

US EPA ARCHIVE DOCUMENT

Quarterly Project Progress Report

**Construction Storm Water Excellence Initiative 2007
EPA Grant# EI-96489108-0**

MARCH 2012

**U.S. EPA State Innovation Grant Program
National Center for Environmental Innovation**

**Tennessee Department of Environment and Conservation
University of Tennessee, Municipal Technical Advisory Service**



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Project Description

Construction Stormwater Excellence Initiative

(Tennessee's State Innovation Grant Project- 2007)

Grantor:

US EPA State Innovation grant Program, National Center for Environmental Innovation

Grantee:

Tennessee Department of Environment and Conservation (TDEC)
University of Tennessee, Municipal Technical Advisory Service (MTAS)

State Project Manager:

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Division of Water Pollution Control, Statewide Stormwater Coordinator
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Email: Robert.Karesh@tn.gov

Total Project Cost:

The total amount funded was \$200,000. The State of Tennessee has committed a minimum of \$100,000 of in-kind funding for the same period. There are no other federal contributions to this program.

Project Period:

October 1, 2007 to September 30, 2011 (Original)
October 1, 2007 to September 30, 2013 (Amended)

**Key Milestones (Including Outputs),
Reflecting The Projected Timelines For Completion¹**

Objectives and Outputs	Original Start Date (Amended Start Date)	Original Completion Date (Amended Completion Date)	Complete?	Slippage Explanation/Other Comments
Objective: Stormwater group preliminary organizational meeting (pre-award) Output(s): <i>TDEC/MTAS meetings to determine key MS4's for preliminary solicitation, etc.</i>	September 2007	May 2008	Yes	This objective combined with the 3rd objective while waiting for final signatures.
Objective: Execute contract with the University of Tennessee's Municipal Technical Advisory Service (MTAS) Output(s): <i>Due to MTAS's unique status within the State, their ability to deliver training and technical support statewide to local governments and their history as a TDEC partner in the Stormwater program, MTAS will be the sole contractor for the initiative.</i>	October 2007	Final Signatures May 2008	Yes	Final signatures were received by Contracts Division/TDEC May 2008
Objective: TDEC-MTAS project team meetings Output(s): <i>Continuing identification of MS4's for Stormwater group. Identifying specific contacts from various other stake holder organizations. Scheduling venues for organizational meetings. Developing agenda's, informational literature, etc.</i>	October 2007 (March 2008)	May 2008	Yes	As with Objective #1, TDEC-MTAS continued to work together on project and planning meetings during the delayed pre-award time. The final signatures were received by May 2008.
Objective: Establish stormwater group (Tennessee Stormwater Association) Output(s): <i>Organize initial meeting of the state regional group representative at a state level. Formalize the group. Set up a calendar of regional & state meetings, etc.</i>	December 2007 (March 2008)	June 2008	Yes	Due to delayed signatures for official contract award to MTAS, the development of the statewide Stormwater Association was not begun until March 2008
Objective: Establish stakeholder committee Output(s): <i>Identify, contact, and obtain participation from representatives of the stakeholder groups. Set up and formalize the committee. Set mission, agenda, meeting calendar and milestones.</i>	December 2007 (May 2008)	May 2008	Yes	Due to delayed signatures for official contract award to MTAS, and the delayed establishment of the TNSA, the Stakeholder Committee was not established until May 2008

¹ Please see Revised Timeline Schedule in Appendix B

**Key Milestones (Including Outputs),
Reflecting The Projected Timelines For Completion¹**

Objectives and Outputs	Original Start Date (Amended Start Date)	Original Completion Date (Amended Completion Date)	Complete?	Slippage Explanation/Other Comments
Objective: Issue new MS4 General Permit Output(s): <i>With the new minimum requirements for baseline MS4 programs, develop the additional minimum requirements for QLP. This was not part of Grant.</i>	Not part of grant	June 2008 (July 2010) (October 1, 2010)	Yes	TDEC worked with EPA to craft a permit that reflected the EPA's desire to see a "Green" permit with more emphasis on infiltration based permanent BMP's.
Objective: Facilitate meetings to establish criteria Output(s): <i>Set venue, agenda, etc., and facilitate meetings in order to achieve stakeholder input on the criteria for qualifying a local program.</i>	January 2008 (June 2008)	June 2010	Complete	Start date amended due to grant development delays but meetings have been held every quarter since the organizational Kickoff meeting held August 15, 2008. Prep work began in June 2008.
Objective: Develop and promote guidelines and incentives Output(s): <i>With the information from the stakeholder committee meetings, develop guidance material and an incentive program for qualifying local programs.</i>	Began in (September 2008)	June 2010	Complete	Start date amended due to grant development delays but meetings to develop incentives/criteria have been held every quarter since the organizational Kickoff meeting held August 15, 2008
Objective: Develop excellence recognition program Output(s): <i>With the information from additional stakeholder committee meetings, input from additional groups such as the Tennessee Municipal League, etc., develop excellence recognition program</i>	October 2009	September 2010 (February 2011)	Complete	Began initial discussion October 2009, and after amending the project timeline, we will have two more quarterly meetings to discuss & finalize Excellence Recognition. Permit issuance delays changed this to Feb 2011
Objective: MS4's implement new permit Output(s): <i>MS4's revise their programs in accordance with new permit</i>	July 2008 (October 2010)	January 2010 (June 2012)	In process	Issuance of permit delayed 2 years as explained.
Objective: Pilot the qualification of a MS4 Output(s): <i>Work with select MS4(s) volunteer(s) program(s) to work through guidance materials and document achieving the various elements involved in becoming a qualified program. Monitor the designated Qualified Program.</i>	June 2010 (June 2012)	June 2011 (June 2013)	No	To provide the MS4s with time to adhere to the new MS4 permit requirements, we requested a grant extension of two years. This projects the QLP Pilot start date for June 2012 and the QLP Program to go live in June 2013. Please see Timeline in Appendix B

**Key Milestones (Including Outputs),
Reflecting The Projected Timelines For Completion¹**

Objectives and Outputs	Original Start Date (Amended Start Date)	Original Completion Date (Amended Completion Date)	Complete?	Slippage Explanation/Other Comments
<p>Objective: Develop and deliver workshops across the state</p> <p>Output(s): <i>Based on the results of the pilot program, update the guidance materials. With the updated guidance materials and pilot program case history/histories, develop workshops lesson plans. Deliver workshops and guidance materials statewide.</i></p>	<p>June 2011 (June 2013)</p>	<p>August 2011 (August 2013)</p>	<p>No</p>	<p>The timeline was adjusted by two additional years to provide the MS4s with enough time to adhere to the new MS4 permit requirements; we requested a grant extension of two years. This new timeline projects the QLP Pilot start date for June 2012 and the QLP Program to go live in June 2013. Please see Timeline in Appendix B.</p>
<p>Objective: Deliver a replicable solution to other states</p> <p>Output(s): <i>With updates to workshop lesson plans and materials based on participant feedback, develop final guidance materials, workshop lesson plans, case histories etc., for delivery to EPA.</i></p>	<p>September 2011 (September 2013)</p> <p>*Note: the Gathering of supporting documentation in preparation for this item is ongoing.</p>	<p>September 2011 (September 2013)</p>	<p>No</p>	<p>The timeline was adjusted by two additional years to provide the MS4s with enough time to adhere to the new MS4 permit requirements; we requested a grant extension of two years. This new timeline projects the QLP Pilot start date for June 2012 and the QLP Program to go live in June 2013. Please see Timeline in Appendix B. Gathering of supporting documentation in preparation for this item is ongoing.</p>

Part 1 – Synopsis of Accomplishments during the Reporting Period

The 15th reporting period (ending December 31, 2011, 4th quarter (calendar year) 2011), was mainly part of the time needed under the requested extension for MS4's to work on familiarizing themselves with, and working on, their new Small MS4 Permit.

TDEC has continued to support the establishment of the Tennessee Stormwater Association (TNSA) with efforts outside the scope and funding of this grant.

TNSA held regional meetings across the state which TDEC and MTAS attended in order to provide QLP and permit updates and provide education on the QLP process.

TDEC did educational outreach and recruitment for the QLP pilot program this quarter by attending regional TNSA meetings statewide.

TDEC also did educational outreach and recruitment for the QLP pilot program this quarter by presenting at the 2012 Tennessee Environmental Conference.

Important Program and outreach materials were developed and or/finalized during this quarter.

Part 2 – Narrative Discussion

2.1 QLP Stakeholder Committee

Jennifer Watson (TDEC) and John Chlarson (MTAS) spoke at the West Tennessee Regional TNSA 1st Quarterly Meeting, regarding the status of the QLP Pilot Program as well as educational outreach and recruitment for the QLP pilot program. The meeting was at the Shelby County Stormwater Offices, and included representation from all the MS4's in Shelby County as well as some additional West Tennessee jurisdictions, the local engineering community, and the Memphis Environmental Field Office.

Robert Karesh and Jennifer Watson spoke at the Southeast Tennessee Regional TNSA 1st Quarterly Meeting, February 15, 2012, regarding the status of the QLP Pilot Program, as well as educational outreach and recruitment for the QLP pilot program.

Robert Karesh did educational outreach and recruitment for the QLP pilot program at the Northeast Tennessee Regional TNSA 1st Quarterly Meeting on March 12, 2012.

The following day, March 13, 2012, Robert Karesh was a featured presenter at the 2012 Tennessee Environmental Conference in Johnson City Tennessee, where he gave an overview of the QLP Pilot Program as well as presenting educational outreach and recruitment for the QLP pilot program.

TDEC finalized the QLP Pilot Program announcement materials in March for issuance in April. Web content was also prepared to support the announcement.

TDEC Environmental Field office QLP Oversight Guidance was drafted to be viewed and issued for comment in April.

Robert Karesh and Jennifer Watson worked with TNSA, as represented by Jason Scott with the Town of Farragut to finalize the QLP Logo (see Appendix).

2.2 Tennessee Stormwater Association

One of the key components to the education and outreach for input for the QLP option was the establishment of the Tennessee Stormwater Association. This was identified in the grant proposal. Support for this outreach and input is a grant activity. The Association has been invaluable in this process and will continue to be.

As provided for in this innovation grant, we have continued to support the TNSA during this reporting period.

TDEC has also continued to support the establishment of the TNSA with efforts outside the scope and funding of this grant.

Part 3 – Projection of Activities, Accomplishments, and Major Expenditures for Next Quarterly Report

During the next quarter we will be:

- Contacting MS4 candidates for the QLP Pilot Program and begin preparing them
- Seeking input from and training the Environment Field Office personnel regarding the QLP Oversight Guidance
- Announcing the QLP program with the finalized press releases
- Implementing the QLP public outreach campaign
- Training and editing on the reporting and information sharing process and mechanisms between the QLP's and TDEC
- An application submittal and review process test run on the April 20th at 8:00-11:00 CST to identify things needing more development. John Chlarson will play the role of the submitting MS4; and Michael Atchley, Anne Morbitt, Jennifer Watson and Robert Karesh will be the review team. All participants will have copies of the latest guidance and application review procedures by the 9th (tentative)

- We'll take the results of the test run and finalize the pilot application and EFO review procedures. We'll get an initial announcement to the EFOs on the 9th about our plans on the upcoming pilot, and set a video call for the 24th (tentative) for last minute EFO discussion. We can begin interview/meetings with MS4 applicants on the 25th (tentative)

Part 4 – Financial Report

The project budget is on track for the goals and milestones of this project.

TDEC is in the process of reconciling the project financial records after changing systems. An addendum to this report will contain the specific financial reports as requested by the Grantor, in the format requested.

APPENDIX “A”

A-1 TNSA 2011 Annual Conference Program

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**2011 Tennessee Stormwater Association
Annual Conference
Schedule**

FRIDAY October 28, 2011

- 8:30am to 9:00am TNSA Breakfast – Gatlinburg City Hall *sponsored by CDM**
- 9:00am to 3:30pm UT SMART Center Workshop – Gatlinburg City Hall*⁺
- 12:00pm to 4:00pm Joint Conference Registration – Gatlinburg Convention Center
- 4:30pm to 5:30pm TCAPWA Host City Reception – Gatlinburg Convention Center
- 4:30pm to 6:30pm Exhibits Open – Gatlinburg Convention Center – Tennessee Ballroom
- 7:00pm to 9:00pm TNSA Social – Glenstone Lodge *sponsored by Belgard **

SATURDAY October 29, 2011

- 7:00am to 5:00pm Registration – Gatlinburg Convention Center (GCC) – Mills Lobby
- 7:30am to 8:45am Exhibitor Appreciation Breakfast – GCC Exhibit Hall Dining Area (Tennessee Ballroom)
- 9:00am to 4:00pm Exhibits Open – GCC Mills Conference Center – Tennessee Ballroom
- 9:00am to 11:40am TNSA Educational Sessions – GCC Meeting Room 1*
- 9:00am to 11:00am Morning Breaks – Exhibit Hall – Tennessee Ballroom
- 11:40am to 1:00pm TNSA Lunch & Business Meeting – GCC Gatlinburg Board Room*
- 1:00pm to 4:30pm TNSA Educational Sessions – GCC Meeting Room 1*
- 1:00pm to 3:30pm Afternoon Ice Cream – Exhibit Hall – Tennessee Ballroom
- 6:00pm to 8:00pm TNSA Board Meeting Dinner – Location TBA *sponsored by CEC**

SUNDAY October 30, 2011

- 10:00am – 10:30am Keynote Speaker – Bill Landry from *The Heartland Series* – Tennessee Ballroom (conference adjourns at 10:30am)

See the TCAPWA Schedule for other conference events not related to TNSA

* *TNSA Sponsored Events*

⁺ *Registration and more information regarding the pre-conference workshop will be released at a later date*

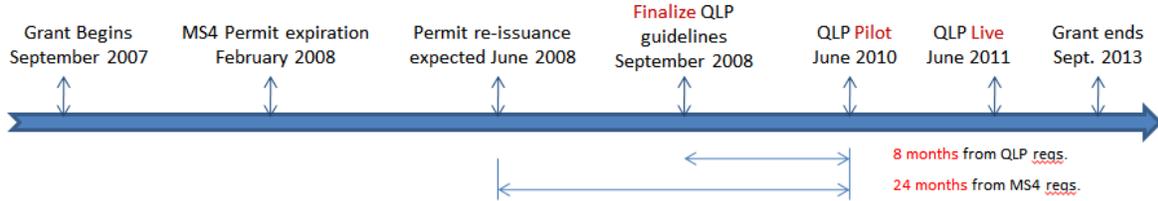
APPENDIX “B”

B-1 Amended and Accepted Timeline Proposal and Comparison

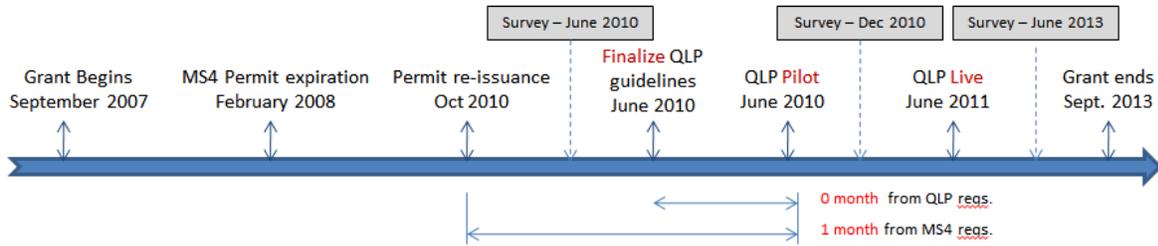
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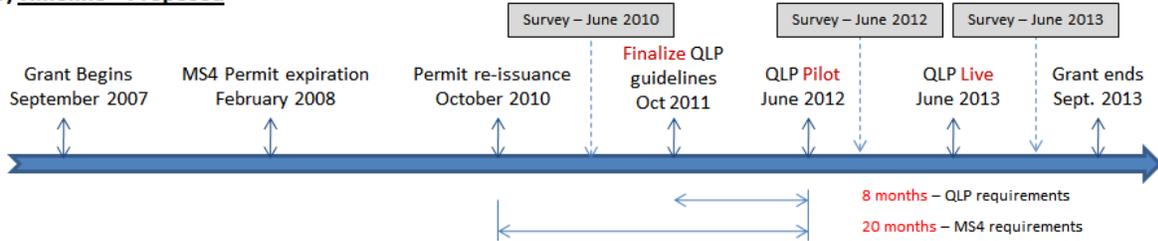
1) Timeline - At time of grant initiation



2) Timeline – Current (as amended)



3) Timeline – Proposed



APPENDIX “C”

C-1	The Tennessee Qualified Local Program Application Guidance	Page 16
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The Tennessee Qualified Local Program Application Guidance

DRAFT (10/12/11)

Introduction

Stormwater runoff from construction activities can have a significant impact on water quality. As stormwater flows over a construction site, it can pick up pollutants like sediment, debris, and chemicals and transport these to a nearby storm sewer system or directly to a river, lake, or sinkhole. Polluted stormwater runoff can harm or kill fish and other wildlife. Sedimentation can destroy aquatic habitat, increase drinking water treatment costs, and high volumes of runoff can cause stream bank erosion.

The promulgation of the Phase I and II NPDES stormwater regulations established federal requirements for state and municipal control of stormwater runoff from construction activity. As a result, the Tennessee Department of Environment and Conservation (TDEC) was required to develop NPDES permits to regulate stormwater discharges associated with construction activity, such as the [General Permit for Discharges of Stormwater Associated with Construction Activities](#) (CGP). Municipalities identified as regulated [Municipal Separate Storm Sewer Systems](#) (MS4s) were required to develop programs, consistent with the CGP, to address construction site runoff within their jurisdictions.

Federal stormwater regulations allow for streamlining and coordination among state and MS4 programs, particularly relating to the regulation of construction site runoff. Under [CFR 122.44\(s\)](#), TDEC can formally recognize an MS4 as a [Qualifying Local Program](#) (QLP) that has been shown to meet or exceed the provisions of the CGP.

As a result, coverage equivalent to coverage under the CGP may be obtained from a QLP. If a construction site has submitted a Notice of Intent (NOI) (Appendix A) to a participating QLP, and has obtained a notice of coverage (NOC) (Appendix B), the operator of the construction activity is authorized to discharge under the CGP without the submittal of a NOI, Stormwater Pollution Prevention Plan (SWPPP), or permit fee to TDEC.

Participation in the QLP program is optional. It is intended to eliminate duplication of the effort between the state and local programs, and ease the burden on construction site operators by providing them with one set of requirements to follow, not two.

QLP Construction Site Stormwater Runoff Control Program Minimum Prerequisites

MS4s must implement and maintain a construction site stormwater runoff control program that addresses pollutants in stormwater runoff from construction activities. Sub-section 4.2.4 of the MS4 general permit requires the following elements:

1. An ordinance or other regulatory mechanism to require erosion prevention and sediment controls, as well as sanctions to ensure compliance: The ordinance must allow for the maximum penalties per day for each day of violation as specified in TCA 68-221-1106. Modifications to ordinances or other regulatory mechanisms for construction site runoff control program must be consistent with requirements of the current CGP.
2. Requirements for construction site operators to implement appropriate erosion prevention and sediment control best management practices: The MS4's EPSC requirements shall be consistent with those described in the TDEC EPSC Handbook.
3. The MS4's requirements for design storm and special conditions for impaired waters or exceptional Tennessee waters must be consistent with those of the current CGP.
4. The MS4 must develop and maintain an inventory of all active public and private construction sites that result in a total land disturbance. The inventory must contain relevant contact information for each project (e.g., tracking number, name, address, phone, etc.), the size of the project and area of disturbance, whether the project has submitted for permit coverage under the CGP and the date the MS4 approved the construction site plan. The MS4 must make this inventory available to TDEC upon request.
5. Requirements for construction site operators to control waste materials: The MS4 must require that operators control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site to avoid adverse impacts to water quality.
6. Specific procedures for construction site plan (including erosion prevention and sediment controls) review and approval: The MS4 procedures must include an evaluation of plan completeness and overall BMP effectiveness.
7. Procedures for managing public input on projects: The MS4 must have mechanisms for public access to information on projects and receiving and considering comments from the public on those projects. It is recommended that the MS4 uses the internet for facilitating public involvement.
8. Procedures for site inspection and enforcement: The MS4 must have procedures in place for its inspectors to evaluate construction site compliance. The Enforcement Response Plan (ERP) must include specific enforcement steps to ensure construction sites are in compliance with the MS4's program.
9. MS4 staff training: Inspectors must maintain certification under the Tennessee Fundamentals of Erosion Prevention and Sediment Control, Level 1 (or equivalent). Construction site plan reviewers must receive a certificate of completion from the Tennessee Erosion Prevention and Sediment Control Design Course, Level 2. It is recommended that MS4 staff receive training under both courses.
10. The MS4 program must provide for the following: Identification of priority construction activity; pre-construction meetings with construction-site operators for priority construction activity; and inspections by the MS4 of priority construction sites at least once per month.

In addition to the MS4 program elements identified above, a QLP construction site stormwater runoff control program must also include the following:

1. Requirements for construction site operators to prepare and submit comprehensive Stormwater Pollution Prevention Plans (SWPPP) as identified in Section 3 (SWPPP Requirements) of the CGP,

2. Specific procedures for SWPPP review and approval: The MS4 procedures must include an evaluation of SWPPP completeness and overall BMP effectiveness,
3. Requirements that construction site operators must achieve *construction and development effluent guidelines* as identified in Section 4, and *special conditions, management practices, and other non-numeric limitations* as identified in Section 5, of the CGP,
4. Requirements for construction site operators to perform *inspections* as identified in Sub-section 3.5.8, and *site assessments* as identified in Sub-section 3.1.2, of the CGP.

Application for QLP Status and Provisional Period

An MS4 seeking QLP status must submit a completed application (Appendix C), documenting the municipality's commitment to implement the QLP program as described. In addition to administrative information, the application must include copies of the municipality's construction stormwater ordinances, project tracking standard operating procedures, ERP, plan review and approval procedures, and most recent annual report.

MS4s must also complete a Level of Service (LOS) (Appendix D) exercise, identifying the resources necessary to implement and maintain the QLP construction site stormwater runoff control program minimum prerequisites. The LOS exercise must be accompanied by a statement, signed by the appropriate authorized representative, documenting that they have considered and can provide the resources necessary to meet the minimum elements to be a QLP.

Review of applications will be performed by TDEC Central Office and Environmental Field Office personnel. Interviews will be scheduled with applicants to discuss their application's content and answer any related questions. Once the application has been approved, the MS4 receives provisional QLP status, and begins operation within a provisional period.

The provisional period provides time for the MS4 to make any program modifications necessary to satisfy all QLP elements. Modifications may include revision of ordinances and policies, hiring or training of personnel, or purchasing related equipment. The provisional period also provides the time necessary to educate all stakeholders, and procedurally move construction activities from a dual permit system to a single administered by the QLP. Stakeholder education is projected to be critical to the success of a smooth MS4 to QLP transition. There is no minimum amount of education required during the provisional period. However, it is expected that the provisional QLP will target appropriate internal and external stakeholders, and utilize various educational methods such as email and mailing lists, public meetings, signage and website content. The length of the provisional period will differ for each applicant based on their program at the time of application. At a minimum, the provisional period must be at least 6 months to ensure adequate stakeholder education.

Final interviews will be scheduled upon the successful completion of a QLP's provisional period, providing an opportunity for final coordination. The applicant will then receive notification that they have successfully received full QLP status and may begin NOC issuance.

QLP Reporting

Provisional QLPs are required to provide TDEC with monthly reports, noting program development progress and stakeholder education performed. After receiving full QLP status,

QLPs will report activities quarterly. Relevant reporting information may include numbers of new construction activities, SWPPP reviews and site inspections performed, and enforcement actions taken. These reports must also identify any technical or programmatic issues needing correction to ensure greater program success. It is expected that the reporting frequency will be reduced as the QLP program matures in following years

In addition, QLPs must make information concerning construction activities available to the public and TDEC through a web service delivery format. This information would include items such as construction activity NOI received date, NOC issuance date, coverage tracking number, site name and location, operator information, receiving waters and impaired status. TDEC's [Water Pollution Data Viewer](#) is an example of a web service delivery.

QLP Compliance Audit

TDEC will audit the QLP annually to document compliance with the requirements of the QLP program. The audit may include administrative, procedural and budgetary reviews, as well as construction site inspection. The QLP audit may be scheduled to coordinate with a compliance audit of the overall MS4 minimum measures.

APPENDIX A – Notice of Intent (NOI) Form for Coverage Under TNCGP
(next page)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243, 1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

NOTICE OF INTENT (NOI) for Coverage under the TNCGP in a Qualified Local Program (QLP)

Purpose of this Form: The State of Tennessee General NPDES Permit for Stormwater Discharges from Construction Activities ([TNCGP](#)), allows for construction activities within the jurisdiction of a Qualified Local Program (QLP) to only have to apply and obtain coverage for both the TNCGP and the local program from the QLP itself. By signing this Notice of Intent, the permittee agrees to be responsible for compliance under the requirements of the TNCGP. The permittee will not be required to submit an NOI, a SWPPP, a notice of termination, or a permit fee to the local TDEC Environmental Field Office. For additional information, please see Section 1.4.5 of the [TNCGP](#) or at <http://tn.gov/environment/wpc/stormh2o/qlp.shtml>

Site or Project Name:		NPDES Tracking Number: TNR	
Street Address or Location:		Start date:	
		Estimated end date:	
Site Description:		Latitude (dd.dddd):	
		Longitude (dd.dddd):	
County(ies):	QLP/MS4 Jurisdiction:	Acres Disturbed:	
		Total Acres:	
Does a topographic map show dotted or solid blue lines <input type="checkbox"/> and/or wetlands <input type="checkbox"/> on or adjacent to the construction site?			
If wetlands are located on-site and may be impacted, attach wetlands delineation report.			
If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP permit No.:			
Receiving waters:			
Attach the SWPPP with the NOI <input type="checkbox"/> SWPPP Attached		Attach a site location map <input type="checkbox"/> Map Attached	
Name of Site Owner or Developer (Site-Wide Permittee): (person, company, or legal entity that has operational or design control over construction plans and specifications):			
Site Owner or Developer Contact name: (individual responsible for site)		Title or Position: (the party who signs the certification below)	
Mailing Address:		City:	State: Zip:
Phone: ()	Fax: ()	E-mail:	
Optional Contact:		Title or Position:	
Address:		City:	State: Zip:
Phone: ()	Fax: ()	E-mail:	
For Coverage under TNCGP Owner/Developer Certification (must be signed by president, vice-president or equivalent, or ranking elected official)			
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
Owner/Developer name; print or type	Signature	Date	
For Coverage under TNCGP Contractor(s) Certification (must be signed by president, vice-president or equivalent, or ranking elected official)			
I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above, and/or my inquiry of the person directly responsible for assembling this NOI, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements.			
Primary contractor name and address	Signature	Date	
Other contractor name and address	Signature	Date	
Other contractor name and address; print or type	Signature	Date	

US EPA ARCHIVE DOCUMENT



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243, 1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

NOTICE OF INTENT (NOI) for Coverage under the TNCGP in a Qualified Local Program (QLP)

11. OFFICIAL STATE/QLP USE ONLY

Received Date	Reviewer	Field Office	Permit Number TNR	High Quality Water
Fee(s)	T & E Aquatic Fauna		Impaired Receiving Stream	Notice of Coverage Date

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**NOTICE OF INTENT (NOI) for Coverage under the TNCGP in a Qualified Local Program (QLP)
INSTRUCTIONS**

Additional Instructions:

Who must submit the NOI form to the QLP? The NOI form must be signed by the “operator(s)” of the construction site. Operators will most likely include the developer of the site, and the primary contractor(s). “Operator” means any party associated with the construction project that meets either of the following two criteria: (1) the party has design or operational control over project specifications (including the ability to make modifications in specifications); or (2) the party has day-to-day operational control of those activities at a project site which are necessary to ensure compliance with the storm water pollution prevention plan (SWPPP) or other permit conditions (e.g., they are authorized to direct workers at the site to carry out activities identified in the storm water pollution prevention plan or comply with other permit conditions). If a contractor has not been identified at the time the NOI is submitted by the developer, the contractor(s) must sign an NOI for the project in order to obtain authorization under this permit. The contractor must include the NPDES permit number that is already assigned to the site, along with the name of the construction project and its location.

Notice of Coverage The QLP will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). Stormwater discharge from the construction site is authorized as of the effective date of the NOC.

Complete the form Type or print clearly, using ink and not markers or pencil. Answer each item or enter “NA,” for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a map and the SWPPP.**

Describe and locate the project Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The quadrangle maps can be obtained at the USGS World Wide Web site: <http://www.usgs.gov/>; latitude and longitude information can be found at numerous other web sites. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

Give name of the receiving waters Trace the route of storm water runoff from the construction site and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the storm water runoff drains. Note that the receiving water course may or may not be located on the construction site. If the first water body receiving construction site runoff is unnamed (“unnamed tributary”), determine the name of the water body which the unnamed tributary enters.

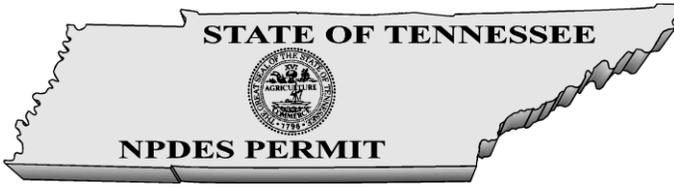
ARAP permit may be required **If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information Note that this form must be signed by the company President, Vice-President, for details see permit subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC) or the local QLP/MS4.

EFO	Street Address	Zip Code	TDEC QLP Contact	Phone Number	Email Address
Memphis	8383 Wolf Lake Drive	38133	Joellyn Brazille	901-371-3018	Joellyn.Brazille@tn.gov
Jackson	1625 Hollywood Drive	38305	Pat Patrick	731-512-1301	Pat.Patrick@tn.gov
Nashville	711 R S Gass Boulevard	37243	Ann Morbitt	615-687-7119	Ann.Morbitt@tn.gov
Columbia	1421 Hampshire Pike	38401	Scott Howell	931-490-3941	Scott.Howell@tn.gov
Cookeville	1221 South Willow Ave.	38506	Karina Bynum	931-432-7634	Karina.Bynum@tn.gov
Chattanooga	540 McCallie Avenue STE 550	37402-2013	Angela Young	423-634-5702	Angela.Young@tn.gov
Knoxville	3711 Middlebrook Pike	37921	Michael Atchley	865-594-5589	Michael.Atchley@tn.gov
Johnson City	2305 Silverdale Road	37601	Brown Patton	423-854-5458	Brown.Patton@tn.gov

US EPA ARCHIVE DOCUMENT

APPENDIX B – Notice of Coverage (NOC) Form for Coverage Under both the TNCGP and the QLP
(next page)



NOTICE OF COVERAGE

Under

<Name of the QLP Construction Stormwater Program>

<address>

And

The State of Tennessee, General NPDES Permit for Stormwater Discharges Associated with Construction Activity (TNR100000)

Tennessee Department of Environment and Conservation, Division of Water Pollution Control, 401 Church Street, 6th Floor, L&C Annex, Nashville, Tennessee 37243-1534

QLP Tracking Number: XXXXXXXX

TNCGP Tracking Number: XXXXXXXX (If different than QLP's Tracking #)

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the delegation of authority from the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.):

ect:
e Site:

XXXXXX
XXXXXX
XXXXXX
XXXXXX

storm water associated with construction activity

XXXXXX
XXXXXX

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

Likely presence of threatened or endangered species in one mile radius: XXXXXX

Likely presence of threatened or endangered species downstream: XXXXXX

Additional pollution prevention requirements apply for discharges into waters which TDEC identifies as:

a) impaired by siltation: xx b) discharging into high quality waters: XXXXXX

Your coverage under the CGP shall become effective on XXXXXX, and shall be terminated upon receipt of Notice of Termination, or the date of expiration of the CGP, May 23, 2016.

Paul E. Davis

Paul E. Davis, Director
Division of Water Pollution Control

<Insert QLP/MS4 Language and signature Block>

XXXXX, Mayor
City of xxxxxxxxxxxx

**APPENDIX C –Qualified Local Program Application
(next page)**



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Pollution Control (WPC)

6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243

1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

QUALIFIED LOCAL PROGRAM (QLP) APPLICATION

PURPOSE

The purpose of this Application is for a Tennessee Municipal Separate Storm Sewer System (MS4) to apply for status as a Qualified Local Program as described in Section 4.3 of the General NPDES Permit for Stormwater Discharges from MS4s: [TNS000000](#).

INSTRUCTIONS

You must provide the following information to the Division of Water Pollution Control as application material. You may either submit a hard copy of the original, signed in accordance with the signatory requirements of sub-part 6.7 of the permit, and a copy of the application, to the address shown in sub-part 1.2 of the permit for the Environmental Field Office (EFO) responsible for the county where the facility is located; or you may submit by e-mail, with the completed application and attachments (such as applicable city ordinances and minimum resources worksheet) to Jennifer.Watson@tn.gov.

In addition, send an original, hard copy letter, signed by the responsible official of the MS4, which makes reference to the e-mail transmission including date and time that the electronic submitted was made. The letter must contain the signatory statement found on this form. The letter must be mailed to the Nashville Central Office address listed above.

PART I ADMINISTRATIVE INFORMATION

Name of MS4 Permit Number
Name of Contact Person Email Address
()
Telephone (including area code)
Mailing Address
City State ZIP code

PART II REQUIREMENTS CHECKLIST

Please check the boxes below if the following items are included with this application:

Construction Stormwater Ordinances Project tracking standard operating procedures
Administrative Penalty Process (\$5,000) ordinance Completed Minimum Resource self-evaluation
Siteplan/EPSC review standard operating procedures Enforcement Response Plan
Most recent Annual Report Other requirement?

PART III SIGNATURE OF RESPONSIBLE CORPORATE OFFICER

This QLP application must be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes one of the following:

- i. The chief executive officer of the agency.
ii. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature

Title/Municipality

Date

Appendix D – Level of Service Exercise
(next page)



Understanding Federal and State Rules on Stormwater Management

Tennessee Department of Environment and Conservation (TDEC)
Division of Water Pollution Control



Stormwater pollution is caused by rainfall moving over the ground picking up pollutants and depositing them into rivers, lakes, wetlands and ground water.



The impact by an individual stormwater source may be small but the **cumulative** effect can significantly degrade water quality. These pollutants can kill aquatic life and limit the use of our waters for recreational or other purposes.

Stormwater pollutants from **urban** areas:

- Oil and Grease
- Metals
- Industrial chemicals
- Bacteria
- Salt/sand
- Pesticides
- Nutrients
- Trash





Stormwater pollutants from **suburban** areas:

- Household chemicals
- Yard waste
- Trash
- Salt/sand
- Nutrients
- Pesticides
- Cleaning agents



Stormwater pollutants from **developing** areas:

- Sediment
- Trash
- Toxins
- Bacteria
- Oil & grease
- Nutrients



Storm water pollution from **agricultural** areas:

- Nutrients
- Sediment
- Pesticides
- Bacteria
- Herbicides



To address stormwater pollution, EPA promulgated **Phase I** of the NPDES Stormwater Program in 1990.

Phase I MS4s

Under Phase I, "medium" and "large" **municipal separate storm sewer systems (MS4s)** were required to obtain NPDES permit coverage for storm water discharges. The NPDES permit required the MS4 to control the quality of stormwater discharges from any ditch, culvert, or conveyance that routes to waters of the state.

Phase I MS4s included:

- Memphis
- Chattanooga
- Nashville
- Knoxville



Phase II MS4s

The next step in the NPDES Stormwater Program, **Phase II**, was published on December 8, 1999. Phase II extended coverage of the NPDES storm water program to "small" MS4s.

Phase II MS4s include:

Aloca	Church Hill	Farragut
Anderson County	Clarksville	Forest Hills
Athens	Cleveland	Franklin
Bartlett	Collegedale	Gallatin
Belle Meade	Collierville	Germantown
Berry Hill	Columbia	Goodlettsville
Blount County	Cookeville	Hamilton County
Brentwood	Dickson	Hawkins County
Bristol	Dyersburg	Hendersonville
Brownsville	East Ridge	Jackson
Carter County	Elizabethton	Johnson City

Jonesborough	McMinnville	Sevier County
Kingsport	Millington	Sevierville
Knox County	Montgomery County	Shelby County
Lakesite	Morristown	Shelbyville
Lakewood	Mount Carmel	Signal Mountain
Lebanon	Mount Juliet	Smyrna
Lewisburg	Murfreesboro	Soddy Daisy
Lookout Mountain	Oak Hill	Sullivan County
Loudon County	Oak Ridge	Sumner County
Madison County	Red Bank	Tullahoma
Martin	Ridgeside	Union City
Maryville	Robertson County	Washington County
Maury County	Rockford	Williamson County
	Rutherford County	Wilson County

Six MS4 minimum control measures...

Phase II MS4s are slightly different from Phase I MS4s and are comprised of six required elements, termed "minimum control measures," that are expected to result in the significant reduction of stormwater pollutants.

- Six minimum control measures include:
- 6**
- Public Education and Outreach
 - Public Participation/Involvement
 - Illicit Discharge Detection/Elimination
 - Pollution Prevention/Good Housekeeping
 - Construction Site Runoff Control
 - Post-Construction Runoff Control

Public Education and Outreach

1

Develop and implement a program to educate the public about the impacts of storm water discharges on local waterbodies and the steps that can be taken to reduce storm water pollution.

Public Education and Outreach



- Informational web site
- Educational displays
- Brochures or factsheets
- Service announcements
- Watershed signage
- Posters
- Bumper stickers

Public Participation/Involvement

2 **Actively include the public** in developing, implementing and reviewing the MS4 stormwater management program

Public Participation / Involvement



- Public meetings and panels
- Citizen watch groups
- "Adopt a stream" programs
- Volunteer monitoring
- Storm drain stenciling
- Volunteer educators
- Community clean-ups

Illicit Discharge Detection / Elimination

3 Develop, implement and enforce a program to **detect and eliminate** any **illicit discharges** that enters the MS4 through either direct or indirect connections

Illicit Discharge Detection and Elimination



- Sanitary wastewater
- Effluent from septic tanks
- Car wash wastewaters
- Improper oil disposal
- Radiator flushing disposal
- Grey wastewaters
- Spills from roadway accidents

Pollution Prevention / Good Housekeeping

4

Develop and implement an **operation and maintenance program** to prevent stormwater pollutant runoff from MS4 operations and system

Pollution Prevention / Good Housekeeping



- Prevention of pollutant runoff from MS4 operations such as roads and parking lots, maintenance/storage yards and waste transfer stations
- Maintenance for structural and non-structural controls
- Proper disposal of waste removed from the MS4

Construction Site Runoff Control

5

Develop, implement, and enforce a program to **reduce pollutants** in stormwater runoff **from construction activities** that result in a land disturbance of one acre or greater

Construction Site Runoff Control



- Ordinance requiring erosion prevention and sediment controls on land disturbance activities
- Submittal and approval process for erosion prevention and sediment control plans
- Perform inspections to ensure compliance

Permanent Stormwater Management

6

Develop, implement and enforce a program to **reduce pollutants in permanent** (post-construction) **stormwater runoff** to the MS4 from new development and redevelopment projects

Post-Construction Runoff Control



- **Ordinance** requiring a combination of structural and/or nonstructural post-construction runoff best management practices
- Requirements to establish, protect and maintain **water quality buffers** in areas of new development
- Ensure **long-term operation and maintenance** of controls

Phase II General MS4 Permit Re-issuance:



- The NPDES Phase II General MS4 Permit **expired** February 26, 2008
- Existing MS4s maintain coverage under the general permit until the new permit is issued
- **Public comment period ended July 1, 2010**

Permit revision utilized:



- New EPA **MS4 Permit Improvement Guide**
- TDEC programmatic **experience** implementing and evaluating MS4 effectiveness
- Extensive **comments** and **suggested language** from many stakeholders, including TNSA

Permit Focus: Performance Standards for Permanent Stormwater Management



- **Runoff reduction** design for infiltration, evapotranspiration, and reuse of the first inch of every rainfall event
- Projects that cannot meet 100% of the runoff reduction volume must treat the remainder with **pollution reduction** practices
- Runoff reduction is preferred as it can achieve both **volume control** and **pollutant removal**

Permanent Stormwater Cont.: Codes and Ordinances Review and Update




- Water quality **scorecard** must be completed within first year of permit coverage
- Developed to help MS4s **evaluate, revise and create codes, ordinances, and incentives**
- MS4s may choose a mixture of runoff and pollutant reduction practices

Permit Focus: Impaired Waterbodies and TMDLs



- Determine if stormwater discharges from the MS4 contributes pollutants of concern to an impaired waterbody **and** if a TMDL has been developed
- SWMP must be revised to include BMPs **specifically targeted** to reduce the identified pollutant

Permit Focus: Minimum Monitoring Requirements



- Monitoring based on stream **impairment** and pollutant type, including Siltation, Pathogens and Nutrients
- Requirements include **analytical** and **visual** stream survey and impairment inventory components
- Performed to assess MS4 program **effectiveness** and identify improvement opportunities

Permit Focus: Enforcement Response Plan




- MS4s must develop and implement an **enforcement response plan** (ERP)
- The plan must identify responses to violations and address repeat violations through progressive enforcement up to **\$5,000 maximum penalty**
- The MS4 must have the legal ability to employ enforcement responses

Permit Focus: Construction Stormwater Control



- EPSCs required through **ordinance** or **regulatory mechanism**
- EPSC requirements shall be consistent with **TDEC EPSC Handbook**
- EPSC plans **reviewed** for completeness and effectiveness
- Perform site inspection and enforcement

Permit Focus: Construction Stormwater Control



- Requirements corresponding to **current CGP** for design storm and special conditions for impaired or exceptional waters
- Require that **operators control wastes** such as building materials, concrete washout, chemicals and sanitary waste



CGP Reissuance Status:

- Permit expired May 2010
- New permit public noticed in Oct 2010
- Currently responding to comments in Notice of Determination (NOD)
- Permit issuance anticipated March 2011

Proposed permit changes:

- Permit includes performance non-numerical limits (BMPS), but does not include numerical limits
- NOD can be delayed until applicable ARAP or sanitary wastewater issues are permitted or addressed
- The definition for 2-year and 5-year 24hr storms now acknowledges rainfall intensity
- Project phasing is now required on all sites

Proposed permit changes cont.:

- EPSCs must be consistent with the Tennessee EPSC handbook
- Temporary riparian buffers are required on all streams
- Inspections must be documented on a newly revised inspection report form
- SWPPP quality assurance site assessments performed:
 - Monthly – Impaired and Exceptional
 - Quarterly – Other streams

Permit Focus: Updated NOI Form



- MS4s are required to submit NOIs to the appropriate EFO
- MS4s **previously permitted** must submit **within 90 days** of the effective date of the permit
- New MS4s must submit within 180 days of notice
- New form is **fill-in version**

Permit Focus: Updated Annual Report Form



- MS4s must submit an annual report to the appropriate EFO by **September 30** of each calendar year that covers the previous calendar year
- New form is **fill-in version**




Maryam Gerber, USEPA
TN Workshop, July 2010

Definition of Green Infrastructure

- EPA uses the term to mean an approach to managing stormwater:
 - Utilizing natural or engineered systems that mimic natural landscapes to capture, cleanse and reduce stormwater runoff through plant, soil and microbial processes
 - Infiltrate, evapotranspire, reuse



Green Infrastructure Scales

- Watershed
 - Open space, infill development, trees
- Neighborhood
 - Street networks, parking, mixed use
- Site
 - Rain gardens, green roofs, pervious pavers



Importance of Imperviousness in Stormwater Management

The diagram illustrates the difference in stormwater management between a green area and an impervious urban area. In the green area, rainwater is absorbed by the ground, reducing runoff. In the urban area, rainwater runs off buildings and roads into a storm drain, increasing the volume of water that needs to be managed.

Why Review Codes/Ordinances?

- Requirement on new MS4 permits
- Helps communities protect water quality through better land use and development
- Consolidates development requirements
- Multiplies community benefits beyond water quality improvement
 - Urban heat island reduction
 - Energy demand reduction
 - Air quality improvement
 - Reduced parking demand
 - Walkable areas
 - Property value increases
 - Quality of life improvements

What is the WQ Scorecard?

A tool for local governments to:

- Evaluate the drivers of impervious cover at watershed, neighborhood, and site scales

The tool:

- Requires inter-departmental collaboration and cooperation for a comprehensive review
- 5 broad categories of evaluation which involve different departments
- Identifies over 200 different policies, codes, or incentives a local government could implement

How is the WQ Scorecard Organized?

Introduction

Quick Reference Guide

Evaluation Tables (5 Broad Categories)

- 1 Assess Natural Resources (Trees) and Open Space
- 2 Assess Campus Development and Infill
- 3 Design Complete, Smart Growth and Reduce Imperviousness
- 4 Encourage Efficient Parking Supply
- 5 Implement Green Infrastructure On Site

Resource Guide and Case Studies

How are the Evaluation Tables Organized?

- 2-3 Sub-categories under each main category (13 subcategories)
- For each sub-category, there is a question, goal, and purpose of the evaluation
- Using the questions each sub-category has a list of tools and policies to consider to ensure your codes, ordinances, plans and incentives will positively impact the sub-category
- Point system for self-evaluation
- Resources list and case studies follow each major category evaluation table.

Each Question Offers Four Ways to Impact Change

- Adopt plans
- Remove barriers
- Create incentives
- Enact regulations



How to Use the WQ Scorecard

- Decide to improve codes & ordinances and planning for community benefits/water quality
- Select one of the five broad areas
- Gather the codes & ordinances to review
- Assemble the key departments
- Review and determine where codes & ordinances could be improved



What Next? After the Review is Complete

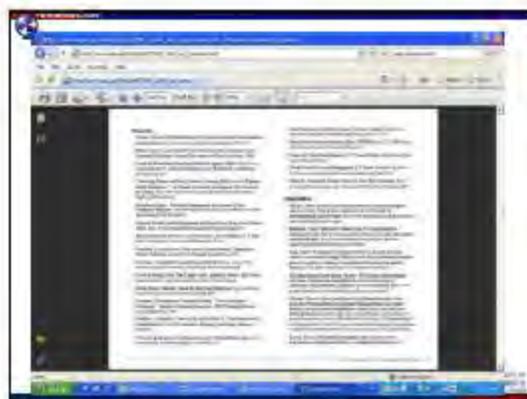
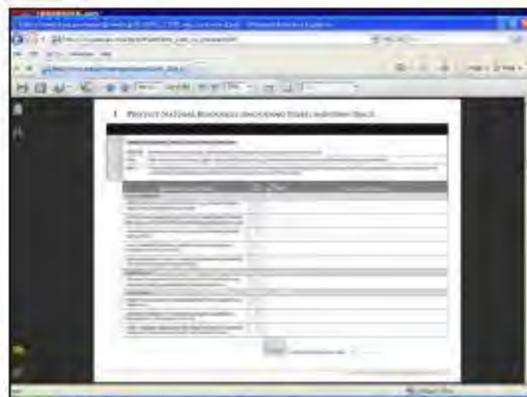
Triage!

- Start with the obvious
- Implement the easy solutions
- Prioritize the others to address as timeframe/resources allow



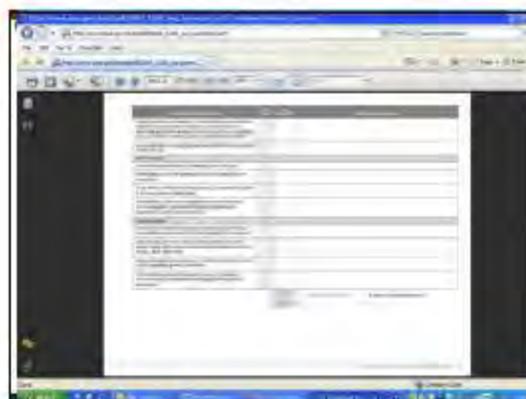
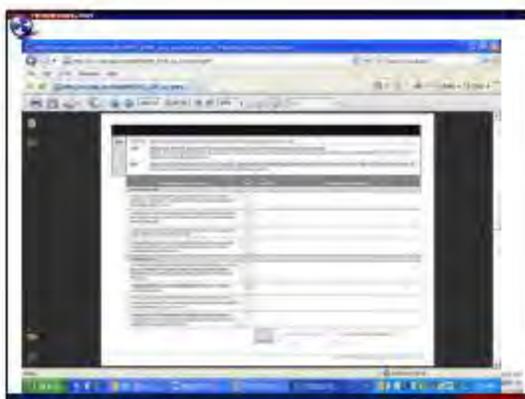
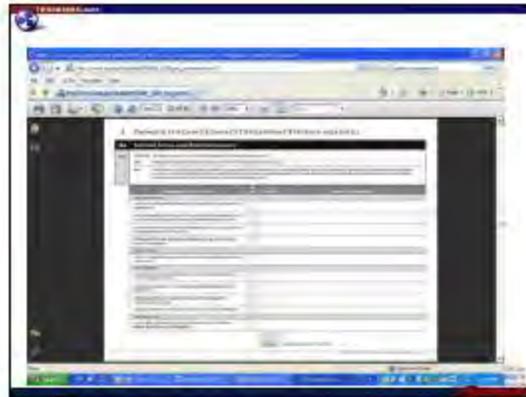
1. Protect Natural Resources (including Trees) and Open Space

- 1.A. Natural Resource Protection
 - 1.A.1. Sensitive Natural Lands/Critical Areas Protection
 - 1.A.2. Protection of Water Bodies/Aquifers
- 1.B. Open Space Protection
 - 1.B.1. Open Space Protection
- 1.C. Tree Protection
 - 1.C.1. Tree Protection



2. Promote Compact Development and Infill

- 2.A. Support Infill & Redevelopment
 - 2.A.1. Support infill & redevelopment
- 2.B. Direct Development to Existing Infrastructure
 - 2.B.1. Direct development to existing infrastructure
- 2.C. Encourage Mixed-Use Development
 - 2.C.1. Encourage mixed-use development



3. Design Complete, Smart Streets that Reduce Imperviousness

- 3.A. Street Design
 - 3.A.1. Context sensitive street designs
 - 3.A.2. Driveway location/design
- 3.B. Green Infrastructure Designs
 - 3.B.1. Green infrastructure street design criteria
 - 3.B.2. Green construction materials

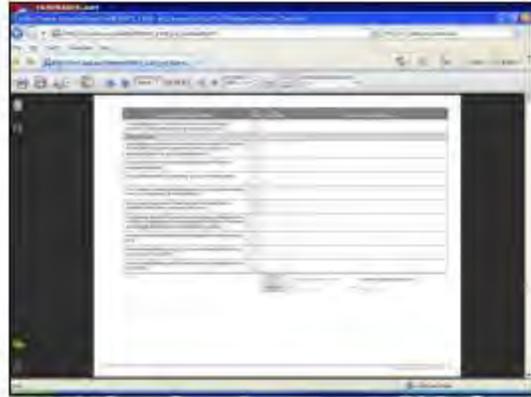
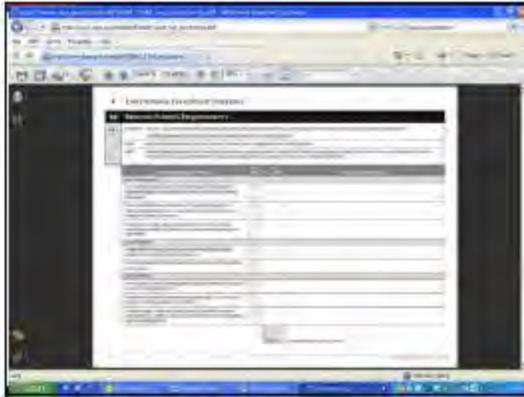




4. Encourage Efficient Parking Supply

- 4.A. Reduce Parking Requirements
 - 4.A.1. Reduce parking requirements
- 4.B. Transportation Demand Management
 - 4.B.1. Encourage alternative transportation
- 4.C. Minimize Stormwater from Parking Lots
 - 4.C.1. Minimize stormwater runoff from parking lots

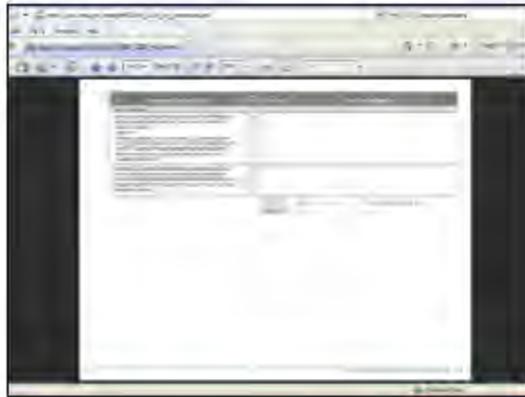




5. Adopt Green Infrastructure Stormwater Management Provisions

- 5.A. Green Infrastructure Practices
 - 5.A.1. Allowed for stormwater management
 - 5.A.2. Required for new developments
- 5.B. Maintenance and Enforcement
 - 5.B.1. Implement monitoring, tracking and maintenance protocols





Other Options



Comprehensive Green Building Toolkit

Section 1. A. Sustainable Sites and Responsible Land Use Development

- Site development and preservation of natural areas

Construction Stormwater Excellence Initiative

(We're making QLP, Qualified Local Programs)



- **Grant Provider and Program:**
EPA - State Innovation Grant Program

Construction Site Runoff Control

Develop, implement, and enforce a program to reduce pollutants in storm water runoff from construction activities that result in a land disturbance of one acre or greater

Construction Site Runoff Control



- Ordinance requiring erosion prevention and sediment controls on land disturbance activities
- Submittal and approval process for erosion prevention and sediment control plans
- Perform inspections to ensure compliance

Currently, Site Operators must follow two sets of requirements.



How do we change the picture from this:



To this?





Federal storm water regulations allow for **streamlining** and **coordination** among state and local programs, particularly relating to the regulation of construction site runoff.

Tennessee's Construction Storm Water Excellence Initiative

(We're talking QLP, Qualified Local Programs)



- Under CFR 122.44(s), TDEC can formally recognize a MS4 as a **Qualified Local Program (QLP)** that has been shown to meet or exceed the provisions of the construction general permit.

- American Public Works Association's Public Works Stormwater Summit**
San Antonio, Texas
September 12, 2007

Remarks by Benjamin H. Grumbles
EPA Assistant Administrator for Water :

- **“Qualifying Local Programs:** EPA is committed to streamlining and strengthening the stormwater program and one of the keys is to make much greater use of the qualifying local program provisions in our existing regulations...

- The Phase II stormwater regulations included provisions that would allow for further coordination among programs at the state and local levels, particularly for construction site runoff...

- The qualifying local programs provision for the management and oversight of stormwater runoff from construction activities allows for such streamlining, particularly as regulated municipalities develop and implement their programs...

- Under this provision, the NPDES authority (usually an authorized state agency), can formally recognize a municipal program that meets or exceeds the provisions of its own construction general permit...

- This provision offers the opportunity to increase administrative efficiencies in the stormwater program by formally recognizing local construction management programs that meet or exceed the provisions in EPA's construction general permit...

- It can ease the burden on construction site operators by providing them with one set of requirements to follow, not two...



- It is also an incentive for municipalities to develop strong sediment and erosion control programs that can more efficiently and effectively protect local water quality...

- In May 2006, I sent each state and EPA Region a letter to encourage and accelerate the use of the Qualifying Local Programs concept...

- I do not want this to be a top-down, Washington, DC drill. I want it to succeed, to transcend administrators. I need your help. It will continue to be a priority for me. In coming months we will provide additional guidance and support to advance the ball on qualifying local programs. ...”

- So, where do we go from here?



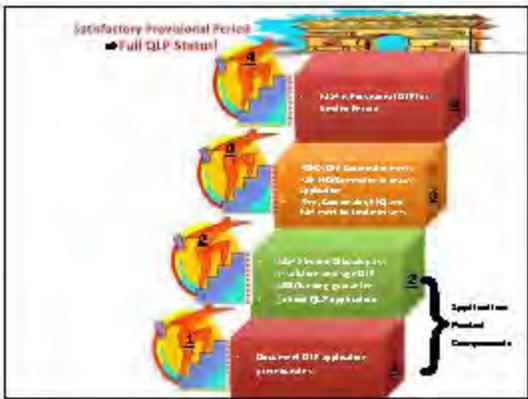
Tasks	Outputs	Completion Date
Establish Tennessee Stormwater Association	Set up a calendar of regional and state meetings, etc	March 2008
Establish QLP stakeholder committee	Participation from representatives of the stakeholder groups	May 2008
Develop QLP Criteria and Incentives	Facilitate stakeholder input on the criteria for qualifying a local program	July 2010 <small>(located in the QLP guidance materials)</small>

Tasks	Outputs	Completion Date
Pilot QLP Program	Work with volunteer MS4 programs and monitor.	June 2012
Finalize QLP Program	Modification based on experience with pilot period. Open enrollment.	June 2013
Deliver replicable solution to other states	Develop final guidance materials for delivery to EPA	August 2013

Revised Minimum Requirements for QLP Certification



- Language modified to make consistent with new MS4 and proposed CGP permit
- Removal of requirement for compliance with turbidity effluent limitations and monitoring requirements



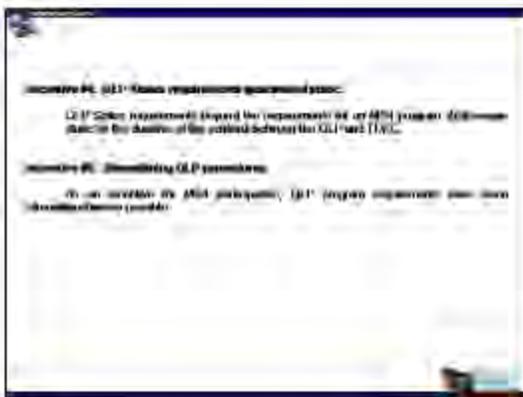

Wait a minute, what is in this for me?
 Again, why should I be a QLP?

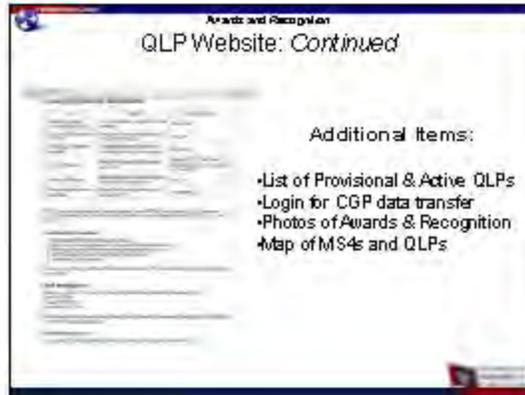
List of Incentives previously discussed:

MS4 DIF Incentives

MS4 DIF Incentives are implemented in the MS4 DIF Plan. MS4 DIF Incentives are implemented in the MS4 DIF Plan. MS4 DIF Incentives are implemented in the MS4 DIF Plan.

MS4 DIF Incentives are implemented in the MS4 DIF Plan. MS4 DIF Incentives are implemented in the MS4 DIF Plan. MS4 DIF Incentives are implemented in the MS4 DIF Plan.





Awards and Recognition

List of Awards and Recognition options previously discussed:

- QLP Website
- Special QLP Logo
- Public Announcement/Press Release/Photo Opportunity with TDEC Commissioner
- Additional Points awarded for State Revolving Fund (SRF) loans and Community Development Block Grants (CDBG)
- Articles in Magazines, Professional Newsletters and Websites

Awards and Recognition

Public Announcement/Press Release

- TDEC will prepare a Press Release describing the QLP program and name the designated MS4s that attained QLP status

Photo Opportunity with TDEC Commissioner

- TDEC will organize a Photo Opportunity before a Press Release, Announcement at a conference, or before City Council meeting



Awards and Recognition

List of Awards and Recognition options previously discussed:

- QLP Website
- Special QLP Logo
- Public Announcement/Press Release/Photo Opportunity with TDEC Commissioner
- Additional Points awarded for State Revolving Fund (SRF) loans and Community Development Block Grants (CDBG)
- Articles in Magazines, Professional Newsletters and Websites

Awards and Recognition

Additional Points awarded for State Revolving Fund (SRF) loans and Community Development Block Grants (CDBG)



State Revolving Fund

- SRF funding is available solely for stormwater related projects
- Currently discussing the award of Priority points to QLPs applying for a stormwater, wastewater or drinking water SRF loan

Community Development Block Grants

- Currently Exploring Possibilities in awarding Priority Points

Awards and Recognition

List of Awards and Recognition options previously discussed:

- QLP Website
- Special QLP Logo
- Public Announcement/Press Release/Photo Opportunity with TDEC Commissioner
- Additional Points awarded for State Revolving Fund (SRF) loans and Community Development Block Grants (CDBG)
- **Articles in Magazines, Professional Newsletters and Websites**

Awards and Recognition

Articles in Magazines, Professional Newsletters and Websites

• TDEC will coordinate with the publishing community to showcase QLPs and related program information in professional newsletters, professional magazines and websites




O.K, I can see why I might be interested. What is that process?



- Stormwater Management Plan
- 2010 Permit Compliant Ordinances
- Administrative Penalty Process (\$5,000)
- Substantial compliance with construction minimum measure of the MS4 permit
- Completed resource self-evaluation
- Siteplan/EPSC review procedures
- Enforcement Response Plan
- Project tracking procedures

Construction Activity Inventory and Reporting:

- Currently developing virtual private network (VPN) portal to report construction activities via Waterlog
- Researching ability to establish a node as alternative
- Each QLP will be issued a block of coverage numbers

Construction Activity Reporting Fields:

1. Submittal date	11. Total acres
2. Coverage date	12. T&E
3. Coverage No.	13. Exceptional or impaired waters
4. SWPPP provided	14. Wetland delineation
5. Site/project name	15. ARAP obtained
6. Owner/operator(s)	16. Related enforcement and compliance documents
7. Lat/long	
8. Start date	
9. End date	
10. Acres disturbed	

MS4 Hazard Ordinance review and sign-off
 MS4 Hazard Ordinance
 Submit QLP application

QLP Application?

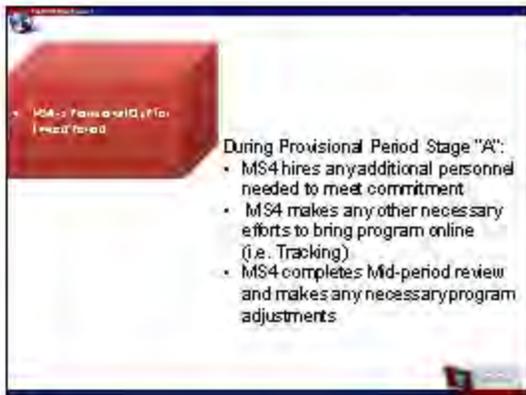
MS4 Hazard Ordinance review and sign-off
 MS4 Hazard Ordinance
 Submit QLP application

TDEC's QLP Coordinator meets with EPO Coordinators to discuss Applications
 Then, Coordinators, EPO, and MS4s review final data report

MS4's Provisional QLP Period

Provisional Period divided into two stages: "A" and "B"

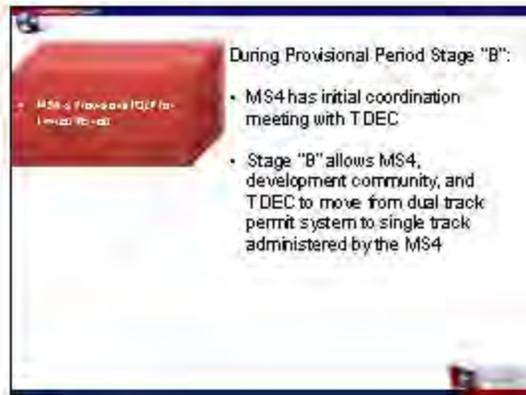
- Stage "A" is a program "ramp-up" stage and lasts from 0-18 months, depending on the MS4
- Stage "B" is a program "stakeholder adjustment" stage and lasts for 6 months



MS4 Provisional QLP for Initial Period

During Provisional Period Stage "A":

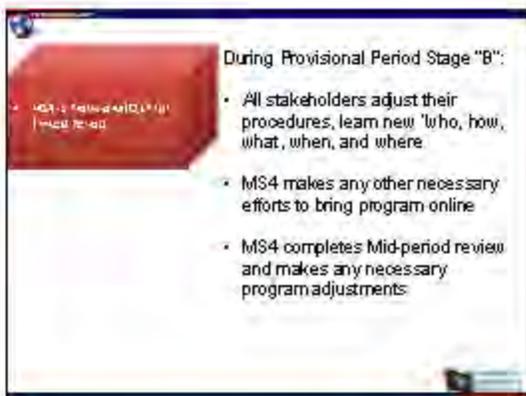
- MS4 hires any additional personnel needed to meet commitment
- MS4 makes any other necessary efforts to bring program online (i.e. Tracking)
- MS4 completes Mid-period review and makes any necessary program adjustments



MS4 Provisional QLP for Initial Period

During Provisional Period Stage "B":

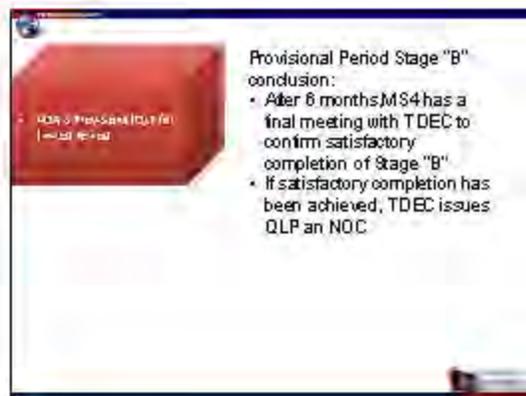
- MS4 has initial coordination meeting with TDEC
- Stage "B" allows MS4, development community, and TDEC to move from dual track permit system to single track administered by the MS4



MS4 Provisional QLP for Initial Period

During Provisional Period Stage "B":

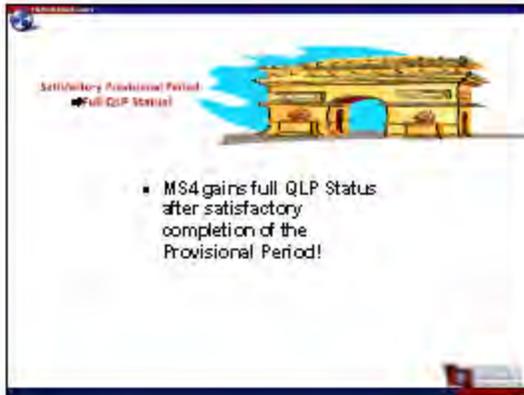
- All stakeholders adjust their procedures, learn new "who, how, what, when, and where"
- MS4 makes any other necessary efforts to bring program online
- MS4 completes Mid-period review and makes any necessary program adjustments



MS4 Provisional QLP for Initial Period

Provisional Period Stage "B" conclusion:

- After 6 months MS4 has a final meeting with TDEC to confirm satisfactory completion of Stage "B"
- If satisfactory completion has been achieved, TDEC issues QLP an NOC





8/24/11

DRAFT

QLP Construction Site Stormwater Runoff Control Program Minimum Elements

QLPs must implement and maintain a construction site stormwater runoff control program that addresses pollutants in stormwater runoff from construction activities that result from a land disturbance of one acre or greater, or less than one acre if part of a larger common plan of development or sale that would disturb one acre or more. The program must include the following minimum elements:

1. An ordinance or other regulatory mechanism to require erosion prevention and sediment controls, as well as sanctions to ensure compliance: The ordinance must allow for the maximum penalties per day for each day of violation as specified in TCA 68-221-1106.
2. Requirements for construction site operators to implement appropriate erosion prevention and sediment control (EPSC) best management practices: The MS4's EPSC requirements should be consistent with those described in the TDEC EPSC Handbook.
3. Procedures for the issuance, tracking and reporting coverage's for construction activities performed within the jurisdiction.
4. Procedures for managing public input on projects: The MS4 must have mechanisms for providing notice of projects and receiving and considering comments from the public.
5. Requirements for construction site operators to prepare and submit comprehensive Stormwater Pollution Prevention Plans (SWPPP) consistent with Section 3 (SWPPP Requirements) of the Tennessee Construction General Permit (CGP)
6. Requirements that construction site operators must achieve construction and development effluent guidelines consistent with Section 4, and special conditions, management practices, and other non-numeric limitations consistent with Section 5, of the CGP
7. Specific procedures for SWPPP review and approval: The MS4 procedures must include an evaluation of SWPPP completeness and overall BMP effectiveness.
8. Requirements for construction site operators to perform construction site inspections consistent with Sub-section 3.5.8 (Inspections), and site assessments consistent with Sub-section 3.1.2, of the CGP
9. Requirements for construction site operators to control waste materials, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site to avoid adverse impacts to water quality
10. Recognition of priority construction activities, including at a minimum, activities discharging into impaired waters (siltation and habitat alteration) or Exceptional Tennessee Waters; pre-construction meetings with construction site operators for priority construction activities; and inspections by the MS4 of priority construction sites at least once per month
11. Procedures for MS4 inspectors to evaluate construction site compliance, and an Enforcement Response Plan (ERP) that includes specific enforcement steps to ensure construction sites are in compliance with the MS4's program
12. MS4 inspectors must maintain certification under the Tennessee Fundamentals of Erosion Prevention and Sediment Control, Level 1, SWPPP reviewers must receive a certificate of completion from the Tennessee Erosion Prevention and Sediment Control Design Course, Level 2





Minimum Resources for QLP's:

Applicants for QLP status must complete the LOS exercise as part of their application to show that they have considered and can provide the resources necessary to meet the minimum requirements to be a QLP.

The first step in the establishment of the proper level of service is to determine what functions will be provided. (The) Section ... below provides a starting point for the assessment. Annual workloads need to be understood. Historical data provides some of the information but a bottom up analysis is the most effective. An example of the operation and maintenance area is shown below:

- **Inventory** - Determine how much of a typical facility is present. For example, if the stormwater unit has the responsibility for ditch maintenance, the initial starting point would be to measure the number of linear feet of ditch that has to be routinely maintained.
- **Activity** - Related to each feature of the inventory, decide what maintenance activity is needed. This could be mowing, grading and erosion repair etc.
- **Standard** - For each activity, an activity standard is established relating resources (people and equipment) required to perform the maintenance. If we continue on with our example related to ditch mowing, the stormwater unit determines a one-person crew operating a slope mower could serve 2,500 linear feet of ditch per day.
- **Level of Service (LOS)** - The most difficult determination is often deciding what LOS is to be applied to each activity. For our ditch mowing activity, the staff determines that mowing at a frequency of three times per year (on average) is necessary. A logical and informed decision can be made because this is the only variable that is subjective. If the political leadership desires more frequently mowing, the LOS may become four or five times per year. Management may only want to mow two times per year. Once costs are applied to the LOS, then a decision is made.
- **Available Work Days** - How many days can work be performed taking into account vacations, sick leave, holidays, historical weather delays, etc? It is determined that 200 workdays are available each year. (Some local governments report available workdays as low as 160.)
- **Production Requirements** - LOS multiplied by the inventory determines production needs. If the locality has 100,000 linear feet of ditches (the inventory) and the LOS is 3, then the annual production requirement is $100,000 \times 3 = 300,000$ LF/year.
- **Crew Days** - This is computed by dividing production requirements by the standard: $300,000 / 2,500 = 200$ crew days.
- **Resource Requirements** - The number of crew days/ standard: $200 / 200 = 1$ crew. The standard establishes crew cost; therefore, the cost to provide ditch maintenance at the LOS is the cost of one crew including manpower, equipment, employee benefits, etc.

Coupling the LOS with the facility inventory can create a powerful tool to logically determine the cost of providing the desired service. Even though the example uses a straightforward maintenance activity, it can be applied to virtually any work activity. By performing a service level analysis for each desired work activity and summing them, the total cost to provide



stormwater services for a local government jurisdiction can be determined. Service level analysis is an extremely powerful tool for the stormwater manager.

Level of service analysis can also be applied to the setting of design standards (frequency of allowable flooding, duration and depth), which in turn establishes the cost of a capital improvement program.

(Florida Stormwater Association)

Inventory	200 Permits	200 Permits	200 Permits	200 Permits	200 Permits
Activity	Plan review	swppp review	Inspections	Pre project conference	Project close-out
Standard	1 plan/1.0 days/employee	1 swppp/1.0 days/employee	1 inspec/0.125 days/employee	1 conf/1.0 days/employee	1 closeout/ 2.0 days/employee
Level of Service	1	1	12	1	1
Avail Work Days	200	200	200	200	200
Production Req'ts	200 plans/yr	200 swppp/yr	2400 insp/yr	200	200
Crew Days	200	200	300	200	400
Resource Req'ts	1 employee	1 employee	1.5 employees	1 employee	2 employees

For our purposes, let's use the process above in a program example:

According to this, if you had 200 construction permits per year, and did 1 inspection per month on each project, and the projects lasted a year, you'd need 6.5 employees to provide this scope of services given these standards and these levels of service.

Now using this model, MS4's applying for QLP Status will have to complete the LOS exercise to show the resources necessary for their program to support, at a minimum, the following requirements in their jurisdiction:

MS4s shall implement a construction site stormwater runoff control program. The program must address pollutants in stormwater runoff from construction activities that result in a land disturbance of or equal to or greater than one acre. Reduction of pollutants discharged from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include the development and implementation of, at a minimum:

1. Procedures for site inspection and enforcement: The MS4 must have procedures in place for its inspectors to evaluate construction site compliance. The ERP must include specific enforcement steps to insure construction sites are in compliance with the MS4's program.





2. Recognition of priority construction activity, including at a minimum, those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired or Exceptional Tennessee Waters; Pre-construction meetings with construction-site operators for priority construction activities; and Inspections by the MS4 of priority construction sites at least once per month.
3. Specific procedures for SWPPP review and approval: These procedures must include an evaluation of SWPPP completeness and overall BMP effectiveness.
4. Procedures for managing public input on projects: The MS4 must have mechanisms for providing notice of projects and receiving and considering comments from the public.
5. Procedures for the issuance, tracking and reporting of Notice of Coverage for construction activities performed within the QLP jurisdiction; providing notice of projects and receiving and considering comments from the public.

The QLP application will contain the results of this exercise along with a signature blank for the Mayor (or responsible party) to sign, signifying that he/she is committing that the MS4 guarantees that the resources to support the minimum requirements for QLP Status will be provided.



October 17, 2011

State Revolving Fund (SRF) Loan Program Stormwater Infrastructure Funding Opportunities

The SRF Loan Program administers Tennessee's Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Loan Program. This program provides low-interest loans to cities, counties, and utility districts for the planning, design, and construction of wastewater facilities, drinking water facilities, **and may also be used to fund stormwater infrastructure.** The U.S. Environmental Protection Agency awards annual capitalization grants to fund the program, and the State of Tennessee provides a twenty-percent funding match.

For a Drinking Water or Clean Water SRF loan application to be considered there must be a viable and dedicated funding source for the municipal or county program to show that repayment of the low interest loan can be made. **Many of our state's MS4s now have enacted stormwater utility fees and are eligible to apply for a low interest loan from the SRF program.**

Chapter 1200-22-1-.02(2)g under Rules of the Department of Environment & Conservation, Division of Community Assistance, Priority Ranking, Project Criteria Points, and Priority Point Value Formula states:

Chapter 1200-22-1-.02(2)g: <http://www.tn.gov/sos/rules/1200/1200-22/1200-22-01.pdf>
Stormwater management projects affecting a water-quality impaired stream segment will receive 100 Project Criteria Points. Storm water management projects with a compliance schedule in the NPDES permit requiring construction will receive 50 Project Criteria Points. All other stormwater management projects will receive 25 Project Criteria Points.

Priority points will be also be awarded to municipalities applying for Clean Water, and Drinking Water SRF loans if they submit plans to incorporate green infrastructure. Details on this information may be found in the following document: *Clean Water and Drinking Water State Revolving Fund, 20% Green Project Reserve: Guidance for Determining Project Eligibility:*

http://www.tn.gov/environment/srf/pdf/eps_green_guidance_for_fv2010_cw_loans.pdf

"... not less than 20 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and not less than 20 percent of the funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants shall be used by the State for projects to address:

- *Green Infrastructure,*
- *Water Efficiency Improvements*
- *Energy Efficiency Improvements*
- *Other Environmentally Innovative Activities.*"

These four categories of projects are the components of the Green Project Reserve (GPR).

For more information please visit: <http://tennessee.gov/environment/srf/> or contact Sherwin Smith at 615-532-0168 or at Sherwin.Smith@tn.gov.

