North Central Texas Council of Governments

LETTER OF AUTHORIZATION

North Central Texas
Regional Storm Water Monitoring Program

PBS&J Monitoring Program Assistance for FY09
North Central Texas Council of Governments (NCTCOG)

The NCTCOG and the **North Texas Tollway Authority** (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 TPDES storm water permit requirements for municipal storm water discharges including cooperative regional wet weather monitoring. The Interlocal Agreement established a structure by which a *Regional Storm Water Management Coordinating Council* (RSWMCC) 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 Storm Water Monitoring Task Force (Task Force), NCTCOG has coordinated the design of a cooperative Regional Storm Water Monitoring Program. The Regional Storm Water Monitoring Program is designed to meet the storm water monitoring requirements for each individual permit holder, while providing for a more efficient, consistent and cost-effective regional effort. The United States Environmental Protection Agency (USEPA), Region 6, and the Texas Commission on Environmental Quality (TCEQ) have formally endorsed this regional program among the region's seven largest cities (Arlington, Dallas, Fort Worth, Garland, Irving, Mesquite, & 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 storm water permit requirements for wet weather monitoring for which the Participant will reimburse NCTCOG.

The firm of PBS&J, in association with other partnering firms, has been contracted by NCTCOG to provide regional monitoring program assistance through March 2010. The scope of work to be provided to each participating entity for the duration of the PBS&J contract has been approved by the Task Force and can be found in Attachment 1. NCTCOG has entered into a phased contract with PBS&J for monitoring assistance on behalf of the participating entities whereby PBS&J will monitor storm events as part of each entity's storm water permit requirement to provide an ongoing assessment of urban storm water 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 agreements. The scope of services provided by PBS&J is limited to the cities of Arlington, Garland, Irving, Plano, and Mesquite, the TxDOT Dallas District, and the NTTA.

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This form seeks funding commitments and authorization to proceed with the scheduled tasks for **FY09**. Attachment 2 of this Letter of Authorization is a table outlining the detailed task list for **FY09** that will be received by each participating entity. Attachment 3 is a table outlining the total and annual cost-share amounts among all potential participants for PBS&J assistance with the Regional Monitoring Program. Execution of this Letter of Authorization obligates the Participant to pay its cost-share portion of the PBS&J Regional Monitoring Program Assistance for the specified fiscal year. Billing of each Participant by NCTCOG for these services will be made no more frequently than quarterly, and will be based on an equal share of services received by the Participants. Under the contract with PBS&J, 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.

Work under this agreement may continue beyond September 30, 2009 to complete the authorized **FY09** agreement. However, costs for the fiscal year's work program will not exceed the Participant's cost-share as agreed to in this executed agreement.

The **North Texas Tollway Authority's** share of the **FY09** PBS&J Regional Storm Water Monitoring Program Assistance is **$42,461.**

The undersigned, duly authorized to make such obligations, represent NCTCOG's and the Participant's agreement to these provisions and hereby execute this agreement in triplicate originals.

(Authorized Signature)

Clayton Howe
(Typed Name)

Date: 4/13/09

Mike Eastland, Executive Director
North Central Texas Council of Governments

Date: 3/26/09

PBS&J Amended Work Scope for FY06-FY10

BACKGROUND

The North Central Texas Council of Governments (NCTCOG) provides assistance with the implementation of the regional storm water monitoring program (regional program) implemented to provide compliance with Texas Commission on Environmental Quality (TCEQ) existing permits for municipal storm water discharges. Program participants for this Scope of Work (SOW) include the Cities of: Arlington; Garland; Irving; Mesquite, Plano, TxDOT Dallas District; and, North Texas Tollway Authority (NTTA).

An initial storm water monitoring program was implemented that captured runoff data from smaller, single land use, watersheds. While the analysis of these samples indicated the typical runoff characteristics of the specific land use, the data did not evaluate the impacts on receiving streams. The primary goal of the regional program and this SOW will be to determine long-term trends and assess the impact of storm water discharge on receiving stream quality so that meaningful trend analysis can be gained. Data gathered through implementation of the regional program will serve as a baseline for future analyses.

The regional monitoring plan was approved by TCEQ, and calls for the sampling of seven watersheds per year for three years beginning January 1, 2007. Two other municipalities are a part of the regional program but are not a part of this SOW, each of these two will complete their own field collection and analysis of storm water samples, but coordination with each is required to provide consistency with sampling protocol development and implementation. PBS&J's contract with NCTCOG began July 2006, and end March 2010. Letter Authorizations will be issued by NCTCOG for fiscal years (FY) beginning with FY06 (July 06 through September 06). FY07, 08, 09, and 10 Letter Authorizations will each coincide with the current fiscal year work to be completed (fiscal years run October 1 through September 30). FY10 will be from October 1, 2009 until March 31, 2010 (FY-10 has been included to allow time for final report development and submittal to NCTCOG). Watershed sampling began in January 2007 and continued for three years. Monitoring periods will be quarterly during FY07, 08, 09, and 10; monitoring periods are as follows: January 1 - March 31, April 1 - June 30, July 1 - September 30 and October 1 - December 31. Five watersheds will contain three sampling stations to be sampled during each quarter. The remaining two watersheds will each have two sampling stations to be sampled each quarter.

The PBS&J Team will provide automatic storm water sampling services to collect the necessary quarterly samples. This will include utilizing two-person teams to set up, collect quarterly samples and maintain sampling equipment within the specific watershed.

Field data will be collected to include general observations of site conditions, water quality, determination of first flush conditions, time of first flush, time of subsequent sample collections and rainfall data specific to the watershed. Field data will be reported along with the laboratory analytical data.

MAJOR WORK TASKS

The PBS&J Team will conduct the following tasks to assist the contracting entities in performing monitoring at identified sites:

SET-UP ACTIVITIES - 0100

- Task 0110 – Office Set-Up;
- Task 0120 – General Training;
- Task 0130 – Site Selection;
- Task 0140 - Monitoring Plan Protocol Finalization;

MONITORING ACTIVITIES - 0200

- Task 0210 – Weather and Storm Tracking;
- Task 0220 – Mobilization;
- Task 0230 – Supplemental Engineering;
- Task 0240 – First Flush Grab Sample Collection;
- Task 0250 – Non-First Flush Grab Sample Collection;
- Task 0260 – Automatic Sample Retrieval;
- Task 0270 - Equipment Maintenance;

DATA MANAGEMENT AND REPORTING - 0300

- Task 0310 – Data Management and Entry;
- Task 0320 – Final Comprehensive Summary Report; and

PROJECT MANAGEMENT - 0400

- Task 0410 – Project Management.

Each of the proposed tasks is described below.

SET-UP ACTIVITIES - 0100

Task 0110 – Office Set-Up

Consumable items necessary for conducting sampling events will be purchased. Automatic samplers will be purchased from C.C. Lynch & Associates, Inc., and prepared for field deployment. Logbooks and checklists for field sampling and maintenance trips will be created. Logbooks will contain reference materials for field use and contain all necessary sample retrieval and equipment maintenance forms and checklists. All sampling materials will be organized and maintained in a readily transportable state to minimize mobilization time.

Task 0120 – General Training

Sampling and maintenance staff will be trained on established protocol. Training will include: use of any monitoring software; sample and data retrieval procedures for automated samplers and associated flow and rain devices; sample collection procedures for grab sampling; 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 include both office and field activities. A Vendor representative will direct training regarding on-site equipment and utilization of monitoring software, as necessary. A representative from the sub-contracted laboratory will assist with sample delivery protocol for field personnel.

Task 0130 – Site Selection

"Candidate Storm Water Sampling Locations" identified by each of the cities will be evaluated to identify suitable candidate sites. Staff members will conduct on-site inspections of the sites in accordance with the established Health and Safety Plan. Photographs will be taken at each sampling site, each with the specific site ID. Latitude, longitude, and elevation of the site will be recorded using a hand held 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 "Candidate Wet Weather Sampling Site Evaluation Checklist and Data Collection Forms", Appendix A has an example. Sketches will also be drawn of the sites showing the stream crossing, surrounding roads, identified structures, and north arrow.

The sites will be evaluated based on the following parameters:

- Ease of sampler installation;
- Sample area access and safety;
- Suitable conveyance type;
- Vegetative cover;
- Visibility from right-of-way;
- Amount of public use;
- Risk of vandalism;
- Horizontal and vertical distance constraints of automatic sample equipment

Evaluation information will be used to determine whether the site is well suited for wet weather sampling or if there are indications that the site is very poorly suited for sampling.

The categories listed below will be used to separate the candidate sites based on their relative potential for automatic sampling, safety, vandalism, and public safety.

FATAL FLAW SITES

Sites will be identified as having a fatal flaw if any of the following conditions are met:

- The stream reach does not provide a laminar flow (determined by visible obstructions, bends, riffles, and/or eddy areas);
- The site has numerous discharge points entering in to it;
- Excessive hose length is required to reach sampler; and
- The site is located in a confined space.

On-site reconnaissance will be performed to reveal sites included on the candidate site list that are not suitable for identified reasons. Sites that are identified as having a fatal flaw, discovered through site reconnaissance, will have alternatives provided based on meeting satisfactory conditions.

Task 0140 – Monitoring Plan Protocol Finalization

PBS&J will finalize a monitoring plan protocol and quality assurance project plan (QAPP). The plan will include: incorporation of laboratory comments; monitoring station equipment information; monitoring station sample collection and maintenance protocols; and other necessary actions to reflect the actual installed condition of monitoring equipment at the site. The protocol will include the following general provisions:

- Vehicle Parking and Safety
- Approaching the Sampling Site
- Fill-out Screening Form

Annually, as site locations change, PBS&J will fully complete the *Candidate Wet Weather Sampling Site Evaluation Checklist and Data Collection Forms* for each new site and submit copies of those to NCTCOG. NCTCOG will in turn generate site location maps using the GPS coordinates provided on the sheets for inclusion in the *Monitoring Plan Protocol* document. NCTCOG will also update the Health and Safety Plan section of the Protocol with new information identifying the nearest hospital locations to the new sites. PBS&J will be responsible for forwarding to NCTCOG any other Health and Safety Plan information as well as any updated Field Activities information that is needed. NCTCOG will assume responsibility for editing the *Monitoring Plan Protocol* to reflect these updates. PBS&J staff will be responsible for reviewing the final draft of the *Monitoring Plan Protocol* for accuracy.

MONITORING ACTIVITIES - 0200

Task 0210 - Weather and Storm Tracking

PBS&J will monitor meteorological conditions and storm fronts in order to anticipate qualified storm events. During workdays of warm weather months when afternoon showers are common, staff will check weather conditions twice daily to determine whether precipitation is likely at the site. During cold weather months, PBS&J will monitor the approach of rain producing cold and warm fronts. PBS&J will not monitor weather when 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.

The depth of rainfall in the previous 24-hour period will be obtained by visiting the web site http://www.intellicast.com. Go to 'Current Weather', 'Historic' and select 'Daily Precipitation'. Click on 'Dallas' to obtain a contour map of precipitation depth for the Dallas-Fort Worth metroplex for the previous 24 hours. The precipitation depth is from 1200 hours UTC (Coordinated Universal Time) of the previous day to 1200 hours UTC of the current day.

Current weather forecasts will be obtained from the radar rainfall summary map at the web site (http://www.srh.noaa.gov/radar/latest/DS.80stp/si.kfws.shtml). Weather forecasts can also be obtained at this web site by entering the city name or zip code.

Task 0220 – Mobilization

When storm conditions warrant, PBS&J field staff will mobilize to the site to retrieve automatic samples, inspect sampling equipment and to collect grab samples. Field personnel will gather necessary equipment and logbooks 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 after the storm event conclusion as possible (for retrieval of automatic samples) or as soon as precipitation starts for collection of grab samples.

Field personnel will print out the required number of blank Wet Weather Storm Water Outfall Field Screening Inspection forms. One form is required for each sampling site, and will carry several additional forms.

Field personnel will go through the checklist of all the equipment needed for the field trip, making sure that equipment, including the vehicles, are in good working condition and that there is sufficient gas for the field trip.

Field personnel will verify with a written checklist that the following equipment items are in the vehicle before leaving:

- Maps (Mapsco)
- Site description and driving directions to each site
- Spare charged marine battery
- Walking stick
- Blank Wet Weather Storm Water Outfall Field Screening Inspection forms for data recording
- Digital camera (with charged battery)
- Dry Erase Board and markers
- GPS
- pH/Conductivity meter and other testing meters/equipment
- Field notebook, pencils, pens
- Safety vests, hard hats and steel toes shoes
- Rain Gear
- Rubberized boots
- Flashlight
- Cell phone
- Machete
- Can of pepper spray (one for each person), sunscreen and bug repellent
- Project Information Sheets for inquiries in the field
- Identification cards, insurance information and contact information of office colleagues
- First aid kit
- Amber warning light
- Reflectorized cones
- 100 feet tape
- Bucket
- Water cooler
- Laboratory chain of custody forms
- Automatic Sampler replacement bottles
- Lab sample transfer ice chest
- Jumbo zip lock freezer bags
- Fire extinguisher

When to Mobilize

Field mobilization will occur when: (1) there is sufficient rainfall at the sampler deployment location, (2) the water level increases to the level of the established event mean concentration determined at each sampling location. Field mobilization will occur 24-hours a day 7-days a week, and on holidays. This information is recorded by the bubbler sensor and can be obtained by querying the automatic sampler unit using the cell phone telemetry unit. If an automatic sampler does not have cell phone query capability, the mobilization will be initiated based on the established sampling protocol.

Check Equipment and Consumables

The list of equipment and items indicated earlier will be checked before field mobilization begins.

Conduct Tailgate Safety Meeting & Complete Site HASP Form

Every field trip needs adequate health and safety preparation. Field personnel will make sure that the following procedures (at a minimum) are followed to ensure a successful field sample collection day.

Conduct a tailgate safety meeting reviewing the anticipated site hazards, and complete the Site HASP Form. Place all meeting information and forms into the Daily Health and Safety Meeting Manual.

Task 0230 – Supplemental Engineering

In the event that designated locations are required to have hard mount stations, such as placement on or under a bridge, ancillary engineering design will be required to meet equipment specifications and to meet mounting standards. PBS&J will develop necessary plans and/or specifications based on current standards for the particular type installation.

Task 0240 – First Flush Grab Sample Collection

When storm conditions permit, PBS&J will mobilize to capture grab samples from the designated sampling station within the first 30-minutes of the rain event. Field personnel will record required data; properly document and preserve the grab samples; initiate chain of custody forms; transport samples to the lab; and return to the PBS&J Office. This task will be performed only if automatic samplers are not in use, and will be performed using the unit costs associated with first flush grab samples.

Task 0250 – Non-First Flush Grab Sample Collection

When storm conditions permit, PBS&J will mobilize to collect non-first flush grab samples from each sampling station every 30-minutes after collection of the grab sample. Field personnel will record required data; properly document and preserve the grab samples; initiate chain of custody forms; transport samples to the lab; and return to the PBS&J Office. This task will be performed only if automatic samplers are not in use, and will be performed using the unit costs associated with non-first flush grab samples.

Task 0260 – Automatic Sample Retrieval

Where sampling station conditions permit, PBS&J will set-up a portable sampling unit to collect a composite sample of the event mean concentration at 30-minute intervals for 120 minutes after initiation of sampling (collection of the first-flush sample). At the start of an anticipated qualified storm event, field personnel will check the portable sampling unit; record required data; and proceed to other sampling locations that may require grab sample collection. After collection of necessary grab samples, field personnel will return to the site; check the operational status of the portable sampler; record required data; retrieve the grab and composite sample; properly document and preserve the sample; initiate a chain of custody form; transport the sample to the lab; and return to the Office.

Task 0270 - Equipment Maintenance

PBS&J will perform the following maintenance activities after each mobilization: decontaminate field equipment and store in an accessible location at the Office; return to the site; check equipment and perform routine maintenance and cleaning activities; replace auto-sampler composite containers; prepare sampling stations for next storm event; check integrity of shelters; perform other site checks; and record maintenance activities.

DATA MANAGEMENT AND REPORTING

Task 0310 – Data Management and Entry

After all qualified sampling events and other events generating acceptable data, PBS&J will evaluate and enter data into the regional program monitoring database. During this process, PBS&J will evaluate lab sample results, field data, and storm characteristics; review corresponding QA/QC material; ensure generated data is in appropriate format; input valid data into the database; and store a hard copy of data in a secure readily accessible location.

Task 0320 –Final comprehensive Summary Report

NCTCOG will prepare Annual Regional Monitoring Reports each year that will include an introductory section, summary of field activities, presentation of data and an appendix which will have the last four quarters of event summary sheets, rainfall and hydrologic data based on information provided to them from PBS&J. PBS&J is responsible for reviewing the annual reports and providing comment. At the end of the fourth permit year, PBS&J will prepare a separate comprehensive summary report of the prior three-year sampling effort which will include statistical analyses to determine outliers and trends in the data, a comparison of the data with National Urban Run-off Program (NURP) and National Storm Water Quality Database (NSQD) data and a discussion of climate and seasonal effects. There will also be a recommendation section of how the regional monitoring program should proceed in the next permit term.

PROJECT MANAGEMENT

Task 0410 - Project Management

PBS&J will provide brief and progress reports (normally by phone or e-mail) to each entity. Staff, equipment, and other resources will be allocated and activities will be coordinated on a weekly basis. Project accounting and invoicing will be conducted and submitted to NCTCOG quarterly. Quarterly progress meetings with NCTCOG will be conducted during the monitoring period. During the progress meeting, PBS&J will present an overview of work completed, results to date, preliminary statistical summary of results to date, and planned activities.

EQUIPMENT

Automatic sampling will be conducted using the ISCO 6712 automatic samplers. This sampler uses a battery-powered peristaltic pump to draw water through a strainer and flexible sample tube. Sampling can be triggered by an increase in water surface elevation (of more than one (1) inch within the stream channels, for example) or by use of a rain gauge. Approximately twelve (12) liters of storm water will be collected at each site to enable the analysis of all the required constituents. This will be collected using four one-gallon glass containers. The 730 Bubbler Flow Module or the 4230 Flow Meter attached to a tube connected to the automatic sampler will be used to monitor water level increase. A computer processor with LCD display allows programming of sampler functions such as collection intervals and sample volumes, and additional data recording. Data collected by the automatic sampler unit can be retrieved from a remote location using the SPA 1489 Cellular Phone System. Sampling routines can be initiated and programs can be changed on the automatic sampler using the cell phone. A deep cycle marine battery will power the automatic sampler and related equipment.

A brief description of the main features of the automatic sampler as it relates to the regional program is presented below. For a more detailed description, visit the ISCO site at http://www.isco.com. Vendor literature listed in the references and additional documents at the vendor web site should be referred for detailed information on handling the equipment and add-on modules, programming and retrieving data. Also consult with ISCO for field specific problems such as monitoring under high velocity conditions.

AUTOMATIC SAMPLER DEPLOYMENT

Pump and Sample Bottle Housing

The automatic sampler will be located on a stable and flat surface. The equipment will be securely fastened by a chain to a solid object such as a tree to prevent removal by high flood events or vandals. The automatic sampler will also be anchored suitably so that it does not get tipped over by wind or water. The battery will also be secured in a similar fashion. The automatic sampler and battery will also be placed inside a box or waterproof container.

Suction Line

The automatic sampler will be located outside the stream and above the normal water surface elevation. The sampler will be located within 25 to 28 vertical feet for suction lift. If the vertical distance can not be maintained, another suitable location will be found for placement of the sampler.

The strainer or suction line intake will be located as close to the center of the stream as possible. The intake may be fastened to a steel stake driven into the center of the stream channel, attached to a bridge crossing bent, or secured to the side bank if needed. Wire, cable ties or hose clamps will be used to fasten the intake to the steel stake, making sure not to crimp the tubing and avoid vertical loops that can trap water in the tubing.

Flow Sensor and Cable

The 730 Bubbler Module will be used to detect the level rise increase of stream flow. The 730 Bubbler Module line lengths will not exceed 25 feet.

When line lengths longer than 25 feet are required, the 4230 Flow Meter may be used. The ¼" vinyl bubble line will be used for lengths between 25 and 50 feet.

PBS&J field technicians will secure the flow sensor module similar to the suction line intake. The flow sensor will be placed above the streambed or natural flow line, the established height for level rise to capture the event mean concentration. The flow sensor module will be fastened to a steel stake driven into the center of the stream channel. Wire, cable ties, or hose clamps will be used to fasten the intake to the steel stake.

PBS&J will calibrate the flow sensor module by measuring the depth of water and adjusting the reading to match, as described in the vendor manual.

The bubbler line will be routed and secured so that it does not disturb the flow.

Equipment Protection

Failure of the automatic sampler is not uncommon and can occur from power failure, programming error, flood damage, theft and vandalism. Every effort will be taken to prevent failure and to protect the automatic sampler. The automatic sampler and battery will be hidden from view, where applicable, and/or enclosed to reduce the possibility of theft or vandalism.

LABORATORY ANALYSIS

After collection of verified storm event samples from the designated stations, the samples will be delivered to TTI labs by the field teams. If sample collection occurs after normal business hours or on weekends and holidays, the field team will call TTI's 24-hour on-duty number to deliver samples to the lab. Laboratory technicians will meet the field team at the lab and begin analysis of necessary testing procedures. Analysis will be conducted according to test procedures established in 40 CFR 136, or as otherwise approved by TCEQ.

COST ESTIMATE

Estimated costs for this work are presented in Attachment 3. The estimated costs are for monitoring activities conducted through March 31, 2010. It is understood that Letters of Authorization/Agreement will be issued each year, and will coincide with the established fiscal year rather than the calendar year services are provided. PBS&J will not exceed these estimated costs without written authorization from the contracting entities.

PBS&J Task List for FY09

Detailed budget information is found in Attachment 3.

FY09		
Task	Task Name	Activities
0110	Office Set-up	• Purchase replacement sampling equipment, if necessary • Modify checklists and logbooks for Year 3 monitoring • Maintain maintenance and storage area
0120	General Training	• Internal meeting to review new monitoring locations including access, health and safety and travel routes. • Refresher training for new staff
0130	Site Selection	• Conduct site reconnaissance for Year 3 candidate wet weather sampling sites with sponsor entities • Identify fatal flaw sites • Develop alternative site locations, as required
0140	Monitoring Plan Protocol Finalization	• Review changes made to protocol by NCTCOG regarding GIS maps and hospital locations.
0210	Weather and Storm Tracking	• Continue weather and storm tracking efforts for 4 quarters of monitoring during October 2008 through September 2009.
0220	Mobilization	• Prepare necessary equipment for deployment • Gather all checklists and logbooks for use • Obtain all consumables and safety equipment • Conduct safety tailgates • Coordinate with laboratory on sample jar collection and cleaning
0230	Supplemental Engineering	• No action anticipated but will implement as needed
0240	First Flush Grab Sample Collection	• Actions to be covered under task 0260
0250	Non-First Flush Grab Sample Collection	• Actions to be covered under task 0260
0260	Automatic Sample Retrieval	• At the end of Year 2 Monitoring (2008), dismantle equipment at existing sites and re-deploy samplers and shelters to Year 3 sites • Respond to rainfall events • Collect first flush grab and non-first flush grab samples. Submit to laboratory • Re-deploy for next quarter sampling event • Perform field evaluations, and analysis • Prepare chain-of-custody and field inspection forms
0270	Equipment Maintenance	• Perform in-field diagnostics and maintenance, as required • Before and after sampling events, clean and prepare samplers for re-deployment • Monitor for vandalism and repair as needed

0310	Data Management and Entry	• Provide QA/QC of data o Chain-of-custody o Field forms o Log books o Laboratory analysis o Storm characteristics • Prepare data for upload to approved database
0320	Final Comprehensive Summary Report	• Review annual report prepared by NCTCOG and provide comments
0410	Project Management	• Provide continuous project management • Attend monitoring meetings with NCTCOG and entities

Total and Annual Cost-share Allocation
PBS&J Regional Monitoring Assistance

PARTICIPANT	FY09 COST-SHARE
Arlington	$ 42,461
Garland	$ 42,461
Irving	$ 42,461
Plano	$ 42,461
Mesquite	$ 42,461
TxDOT Dallas District	$ 42,461
NTTA	$ 42,461
Total Costs	**$ 297,227**

** Cost-share for each participant is determined by equally dividing the total program cost among the 7 participants.

Annual Fiscal Year Cost

Entity	Total Est Costs	FY-06 Jul 06' to Sept 06'	FY-07 Oct 06' to Sep 07'	FY-08 Oct 07' to Sep 08'	FY-09 Oct 08' to Sep 09'	FY-10 Oct 09' to Mar 10'
Arlington	$ 158,475	$ 24,990	$ 38,026	$ 42,461	$ 42,461	$ 10,537
Garland	$ 158,475	$ 29,110	$ 33,906	$ 42,461	$ 42,461	$ 10,537
Irving	$ 158,475	$ 29,110	$ 33,906	$ 42,461	$ 42,461	$ 10,537
Mesquite	$ 158,475	$ 24,990	$ 38,026	$ 42,461	$ 42,461	$ 10,537
NTTA	$ 158,475	$ 29,110	$ 33,906	$ 42,461	$ 42,461	$ 10,537
Plano	$ 158,475	$ 29,110	$ 33,906	$ 42,461	$ 42,461	$ 10,537
TxDOT Dallas	$ 158,475	$ 29,110	$ 33,906	$ 42,461	$ 42,461	$ 10,537
TOTAL TASK FEE	**$ 1,109,325**	**$ 195,530**	**$ 245,582**	**$ 297,227**	**$ 297,227**	**$ 73,759**