND) 170201 (DWM WASTEWATER TREATMENT & COLLECTIONS) 5222002 (REPAIR & MAINTENANCE-EQUIPMENT) 4310000 (SANITARY ADMINISTRATION) IN THE FOLLOWING AMOUNTS: FY2014 - $ 289,000.00 AND FY2015 - $ 289,000.00; AND FOR OTHER PURPOSES.

Committee Meeting Date:	**March 11, 2014**
Council Meeting Date:	**March 17, 2014**
Legislative Title:	**U.S. Geological Survey, United States Dept. Of Interior for Water Quality & Water Quantity Long Term Monitoring Network**
Requesting Dept.:	**Watershed Management**
Contract Type:	Intergovernmental Agreement
Source Selection:	Pursuant to City of Atlanta Procurement and Real Estate Code Section 2-1602 and 2-1604
Public Entity:	U.S. Geological Survey, United States Department of Interior
Funding Term:	The term of the agreement shall be for one (1) year with three (3) one (1) year renewal options at the sole discretion of the City.
Background:	The City of Atlanta, Department of Watershed of

	Management has a program known as "Clean Water Atlanta" to monitor the water quality of major Streams and rivers that will be facilitated with the Assistance of the United States Department of Interior.
Justification:	The Department of Watershed Management desires to authorize 2014 calendar funding for the Water Quality and Water Quantity Long Term Monitoring Network to maintain and operate water monitoring equipment in the City of Atlanta.
Contractor:	**U.S. Department of Interior/Geological Survey**
Estimated Value:	$578,000.00
Scope Summary:	To provide both a comprehensive view of water quality and to allow the determination of stream loads (fluxes) of constituents, sources of contaminants, and changes over time. The program includes an extensive network of long-term, real time stream flow and water-quality monitors, hydrological-based stream water sampling for organic and inorganic contaminants and sediment.
Funding:	Funding for the first year will be split by fiscal year, FY2014 - $289,000 and FY2015 - $ 289,000.
Fund Account Centers:	5051 (Water & Wastewater Revenue Fund) 170201 (DWM Wastewater Treatment & Collections) 5222002 (Repair & Maintenance-Equipment) 4310000 (Sanitary Administration) in the following amounts: FY2014 - $289,000.00 and FY2015 - $ 289,000.00.
Prepared By:	Valerie Floyd, Contracting Officer
Contact Number:	(404) 330-6517

First Reading

Committee _____
Date _____
Chair _____
Referred To _____

FINAL COUNCIL ACTION

☐ 2nd ☐ 1st & 2nd ☐ 3rd

Readings

☐ Consent ☐ V Vote ☐ RC Vote

A RESOLUTION
BY CITY UTILITIES COMMITTEE

A RESOLUTION AUTHORIZING THE MAYOR TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR FOR FC-6004007858, WATER QUALITY AND WATER QUANTITY LONG TERM MONITORING NETWORK, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED SEVENTY-EIGHT THOUSAND DOLLARS AND ZERO CENTS ($578,000.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER 5051 (WATER & WASTEWATER REVENUE FUND) 170201 (DWM WASTEWATER TREATMENT & COLLECTIONS) 5222002 (REPAIR & MAINTENANCE-EQUIPMENT) 4310000 (SANITARY ADMINISTRATION) IN THE FOLLOWING AMOUNTS: FY2014 - $ 289,000.00 AND FY2015 - $ 289,000.00; AND FOR OTHER PURPOSES.

Committee	Committee
Date	Date
Chair	Chair
Action Fav, Adv, Hold (see rev. side) POther	Action Fav, Adv, Hold (see rev. side) Other
Members	Members
Refer To	Refer To

CERTIFIED

Committee	Committee
Date	Date
Chair	Chair
Action Fav, Adv, Hold (see rev. side) Other	Action Fav, Adv, Hold (see rev. side) Other
Members	Members
Refer To	Refer To

MAYOR'S ACTION

☐ CONSENT REFER
☐ REGULAR REPORT REFER
☐ ADVERTISE & REFER
☐ 1ST ADOPT 2ND READ &REFER
☐ PERSONAL PAPER REFER

Date Referred:
Referred To:
Date Referred:
Referred To:
Date Referred:
Referred To:

CITY OF ATLANTA

Kasim Reed
Mayor

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ATLANTA, GA 30303
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DEPARTMENT OF PROCUREMENT
Adam L. Smith, Esq., CPPO, CPPB, CPPM, CPP
Chief Procurement Officer
asmith@atlantaga.gov

MEMORANDUM

TO: Councilmember Natalyn Mosby Archibong
Chair, City Utilities Committee

FROM: Adam L. Smith ALS. 2/21/13

RE: FC-6004007858; Cooperative Purchasing Agreement with United States Department of Geological Survey, United States Department of Interior for Water Quality and Water Quantity Long Term Monitoring Network

DATE: February 21, 2014

This memorandum is to certify that the above-referenced Cooperative Agreement was procured in a manner consistent and pursuant to sections 2-1602, 2-1604, 2-1606 and 2-1608 of the Procurement and Real Estate Code.

If you have any questions or need additional information, please do not hesitate to contact me.

ALS/vmf/lar