



**CITY OF PLANO
COUNCIL AGENDA ITEM**

CITY SECRETARY'S USE ONLY	
<input type="checkbox"/> Consent	<input type="checkbox"/> Regular <input type="checkbox"/> Statutory
Council Meeting Date:	November 12, 2012
Department:	Environmental Health
Department Head	Brian Collins
Agenda Coordinator (include phone #): Kellie Boyer x 7248	

CAPTION

Approval of an estimated expenditure of \$57,125 with North Central Texas Council of Governments (NCTCOG) to engage the services of Atkins North America, Inc. on behalf of the City of Plano for compliance with the Texas Pollutant Discharge Elimination System (TPDES) storm water permit requirements; and authorizing the City Manager or his authorized designee to execute all necessary documents.

FINANCIAL SUMMARY

NOT APPLICABLE OPERATING EXPENSE REVENUE CIP

FISCAL YEAR: FY 2011 - FY 2016	Prior Year (CIP Only)	Current Year	Future Years	TOTALS
Budget	0	57,125	205,000	262,125
Encumbered/Expended Amount	0	0	0	0
This Item	0	-57,125	-205,000	-262,125
BALANCE	0	0	0	0

FUND(S): MUNICIPAL DRAINAGE FUND

COMMENTS: Funding for this item is included in the FY 2012-13 Municipal Drainage Fund Budget. This item approves the terms and conditions of a Letter of Authorization effective October 1, 2011 through June 30, 2016. FY 2011-12 expenditures were budgeted and paid by the Municipal Drainage Fund. Future year's budget and proposed expenditures are an estimate and may vary based on the North Central Texas Council of Governments (NCTCOG) work plan and will be funded by the Municipal Drainage Fund within approved budget appropriations.

STRATEGIC PLAN GOAL: Approving the Letter of Authorization for compliance with the Texas Pollutant Discharge Elimination System (TPDES) relates to the City's Goal of Partnering for Community Benefit.

SUMMARY OF ITEM

Staff recommends approval of expenditure in the estimated amount of \$57,125 to NCTCOG, pursuant to the interlocal agreement with NCTCOG for the Storm Water Management Program, to engage the services of Atkins North America, Inc. on the City of Plano's behalf for compliance with TPDES storm water permit requirements. Future year costs are estimated (as shown in Attachment 3 of the Letter of Authorization).



**CITY OF PLANO
COUNCIL AGENDA ITEM**

List of Supporting Documents: Letter of Authorization	Other Departments, Boards, Commissions or Agencies

LETTER OF AUTHORIZATION

North Central Texas Regional Stormwater Monitoring Program

Atkins Monitoring Program Assistance for FY13 North Central Texas Council of Governments (NCTCOG)

The NCTCOG and the **City of Plano** (hereinafter referred to as “Participant”) have executed an Interlocal Agreement to provide a structure through which the member entities can pursue initiatives that assist with compliance with the Texas Pollutant Discharge Elimination System (TPDES) stormwater permit requirements for municipal stormwater discharges including cooperative regional wet weather monitoring. The Interlocal Agreement established a structure by which a Regional Stormwater Management Coordinating Council (RSMCC) may identify specific activities to be carried out by NCTCOG, and/or other professional agencies, with cost allocations to be determined through participating entity consensus.

On behalf of the TPDES Phase I entities, and with their support through the Regional Stormwater Monitoring Task Force (Task Force), NCTCOG has coordinated the design of a cooperative Regional Stormwater Monitoring Program. The Regional Stormwater Monitoring Program is designed to meet the stormwater monitoring requirements for each individual permit holder, while providing for a more efficient, consistent, and cost-effective regional effort. The Texas Commission on Environmental Quality (TCEQ) has formally endorsed this regional program among the region’s seven largest cities (Arlington, Dallas, Fort Worth, Garland, Irving, Mesquite, and Plano), the Dallas District of the Texas Department of Transportation (TxDOT), and the North Texas Tollway Authority (NTTA).

The NCTCOG and the Participant are executing this Letter of Authorization to allow NCTCOG to engage the services of a consultant on behalf of the Participant to assist in compliance with the TPDES stormwater permit requirements for wet weather monitoring for which the Participant will reimburse NCTCOG.

The firm of Atkins North America, Inc. has been contracted by NCTCOG to provide regional monitoring program assistance from October 1, 2011 through June 30, 2016. The Scope of Work to be provided to each participating entity for the duration of the Atkins contract has been approved by the Task Force and can be found in Attachment 1. NCTCOG will enter into a phased contract with Atkins for monitoring assistance on behalf of the participating entities whereby Atkins will monitor storm events as part of each entity’s stormwater permit requirement to provide an ongoing assessment of urban stormwater quality in the Metroplex. The amount of the initial agreement and subsequent agreements will be contingent upon the funding commitments of the Participants as provided through this Letter of Authorization and all subsequent Authorizations. The scope of services provided by Atkins is limited to those entities that have signed Letters of Authorizations to proceed and to those services specified in the Scope of Work.

This form seeks funding commitments and authorization to proceed with the scheduled tasks for **FY13**. Attachment 2 of this Letter of Authorization is a table outlining the detailed task list for **FY13** that will be received by the Participant. Attachment 3 is a table outlining the total and annual cost-share amounts among all potential participants for Atkins assistance with the

Regional Monitoring Program. Execution of this Letter of Authorization obligates the Participant to pay its cost-share portion of the Atkins Regional Monitoring Program Assistance for the specified fiscal year pursuant to the quarterly billing. Billing of each Participant by NCTCOG for these services will be made no more frequently than quarterly, and will be based on actual services received by the Participant for that quarter. Under the contract with Atkins, NCTCOG will be billed quarterly for actual work performed as outlined in Attachment 2. NCTCOG will in turn invoice each Participant for its costs incurred resulting from the above referenced delivered services and the Participant shall remit the amount of the invoice to NCTCOG within thirty (30) calendar days upon receipt of the invoice. In the event that the Participant does not accept the goods or services or finds an error in the invoice, the Participant shall notify the NCTCOG Environment and Development Manager who is responsible for executing this program as soon as possible within the 30 calendar day period, and shall make payment not less than ten (10) calendar days after the problem(s) are corrected or the error is resolved to the satisfaction of all parties. In the event that payment for invoiced goods or services is not received by the NCTCOG within 30 calendar days of receipt of the accepted invoice, NCTCOG is authorized to charge the Participant interest in accordance with the Prompt Payment Act. By this LOA, participants that do not remit payment will be subject to review and discontinuation of services.

Work under this Authorization is for the time period of October 1, 2012 through September 30, 2013 to complete the **FY13** work tasks as outlined in Attachment 2. The **City of Plano's** share of the **FY13** Atkins Regional Stormwater Monitoring Program Assistance is **\$57,125**.

Each individual signing this Letter of Authorization on behalf of a participant warrants that he or she is legally authorized to do so and that the Participant is legally authorized to perform the obligations undertaken. The undersigned represent the agreement of NCTCOG and the Participant to these provisions and hereby execute this Authorization in triplicate originals.

Authorized Signature

Mike Eastland, Executive Director
North Central Texas Council of
Governments

Name (please print)

Date: _____

Date: _____

The Atkins Team will conduct the following tasks to assist the contracting entities in performing storm water monitoring at identified sites:

PROJECT MANAGEMENT AND COORDINATION

- Task 1110 – Project Management;
- Task 1120 – General Training; and
- Task 1130 – Annual Refresher Training.

SAMPLE ANALYSIS PROJECT PLAN (SAPP) / QUALITY ASSURANCE PROJECT PLAN (QAPP)

- Task 1210 – Monitoring Plan Protocol Revision; and
- Task 1220 – Field Reconnaissance and Site Selection.

FIELD SAMPLING AND ANALYSIS

- Task 1310 – Storm Tracking;
- Task 1320 – Mobilization to Sampling Sites;
- Task 1330 – Auto-Sample Retrieval;
- Task 1340 – Equipment Maintenance;
- Task 1350 – Deployment and Decommissioning; and
- Task 1360 – Analytical.

ELECTRONIC DATA MONITORING REPORTS

- Task 1410 – Data Management (Four Permit Years).

ANNUAL REPORTS

- Task 1510 – Annual Report (Four Permit Years).

FINAL SUMMARY REPORT

- Task 1610 – Final Summary Report (One time only).

Each of the proposed tasks is described below.

PROJECT MANAGEMENT AND COORDINATION

Task 1110 – Project Management

Atkins will perform project management activities to coordinate project activities, staff, and subconsultants under this task. Project Management is expected to occur for 57 months starting October 1, 2011. Atkins will provide quarterly progress reports and invoices to NCTCOG and updates on sampling events and maintenance as they occur. Project updates will be provided to all partners to this agreement which may include the Cities of Arlington, Garland, Irving, Mesquite and Plano along with the North Texas Tollway Authority (NTTA) and the Texas Department of Transportation (TxDOT) Dallas District. Project accounting, scheduling and coordination with internal staff, subconsultants and contract laboratory will be conducted. Atkins will attend one meeting with the Regional Stormwater Monitoring Task Force per year to provide updates, scheduling and answer

questions about the program. Atkins will prepare for and attend up to three meetings with the Texas Commission on Environmental Quality (TCEQ) and/or the United States Environmental Protection Agency (EPA) related to permit renewal or reapplication processes.

Task 1120 – General Training

Atkins sampling and maintenance staff will be trained in the revised monitoring protocol. Training will include: refresher on monitoring software; refresher on sampling procedures; quality assurance and quality control (QA/QC) sample collection methods and frequency; sample documentation and laboratory delivery protocol; maintenance tasks and required frequencies; and health and safety issues. Training will be conducted in an office setting. New site locations will be reviewed, but will not be visited until deployment of equipment.

Task 1130 – Annual Refresher Training

Atkins will conduct brief annual refresher training sessions. Training will allow for a recap of health and safety issues for specific sites (if necessary), problematic sampling sites, security issues, new sampling locations, and any changes to the SAPP/QAPP (if they occur). Refresher training is expected to be one day annually and not exceed two hours for all team members for each year.

SAPP/QAPP

Task 1210 – Monitoring Plan Protocol Revision

Atkins will revise the *Regional Stormwater Monitoring Program: Monitoring Program and Quality Assurance Project Plan for Wet Weather Equipment Deployment and Sampling Program: 2006 - 2010*. Revisions will include:

- Updating sampling and maintenance procedures;
- Revising maps for new sites;
- Preparing new health and safety provisions;
- Verifying laboratory analyses methodology;
- Collecting watershed and rainfall information; and
- Estimating annual flows for watersheds.

Atkins will provide a draft; address one round of comments from the monitoring program participating partners to this agreement (e.g. NCTCOG, Arlington, Garland, Irving, Mesquite, NTTA, Plano and TxDOT) and produce a final document. All documents will be provided in electronic formats only (MS Word and Adobe pdf).

At the beginning of the project, Atkins will perform an evaluation on all of the storm water quality monitoring equipment. Each monitoring program participant, listed above, will deliver their monitoring equipment to Atkins at a time convenient to both the equipment owner and Atkins. Atkins will perform an evaluation on the equipment to determine the status and provide a summary of the evaluation and recommendations (if necessary) on action to take. If necessary, Atkins will order necessary replacement parts and invoice the NCTCOG for the cost of the parts.

Task 1220 – Field Reconnaissance and Site Selection

Atkins will perform field reconnaissance, in coordination with each entity, to identify “Candidate Storm Water Sampling Locations” in watersheds selected by each entity. Field reconnaissance and site selection will occur for Arlington, Garland, Irving, Mesquite, NTTA, Plano and TxDOT. Atkins will

conduct on-site inspections of the sites, where photographs will be taken at each potential sampling site, each with the specific site ID. Latitude and longitude will be recorded using a handheld Global Positioning System (GPS) unit. Detailed notes on the site, surrounding area and stream channel conditions, and any other relevant information will be recorded using a pre-approved "Candidate Wet Weather Sampling Site Evaluation Checklist and Data Collection Form." Sketches will also be drawn of the sites showing the stream crossing, surrounding roads, identified structures, and north arrow.

Atkins will perform field reconnaissance in the fall of 2011 for all watersheds to be sampled. Atkins will repeat this reconnaissance in 2013 to determine if the sites previously selected are still viable.

FIELD SAMPLING AND ANALYSIS

Task 1310 – Storm Tracking

Atkins will monitor meteorological conditions and storm fronts in order to anticipate qualified storm events. During warm weather months when afternoon showers are common, staff will check weather conditions at least twice a day to determine whether precipitation is likely at the site. During cold weather months, Atkins will monitor the approach of rain-producing cold and warm fronts. Atkins will not monitor weather when proper antecedent dry period requirements have not been met at the site. For likely precipitation events, the staff will evaluate whether a qualified rain event may occur and take necessary action as outlined in the monitoring plan.

When tracking storms, the depth of rainfall in the previous 72-hour period will be obtained using the on-site rain gauges and by visiting the City of Dallas Flood Control rain gauge network web site at <http://www.ci.dallas.tx.us/sts/html/fc.html>, the Intellicast precipitation contour map at <http://www.intellicast.com>, and the Weather Underground network of local weather stations. Weather forecasts will be obtained from the National Weather Service web site <http://www.srh.noaa.gov>.

Task 1320 – Mobilization to Sampling Site

When suitable conditions are identified at one or more sampling sites, Atkins will mobilize to the appropriate sites to retrieve automatic samples, inspect sampling equipment and to collect grab samples. Prior to mobilization, field personnel will gather necessary equipment and data sheets, calibrate water quality meters, and travel to the site when mobilization has been authorized. All field teams will consist of two people for safety. Field personnel will attempt to arrive as soon as the storm starts. Atkins will use internal resources to remotely program and turn on samplers (those with cellular modems) to assist with mobilization efforts. Atkins will conduct tailgate safety meetings, reviewing the anticipated site hazards prior to each sampling mobilization.

Task 1330 – Auto-Sample Retrieval

Atkins will collect quarterly storm water samples in accordance with the revised monitoring plan protocol (Task 1210). Atkins will collect composite samples of the storm event at 30-minute intervals for 120 minutes. Sampling will be initiated during the first flush of a storm event. Each sampling event will include collection of a first-flush grab sample and a time-weighted composite sample. The time-weighted composite sample will include a minimum of five aliquots.

Physical water quality measurements will be collected for each storm water sample collected. These measurements include water and air temperature, specific conductance, and pH. This data will be recorded on field data forms.

Task 1340 – Equipment Maintenance

Atkins will perform routine maintenance on the monitoring equipment. Routine maintenance will include decontaminating field equipment; replacing auto-sampler composite containers; prepare sampling stations for next storm event; check integrity of shelters, conduit, bubbler and sampler lines and sample strainer; clean on-site rain gauges where applicable, perform other site checks; and record maintenance activities. Maintenance activities will take place prior to each sampling quarter and immediately after each storm water sampling event or dry run. Maintenance activities are expected to continue for 48 months or until the sampling activities have been completed.

Task 1350 – Deployment and Decommissioning

Atkins will deploy and install the monitoring equipment at all sites. Staff will place equipment in the designated sites within a safe enclosure while striving to protect the equipment from vandalism, flooding, insects, etc. The enclosures will be anchored to the ground and piping will be used to guide the suction and bubbler tubing to the stream. Equipment deployed may include:

- Automatic sampler;
- Tipping bucket rain gauge (specific locations only);
- Cellular modem (specific locations only);
- 12-V marine battery;
- Sampling containers;
- Bubbler tubing and bubbler stainless steel line;
- Sample and pump tubing;
- Earth anchors and steel cables;
- Storm box sample shelter;
- Protective conduit; and
- Strainer.

Atkins will perform equipment deployment twice, once in the fall of 2011 and again in December 2013.

At the conclusion of the sampling activities in Year 2015, Atkins will wipe clean all monitoring equipment and store the equipment for up to four weeks at the designated Atkins facility. Each monitoring program participant will pick up their equipment at a time convenient for both the equipment owner and Atkins.

Task 1360 – Analytical

Over the course of the monitoring contract, Atkins will submit one quarterly sample per monitoring station along with QA/QC samples (10% of the total number of samples ~ two samples per quarter) to TTI Laboratories. Atkins will communicate with the laboratory regarding delivery times, weather forecast, and expected number of samples per submittal. All samples will be packed with ice and chain-of-custody forms will be filled out prior to submittal. A list of the analytes may be found in the revised monitoring protocol.

TTI will be available 24-hours a day and on holidays for sample submittal.

ELECTRONIC DATA MONITORING REPORT

Task 1410 – Data Management (Four Permit Years)

Data management will occur for Arlington, Garland, Irving, Mesquite, NTTA, Plano and TxDOT. Atkins will prepare quarterly summaries of the successful events including laboratory analysis, water quality observations, and graphical representations of the rainfall and water level data. Atkins will prepare one draft set of summaries and address one round of comments and then finalize. Atkins will submit an electronic data deliverable in MS Excel format consistent with the NCTCOG data reporting requirements and the regional program monitoring database format requirements and digital documents of the quarterly summaries in MS Word and Adobe PDF formats.

ANNUAL REPORT

Task 1510 – Annual Reports (Four Permit Years)

Atkins will assist in the preparation of four annual reports. Atkins will compile rainfall data, laboratory data, FLOWLINK data, annual flow and loads into a pre-approved reporting format for Arlington, Garland, Irving, Mesquite, NTTA, Plano and TxDOT. The NCTCOG will summarize the annual program components and sampling activities for the prior year and compile GIS-based maps of the sample locations. Atkins will review the document and provide one set of comments. NCTCOG will address stakeholder comments, finalize and submit to the TCEQ. Digital copies will be provided for all stakeholders by NCTCOG. Atkins and the NCTCOG will perform these activities for four permit years (i.e. 2012 – 2015).

FINAL SUMMARY REPORT

Task 1610 – Final Summary Report (One Time)

Atkins and NCTCOG will jointly develop a Final Regional Summary Report at the conclusion of the monitoring efforts. Activities will support Arlington, Dallas, Fort Worth, Garland, Irving, Mesquite, NTTA, Plano and TxDOT. The report will allow for a statistical analysis of the data, comparison of other data sets and recommendations for future monitoring activities. The following is a breakdown of the activities/roles for Atkins and NCTCOG:

- Atkins
 - Input laboratory data into statistical package.
 - Perform statistical analyses of data including:
 - Summary statistics (number of samples, minimum, maximum, median, arithmetic mean, geometric mean, standard deviation, and coefficient of variation).
 - Statistical comparisons (previous term baseline data, Clean River Program in-stream data, and watershed stations)
 - Obtain and enter reference data (e.g. previous monitoring term, the National Storm Water Quality Database and the Texas Surface Water Quality Criteria [30 TAC 307]) into statistical software package for comparisons.
 - Prepare statistical figures and tables including:
 - Summary table
 - Box-whisker plots
 - Results tables
 - Jointly formulate results and recommendations with NCTCOG.
 - Jointly address one round of comments and revisions with NCTCOG.

- Jointly finalize the report with NCTCOG.
- NCTCOG
 - Facilitate the development of the final report. Provide narratives, descriptions of the program components and sampling activities.
 - Prepare all watershed maps.
 - Distribute draft and final digital copies to all participants and post final copy to NCTCOG website.

The Atkins Team will conduct the following tasks to assist the contracting entities in performing biological monitoring:

PROJECT MANAGEMENT AND COORDINATION

- Task 2110 – Project Management;

SAMPLE ANALYSIS PROJECT PLAN (SAPP) / QUALITY ASSURANCE PROJECT PLAN (QAPP)

- Task 2210 – Monitoring Plan Development; and
- Task 2220 – Field Reconnaissance and Site Selection.

FIELD SAMPLING AND ANALYSIS

- Task 2310 – Sampling Preparation;
- Task 2320 – Field Sampling and Maintenance; and
- Task 2330 – Analytical.

ELECTRONIC DATA MONITORING REPORTS

- Task 2410 – Data Management (Four Permit Years).

ANNUAL REPORTS

- Task 2510 – Annual Report (Four Permit Years).

FINAL SUMMARY REPORT

- Task 2610 – Final Summary Report (One time only).

Each of the proposed tasks is described below.

PROJECT MANAGEMENT AND COORDINATION**Task 2110 – Project Management**

Atkins will perform project management activities to coordinate project activities, staff, and subconsultants under this task. Project management activities are expected to last up to 57 months. Quarterly progress reports and invoices will be submitted to NCTCOG along with the Part B invoice (under this same contract) and progress report. Invoice amounts and progress reports will be noted as different task items under one invoice. Project accounting, scheduling and coordination with internal staff and contract laboratory will be conducted. Atkins will attend one meeting with the Regional Storm Water Monitoring Program per year to provide updates, scheduling and answer questions about the program.

SAPP/QAPP**Task 2210 – Monitoring Plan Development**

Atkins will develop a quality assurance project plan (QAPP) that will serve as a strict guide for data collection. The TCEQ Surface Water Quality Monitoring Procedures will provide the foundation for data collection, although the methodology will be modified in accordance with site-specific conditions. The QAPP will provide specific details on criteria for site selection, field data collection techniques, diel water quality monitoring, habitat assessment protocols, and data quality assurance. Atkins will prepare one draft, address one round of comments, finalize and provide electronically to NCTCOG, Garland and Plano.

Task 2220 – Field Reconnaissance and Site Selection

Atkins will perform field reconnaissance with the Cities of Garland and Plano to identify two potential sites for each entity for biological monitoring. Station selection will be based on input from the project partners, representativeness of typical habitats, site access, and prior sampling history. Atkins will conduct on-site inspections for two watersheds for both Garland and Plano for potential sites. During the site inspection Atkins will collect photographs for each potential biological monitoring site, latitude and longitude, and collect preliminary notes describing each site. Once all sites have been chosen, a Sample Site Selection Report will be provided to NCTCOG, Garland and Plano describing the sites (total of four) selected.

Atkins will perform field reconnaissance in Year 2011 for all watersheds to be sampled. Atkins will repeat this reconnaissance in 2013 to determine if the sites previously selected are still viable.

FIELD SAMPLING AND ANALYSIS**Task 2310 – Sampling Preparation and Maintenance**

Atkins will notify the Cities of Garland and Plano prior to each sampling event. Atkins will attempt to perform biological monitoring for both entities during one mobilization. Mobilizations and preparations will occur twice a year for four years. Atkins will watch weather forecasts to schedule during expected dry periods for sampling. Atkins will perform necessary equipment calibrations (pre- and post-), equipment maintenance, and gather appropriate field data forms.

Task 2320 – Field Sampling

Atkins will perform biological monitoring in accordance with the monitoring plan/QAPP developed for Task 2210 under this contract. Field sampling will include habitat attribute documentation; flow measurements; basic water chemistry; diel water chemistry; and the collection of aquatic invertebrates, fish and mussels. Field sampling will occur two times per year (spring and fall) for four years. At the end of two years, Atkins will move to the second watershed (site) selected for each entity and schedule sampling for those sites.

Task 2330 – Analytical

Atkins will collect a suite of water chemistry samples for each biological monitoring site two times a year for four years. The specific water chemistry constituents will be listed in the monitoring plan/QAPP. One set of QA/QC samples will be collected during each year of monitoring. Water chemistry samples will be delivered to TTI Laboratories, where all samples will be packed with ice and chain-of-custody forms will be filled out prior to submittal.

ELECTRONIC DATA MONITORING REPORT

Task 2410 – Data Management (Four Permit Years)

Atkins will prepare summaries for each successful biological monitoring event performed for Garland and Plano. Each summary will include site descriptions, data analysis including IBI metrics, tabulated data, figures, and maps (one submittal per watershed). Atkins will prepare one draft set of summaries and address one round of comments and then finalize. Atkins will submit an electronic data deliverable in MS Excel format consistent with the NCTCOG data reporting requirements and the regional program monitoring database format requirements and MS Word documents of the summaries.

ANNUAL REPORT

Task 2510 – Annual Reports (Four Permit Years)

Atkins will assist in the preparation of four annual reports. Annual report activities will support Garland and Plano. Atkins will compile meteorological data, summary tables, preliminary data analysis (including IBI metrics), figures, and a brief summary of the results. Summary tables may include those for benthic macroinvertebrates, physical habitats, fish communities, physical/chemical data, and mussels. Atkins will provide input for the NCTCOG to develop narratives and maps for the report. Atkins will also work jointly with NCTCOG to address one round of comments and finalize the document. Digital copies will be provided for all stakeholders.

FINAL SUMMARY REPORT

Task 2610 – Final Summary Report (One Time)

Atkins and NCTCOG will jointly develop a Final Regional Summary Report at the conclusion of Part B. Final Summary Report activities will support Dallas, Fort Worth, Garland and Plano. The report will summarize all annual reports, analyze all data, and interpret aquatic life use designations and possible ecosystem stressors for each site. The report will be structured to enhance local understanding by conveying information in a manner that is readily adaptable to communicate results to the public and the respective participating governing entities. The following is a breakdown of the specific activities/roles for Atkins and NCTCOG:

- Atkins
 - Input all data and perform data analysis.
 - Obtain and prepare reference data for statistical comparisons.
 - Prepare statistical figures and tables.
 - Jointly formulate results and recommendations with NCTCOG.
 - Jointly address one round of comments and revisions with NCTCOG.
 - Jointly finalize the report with NCTCOG.
- NCTCOG
 - Facilitate the development of the final report. Provide narratives, descriptions of the program components and sampling activities.
 - Prepare all watershed maps.
 - Distribute draft and final copies for all participants and post final copy to NCTCOG website.

Atkins Task List for FY13

FY13		
Task	Task Name	Activities
1110	Project Management	<ul style="list-style-type: none"> • Coordinate work of subs and internal team. • Attend one Monitoring Meeting with NCTCOG and stakeholders. • Prepare and provide progress reporting to all partners. • Project accounting and internal meetings.
1120	General Training	<ul style="list-style-type: none"> • No action this FY.
1130	Annual Refresher Training	<ul style="list-style-type: none"> • Conduct refresher training for monitoring staff. Focus on safety, coordination and execution.
1210	Monitoring Plan Protocol Revision	<ul style="list-style-type: none"> • No action this FY. Monitoring plan will be updated in FY2014 to reflect new monitoring stations and site information.
1220	Field Recon and Site Selection	<ul style="list-style-type: none"> • Finalize watershed and rainfall information for annual flow and load estimations.
1310	Storm Tracking	<ul style="list-style-type: none"> • Track storms. • Connect to all sites with modems. • Download data. • Program equipment in real time using modem connections. • Pay monthly charges for multiple cellular plans for modems.
1320	Mobilization to Sampling Sites	<ul style="list-style-type: none"> • Calibrate meters. • Conduct tailgate safety meetings. • Conduct post calibration of meters. • Clean meters and tools. • Replace consumable items. • Staff deployment to sampling sites.
1330	Auto-Sample Retrieval	<ul style="list-style-type: none"> • Inspect portable units and lines. • Record required observations. • Ice down samples. • Label jars. • Complete chain of custody forms. • Collect samples from two sites per quarter for four calendar year quarters (Oct - Dec, Jan - Mar, Apr - June, and Jul - Sep).
1340	Equipment Maintenance	<ul style="list-style-type: none"> • Reset and calibrate equipment (for two sites) prior to each quarter. • Reset equipment due to flooding, vandalism, changes in stream or bank that affect suction line placement, and cleaning of strainer and bubbler lines (submerged). • Conduct these activities multiple times if vandalism or flooding or other problems occur more than once.

1350	Deployment and Decommissioning	<ul style="list-style-type: none">• No action this FY.
1360	Analytical	<ul style="list-style-type: none">• Place water chemistry samples on ice and deliver to laboratory.• Perform water chemistry analytical tests.
1410	Annual Report	<ul style="list-style-type: none">• Compile data for annual report.• Review annual report and provide comments.
1510	Data Management	For two sampling events each calendar quarter: <ul style="list-style-type: none">• Perform data checks for consistency with monitoring plan, laboratory QA/QC, review for abnormalities (e.g. illicit discharges, algal blooms, outliers).• Download and process FLOWLINK data.• Input all data into EDD, summarize all activities and data in summary sheets.
1610	Final Summary Report	<ul style="list-style-type: none">• No action this FY.

Atkins Task List for FY13

FY13		
Task	Task Name	Activities
2110	Project Management	<ul style="list-style-type: none"> • Provide continuous project management. • Attend one Monitoring Meeting with NCTCOG and stakeholders. • Coordination with laboratory and internal team.
2210	Monitoring Plan Development	<ul style="list-style-type: none"> • No action this FY.
2220	Field Recon and Site Selection	<ul style="list-style-type: none"> • No action this FY.
2310	Sampling Preparation and Maintenance	<ul style="list-style-type: none"> • Perform necessary equipment calibrations (pre- and post-). • Perform equipment maintenance. • Gather field data forms.
2320	Field Sampling	<ul style="list-style-type: none"> • Conduct biological monitoring two times per year (spring and fall). • Document habitat attributes. • Perform flow measurements. • Collect basic and diel water chemistry. • Collect aquatic invertebrates, fish and mussels.
2330	Analytical	<ul style="list-style-type: none"> • Take analytical samples with each biological sampling. • Place water chemistry samples on ice and deliver to laboratory.
2410	Annual Report	<ul style="list-style-type: none"> • Compile data for annual report. • Review annual report and provide comments.
2510	Data Management	<ul style="list-style-type: none"> • Prepare data summaries and electronic data deliverables.
2610	Final Summary Report	<ul style="list-style-type: none"> • No action this FY.

PART A: Stormwater Monitoring						
Entity	FY12	FY13	FY14	FY15	FY16	Grand Total
Arlington	\$ 63,941	\$ 66,578	\$ 70,678	\$ 66,578	\$ 24,021	\$ 291,796
Garland	\$ 63,941	\$ 66,578	\$ 70,678	\$ 66,578	\$ 24,021	\$ 291,796
Irving	\$ 63,941	\$ 66,578	\$ 70,678	\$ 66,578	\$ 24,021	\$ 291,796
Mesquite	\$ 45,866	\$ 47,737	\$ 50,679	\$ 47,737	\$ 17,126	\$ 209,145
Plano	\$ 45,866	\$ 47,737	\$ 50,679	\$ 47,737	\$ 17,126	\$ 209,145
NTTA	\$ 45,866	\$ 47,737	\$ 50,679	\$ 47,737	\$ 17,126	\$ 209,145
TxDOT	\$ 45,866	\$ 47,737	\$ 50,679	\$ 47,737	\$ 17,126	\$ 209,145
Dallas					\$ 2,058	\$ 2,058
Fort Worth					\$ 1,103	\$ 1,103
Total	\$ 375,287	\$ 390,682	\$ 414,750	\$ 390,682	\$ 143,728	\$ 1,715,129

PART B: Biological Monitoring						
Entity	FY12	FY13	FY14	FY15	FY16	Grand Total
Garland	\$ 13,836	\$ 9,388	\$ 9,485	\$ 9,389	\$ 3,808	\$ 45,906
Plano	\$ 13,836	\$ 9,388	\$ 9,485	\$ 9,389	\$ 3,808	\$ 45,906
Dallas					\$ 1,440	\$ 1,440
Fort Worth					\$ 3,360	\$ 3,360
Total	\$ 27,672	\$ 18,776	\$ 18,970	\$ 18,778	\$ 12,416	\$ 96,612