



Stormwater Management Plan

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1. Administration

A Notice of Intent (NOI) application was made by the Sevier Water Board to the Tennessee Department of Environment and Conservation (TDEC) on April 7, 2003, for permit coverage to meet the requirements of the Municipal Separate Storm Sewer System (MS4) permit. This permit application was made on behalf of co-permittees: City of Gatlinburg, City of Pigeon Forge, City of Sevierville and Sevier County for the first permit cycle. A Notice of Coverage (NOC) for permit number # TNS075655 was issued.

Co-permittees currently consist of:

Sevier County – Doyle Clabo, Stormwater Director and David Carver;
Gatlinburg – Josh Allen, Stormwater Coordinator;
Pigeon Forge – Brandon Williams, Stormwater Manager;
Sevierville – Frank Cravens, Stormwater Manager.

The current permit was re-issued April 1st, 2024.

Each co-permittee has an adopted set of regulations giving authority to meet the MCMs and enforce ordinances, resolution and or municipal codes as the municipality specifies.

These co-permittees manage stormwater through comprehensive programs that feature the following primary functions:

1. Adopt a plan to identify point source and non-point source pollutants, and reduce the discharge of pollutants within the MS4,
2. Use Best Management Practices and Stormwater Control Measures (SCMs) to improve water quality and manage water quantity (where applicable) being discharged into waters of the state, and;
3. Maintain water quality with a goal of improving water quality.

(a). Administrative Minimum Control Measures MS4

Each co-permitted municipal department has adopted individual stormwater ordinances, documents, and procedures for compliance with the terms of the permit within their respective jurisdictional boundary. Each co-permittee is responsible for all six (6) Minimum Control Measures (MCM) within their jurisdiction as well. The following is a list of the minimum control measures:

1. Public Education/ Information
2. Public Involvement/ Participation
3. Illicit Discharge Detection and Elimination
4. Construction Stormwater
5. Permanent Stormwater Management
6. Good Housekeeping

(b). Water Quality standards for Sevier County

Sevier County streams outfall to three major Hydrologic Unit Code (HUC 8) watershed divisions: 1). Lower French Broad River, 2). Watts Bar Lake, 3). Holston River. Within those divisions, twenty-six HUC 12 watersheds have been designated and are broken down as follows:

Lower French Broad River – 21 watersheds (HUC 12)

Watts Bar Lake – 4 watersheds (HUC 12)

Holston River – 1 watershed (HUC 12)

(c). Waters with Unavailable Parameters for sediment/ siltation in Sevier County

The follow are from the current 2022 Final 303d list:

1. Knob Creek
2. Happy Creek
3. Middle Creek
4. Gist Creek
5. West Prong Little Pigeon River at the intersection of Waldens Creek downstream to the confluence with the Middle Prong of the Little Pigeon River
6. Mill Creek
7. Waldens Creek

(d). The Sevier Water Board and the co-permitted stormwater programs recognize that a TMDL has been issued by TDEC in 2007, noting impacts to the following streams:

<u>Stream</u>	<u>Cause</u>	<u>Pollutant Source</u>
1. West Prong Little Pigeon River	E-coli Siltation Total Phosphorus Low DO	Septic tanks Collection system failure Land Development Channelization
2. Mill Creek	Habitat Alteration E-coli	Channelization Collection system failure
3. Waldens Creek	Siltation E-coli Habitat Alteration	Land development Septic tanks Land development
4. Dumplin Creek	Siltation Habitat Alteration	Land development Channelization

A TMDL was also issued in December of 2005 for pathogens that affects Sevier County.

The following streams are listed:

<u>Stream</u>	<u>Cause</u>	<u>Pollutant Source</u>
1. Boyds Creek	E-coli	Pasture Grazing
2. Gnatty branch	E-coli	Septic Tanks
3. Beech Branch	E-coli	Septic tanks

4.Dudley Creek	E-coli	Septic Tanks
5.Baskins Creek	E-coli	Collection system failure
6.West Prong of the Little Pigeon	E-coli Siltation	Septic Tanks, Land Development, Channelization, Collection system failure
7.Mill Creek	E-coli Habitat Alteration	Collection system failure Channelization
8.Waldens Creek	E-coli Siltation	Septic Tanks, Land Development, Pasture Grazing
9. Little Pigeon River	E-coli	Septic Tanks, Collection system failure

Sevier County has 5 streams impaired for agriculture related sources that do not fall directly under the stormwater regulatory authority. Also noteworthy is the fact that 8 streams are listed as impaired that are within the boundary of the Great Smoky Mountains National Park and are beyond the scope of stormwater regulatory authority. Most of the streams within the National Park are listed for conditions possibly associated with naturally occurring acid rock found in the Park.

(e). Exceptional Tennessee Streams (High Quality Streams)

There are currently 15 streams outside the Great Smoky Mountains National Park that are listed as Exceptional Tennessee Streams.

1. The French Broad River
2. Middle Prong of the Little Pigeon River
3. LeConte Creek
4. Norton Creek
5. Roaring Fork
6. Noisy Creek
7. Redwine Creek
8. Soak Ashe Creek
9. Texas Creek
10. Timothy Creek
11. Wilhite Creek
12. Flat Creek
13. Tuckahoe Creek
14. Norton Branch (aka Roberts Branch – trib to Norton Creek)
15. Seng Branch (trib to Norton Creek)

9 streams are naturally reproducing trout streams

2 streams are protected for exceptional biological diversity
2 streams are protected for management of endangered species
1 stream outside the National Park is an Outstanding National Resource Waterway and a naturally reproducing trout stream (the Middle Prong of the Little Pigeon River).
1 stream is a State Scenic River

There are 186 high quality streams in protected areas in Sevier County. Of that, 183 streams are inside the Great Smoky Mountains National Park, multiple Outstanding National Resource Waterways inside the National Park (West Prong of the Little Pigeon River above Gatlinburg City limits) and 2 streams in the Round Top State Nature Area (Wears Valley).

The Sevier Stormwater Group chose to do “Option Two” of the current monitoring plan choices within the 2016-2021 NPDES General Permit requires for Small Municipal Separate Storm Sewer Systems (MS4). The monitoring plan is included in Appendix G.

2. MCM – Public Education

2.1 BMP- Public School Education

Objective – Water quality education with all 6th grade students in Sevier County.

Description: Sevier County co-permittees are partnering with Keep Sevier Beautiful to provide public education and information to all Kindergarten, 2nd, 4th and 6th grade students in Sevier County. Ms. Lisa Bryant and her staff teach different lessons for different ages. Also, classes two times each week for the entire school year at the Eugene Huskey Environmental Center.

Responsible Party: David Carver, Sevier County Stormwater Management, Keep Sevier Beautiful.

Frequency: varies based on school schedule

Goals: Present a variety of education materials to students

Kindergarten – Recycling

2nd grade – Water Pollution story book

4th grade – Fred and Ted the fish (water quality)

6th grade – Waste Disposal (recycling, composting, solid waste)

Metric: track # of students attending each year

Schedule: Year 1 – Review Education Materials
 Year 2 – attend/ audit presentations
 Year 3 – Continue Farm Days participation
 Year 4 - Review education materials
 Year 5 - Monitor activities

2.2 BMP – PIE Program

Objective – The focus of the program shall be on impacts for stormwater discharges to water bodies and the steps that the public (along with commercial, industrial or institutional entities) can take to reduce pollutants in stormwater runoff.

Description: The permittee shall develop a Public Information and Education plan that details specific goals and specific public information and events/ activities that will occur over the remainder of the permit cycle. The PIE shall also include targeted educational campaigns addressing the following issues:

- a. General public awareness on the impacts on water quality from general housekeeping maintenance/ activities.
- b. Home owner associations and other operators of permanent BMPs awareness of the importance of maintenance activities.
- c. Local engineering and development community awareness of the stormwater ordinances, regulations, and guidance materials related to long-term water quality impacts.
- d. General public and professional chemical applicators awareness on the proper storage, use, and disposal of pesticides, herbicides, and fertilizers use.
- e. General public and professional chemical applicators awareness on the proper storage, use, and disposal of oil and other automotive-related fluids.
- f. General public and municipal employees on the awareness of identifying and reporting procedures for illicit connections/ discharges, sanitary sewer seepage, spills, etc.
- g. Local engineering, development and construction community awareness of stormwater ordinances, regulations and guidance materials related to construction phase stormwater quality impacts.
- h. Municipal employee/ contractor awareness of water quality impacts from daily operations.

Responsible Party: Co-permittees

Frequency: [monthly for individual events and metrics](#)

Goals: Target three groups as follows

1. Municipal Employees – as part of the Good Housekeeping Requirements
2. General Public including industry specific target groups
3. Engineers, developers, contractors, home owner associations, real estate, banking personnel, etc.

Metric: track # of web-hits, participants, attendees, and staff attending

Schedule: Year 1-5 See the following chart:

1 Developers, Contractors Evaluation - # of reply responses	Email survey for engineers and developers
2 Engineers Evaluation - # of reply responses	Emailer
3 Good Housekeeping Evaluation - # of signups	Education event per municipality with inspections
4 Elected Officials Evaluation	Stormwater Education handout/ emailer
5 Engineers Mailer - Evaluation	copy of MS4 permit- PE
6 Hotline Advertisement Evaluation - # of FB Responses	FB and Webpage advertisement
7 Chemical Applicators Evaluation - # of Responses	emailer/ IDDE/ Hotspot
8 Hotspot mapping Evaluation - # of new hotspots identified	Mapping
9 Hot Spot Evaluation - # of handouts counted	Handouts
10 Live Event - Engineers, Developers Evaluation - # of attendees/ # of surveys returned	Post Construction regulations
11 Good Housekeeping Evaluation - # of signups	Shared Education presentations - sign-in counts
12 Det/ WQ Inspections/ Education - Evaluation - # of handouts counted	handout
13 Education event Earth Day - Evaluation - # of presentations/ # of attendees	participation - handout counts

14 Contractors
Evaluation - of responses

Emailer - seeding and stabilization based on weather

15 Education event
Evaluation - # of kids educated

Farm Days/ participation

3. MCM – Public Involvement/ Participation

3.1 BMP – Public Advertisement

Objective: Co-permittees will publicize program participation opportunities by methods designed to reach the general public as well as specific intended audiences. Elements of the program where participation will be encouraged: stormwater management work groups, notices of public meetings and public hearings, recruiting volunteers for cleanup events, education and encouragement of the public to report illicit discharges, illegal spillage, dumping or otherwise improper disposal of materials into the MS4.

Description: Events such as Roads and Rivers, Hazmat Day, Farm Days and the Spur cleanup events are part of the public participation events advertised by the MS4. Co-permittees will facilitate opportunities for citizen involvement.

Responsible Party: Co-permittees

Frequency: Annually

Goals: Continue activities, as well as find new opportunities for the public to be involved.

Metric: track # of participants

Schedule:

- Year 1 – Continue to advertise cleanup events and distribute IDDE education handouts
- Year 2 – Develop a Stormwater Facebook page for advertisement and education resources
- Year 3 – Advertisement campaign for Illicit Discharge reporting via the webpage
- Year 4 – Partner with Keep Sevier Beautiful for other volunteer opportunities
- Year 5 – Evaluate the advertising program

3.2 Public Hearing

Objective: Advertise for an annual public meeting for public input on the Annual Report.

Description: An annual meeting shall be advertised at least 30 days prior to the meeting in a manner compliant with all applicable state and local public notice requirements. This meeting will serve as an opportunity for public review of the annual report. This meeting will provide public input and serve to answer questions concerning stormwater regulations and procedures.

Responsible Party: Co-permittees

Frequency: Annually

Goals: Allow public review and comment as well as public input.

Metric: Receipts for advertising, # of participants

Schedule: This meeting will occur prior to the submission of the annual report to TDEC.

In order to meet TDEC MS4 permit BMP's Sevier Stormwater Group is required to hold one (1) public meeting each calendar year.

This meeting is to be advertised in a local publication (i.e. – newspaper) at least thirty (30) days before the meeting. Also, a copy of the notice will be forwarded to the Public Information Officer for posting on the Stormwater website (30) days before the meeting.

The meeting is to be held in order for members of the public to allow questions, or comment on the Annual Report and to promote discussion of community events and how stormwater management regulations may affect members of the community.

The Public Information Officer will be notified via email by the stormwater director or his designee. At the behest of the Public Information Officer, advertisement will be made to the local newspapers.

An Attendance Sheet is needed to collect signatures from all attendees. An agenda should also be available for attendees to reference.

3.3 – Public Involvement

Objective: Co-permittees have maintained a hotline for reporting violations and complaints since 2005. This hotline is listed in a local phonebook. The hotline will also be advertised on the stormwater webpage to increase public awareness that the hotline is available as well as on education material handouts.

Description: The hotline will be advertised on the webpage for each co-permittee.

Responsible Party: Co-permittees

Frequency: Each permit cycle

Goals: Raise awareness of the access the public has to stormwater co-permittees 24 hours a day for reporting any and all types of complaints, suspected illicit discharges, among other activities.

Metric: budget line item

Schedule:

1. SWMP make a copy available on the webpage

Evaluation - # of comments

2. HazMat Week FB advertisements - 5days straight

Evaluation - # of FB responses

3. Elected Officials HazMat Week advertisement

Evaluation - # of elected officials

4. SWMP Management Plan review

5. Sponsored event Roads and Rivers/sponsored event - FB counts

Evaluation - # of participants

6. Hotspots mapping, meet and greet, hotline

Evaluation - # of handouts for hotline advertisements

7. Hotline Hotline advertisement - FB
Evaluation - # of views/ # of emails received

8. EPLAN emailer
Evaluation - # of Reply Responses

9. Chemical Applicators Live event
Evaluation - # of attendees

10. Eplan Mapping
Evaluation - # of businesses mapped

11. Eplan Education
Evaluation - # of E-Plan handouts counted

12. Sponsored event Roads and Rivers/ advertise and participate - FB counts
Evaluation - # of participants

13. Elected Officials Emailer - public participation events Evaluation - # of responses

14. FB Live live event Evaluation - of views/ # of comments

15. TNSA FB Reposts Evaluation - # of views/ # of comments

Procedure for Receipt of Public Comments

Citizens of Sevier County that are potentially affected by a permitted site and are interested in submitting concerns, complaints, pre-construction or post construction considerations should contact this office during regular business hours. Written information should be on a Public Comments form which is available at the Sevier County Stormwater Management office or online.

Comments may be made during the Planning Commission Meeting when Commissioners are given the option to approve or deny Concepts and Site Plan. Any comment will be obtained by attending the meeting as often as possible or by the minutes of the Planning Commission Meeting.

Complaints shall be documented and addressed on a case-by-case basis. Initial enforcement actions for IDDE complaints are to be taken within seven (7) days.

Pre-construction concerns will be taken into consideration by the director during plans review for each project.

A (24) hour hotline is also maintained where information and complaints may be received.

Procedure for advertising MS4 meetings –

In order to meet TDEC MS4 permit BMP's Sevier Stormwater Group will meet monthly to conduct and as needed for MS4 co-permittee planning and documentation.

Monthly meetings will be advertised on the group Facebook page.

4. MCM – Illicit Discharge

4.1 BMP – Notification of spills

Objective: Any spill of any hazardous material shall be reported to emergency response agencies immediately. Cleanup shall be as specified by the emergency responders. Notification of Stormwater personnel of an active spill shall be at the discretion of emergency responders. Documentation of the cleanup of hazardous spills will be confined to the response report from emergency responders. Follow up investigations and verification of cleanup will be the responsibility of Stormwater personnel.

Description: Stormwater staff are not qualified for first responder status for response to hazardous material spills. As such, stormwater personnel will be responsible for follow documentation of spill cleanup verification. Stormwater staff will attempt to collect emergency responder documentation to file with staff follow up records.

Frequency: Response support as spill cleanup is required

Goals: Verify cleanup is completed as soon as practicable. If cleanup extends beyond fourteen (14) days, a Corrective Action plan may be required,

Metric: Track Illicit Discharge responses, and verify cleanup after emergency response as they may occur.

4.2 BMP – Mapping

Objective: Continue mapping outfalls, stormwater facilities, detention basins, catch basins, etc.

Description: Mapping of outfalls was a requirement from the 1st permit cycle. The 2nd permit cycle required that stormwater personnel begin mapping stormwater infrastructure such as catch basins, pipes, drop structures, and drainage conveyances.

Responsible Party: Co-permittees

Frequency: Annually

Goals: Continue to identify outfalls in all areas of the county. Mapping should include stormwater and storm sewer sheds and components.

Metric: track # of storm sewer system components

Schedule: Year 1 – Continue municipal mapping
 Year 2 – Continue municipal mapping
 Year 3 – Continue municipal mapping
 Year 4 – Continue municipal mapping
 Year 5 – Continue municipal mapping

4.3 BMP – Illicit Discharge Detection and Elimination

Objective: Continue to implement a plan to detect and eliminate non-stormwater discharges, including illegal disposal practices.

Description: The co-permittees shall continue to investigate portions of each perspective MS4 based on the results of continued mapping, dry weather screenings, complaints, identification of un-sewered areas with a history of septic system failures or other identification methods that indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater. Investigations, and results of all non-stormwater discharge investigations, including locations, dates, times, parameters and sampling results, discovered sources of flows, etc., shall be documented and tracked through mitigation and repair.

IDDE Plan –

1. Continue mapping
2. Dry weather screenings
3. Identify portions of the MS4 for intensive investigation
4. Education of hazards associated with illicit discharges
5. Tracking
6. Mitigation and enforcement

Responsible Party: Co-permittees

Frequency: Annually

Goals: Locate and eliminate illicit discharges

Metric: track # of discharges, # of discharges eliminated

Schedule: Year 1 – Continue to seek out illicit discharges and evaluate elimination efforts
 Year 2 – Continue to seek out illicit discharges and evaluate elimination efforts
 Year 3 – Continue to seek out illicit discharges and evaluate elimination efforts
 Year 4 – Continue to seek out illicit discharges and evaluate elimination efforts
 Year 5 – Continue to seek out illicit discharges and evaluate elimination efforts

4.4 BMP – Local Emergency Planning Committee

Objective: Foster interagency coordination of hazardous waste or material spills response and cleanup.

Description: Membership as an active, voting member and participant.

Responsible Party: Co-permittees

Frequency: monthly meetings

Goals: As a member of this committee, the goal is to raise water quality awareness and to encourage water quality consideration in annual training among government agencies in particular as preparedness for emergency response training is planned and emergency response is executed throughout the county.

Metric: Document training events

Schedule: Year 1 – Participate in annual training
 Year 2 – Continue training participation and sponsor education efforts through E-Plan reporting
 Year 3 – Continue training participation as well as sponsorship of E-Plan reporters, and Distribute IDDE education materials to E-Plan reporters
 Year 4 - Continue training participation as well as sponsorship of E-Plan reporters, and Distribute IDDE education materials to E-Plan reporters
 Year 5 - Continue training participation as well as sponsorship of E-Plan reporters, and Distribute IDDE education materials to E-Plan reporters

Procedures for System Mapping

All data collected for Sevier Stormwater Group Municipal Separate Storm Sewer System will be collected using GIS technology and outfall descriptions using approved software.

Data will be maintained in the approved software. All GIS information collected will be used in developing and maintaining a GIS processed Outfalls Map. This Outfalls map will be based on an established Base Map for Sevier County.

Initial mapping will be confined to large area or “major” outfalls “... of a conveyance or system of conveyances ... owned by a state, city, town, or other public entity that discharges to waters of the U.S. and is: designed or used for collecting or conveying stormwater...”(EPA definition of an MS4).

Follow up mapping of all outfalls from public and private lands into waters of the state and all county road structures will be accomplished using GIS information collected as well as GIS technology applications.

Mapping all “inputs” into the storm sewer collection system, such as inlets, catch basins, drop structures or other defined contributing points to the sewer shed should also be mapped.

As a part of the Stream Monitoring Plan required by TDEC for the current permit cycle, co-permittees are mapping streams for a variety of other data (such as erosion sites, illegal dumping, exposed pipes, in stream construction, inadequate buffers, stormwater structures, and fish barriers) using the Maryland Stream Survey Protocol. Using the same GIS technology, co-permittees are also mapping illicit discharges as they are located while conducting stream surveys and potential Hot Spots (sites with greater potential for illicit discharges within the MS4).

Procedures for Illicit Discharge Detection and Elimination.

Sevier Stormwater Group will establish a base map that will serve as the foundation for illicit discharge detection and elimination.

Ordinance Standards –

- 1) Illicit discharge definitions and prohibitions are outlined in the local ordinances and resolution.
- 2) The ordinances and resolution also contain requirement for notification in the event of illicit discharges. Notification may be made in person, phone, or electronic communication.

Base map –

- 1) This map will consist of the mapping of all active construction sites within Sevier County, all public roads and all streams as well as other applicable data sets (utilities, soils and geology, contours and topography, FEMA flood information, etc.).
- 2) Mapping layers and data will be collected, assembled and maintained by Sevier County GIS Department in conjunction with Stormwater.
- 3) GIS mapping software will serve as the operating system until otherwise determined by Sevier Stormwater Group.

- 4) All outfalls within the MS4 permit area will be mapped using GIS technology to collect and identify outfalls.
- 5) Identified outfalls throughout the MS4 permit area will be used to determine screening locations and priority areas for illicit discharge detection.

Screening Protocols –

- 1) Dry weather screenings will be completed on a schedule developed by the Sevier Stormwater Group. Considerations for higher or lower priority screenings may include but not be limited to:
 - a. area development
 - b. commercial industry proximities
 - c. land use potential (zoning changes)
 - d. stream quality (impaired/ high quality waters)
 - e. community complaints/ concerns
- 2) Detection will be accomplished through observations during screenings, community complaint investigations, other agency referrals/ complaints, and TMDL sampling results (when necessary and applicable).
- 3) Investigations into illicit discharge detection will be conducted by the Sevier Stormwater Group along with Tennessee Department of Environment and Conservation, Sevier County Environmental Health Agency, Sevier County Emergency Management Agency, local law enforcement agencies and other applicable agencies as each individual discharge may require.
- 4) Each individual discharge will not only have present unique locations, person(s) involved, types and quantities of illicit discharge materials and community concerns, but each illicit discharge will bring unique hazards, corrective actions to be considered. Therefore, elimination and cleanup are also based on a case by case basis.

Illicit Discharge Tracking –

- 1) Reports of illicit discharges are detailed and filed into a database used to document and track all information concerning illicit discharges. This database will contain location descriptions, person (s) contacted and or responsible, mapping coordinates, corrective actions ordered and or taken, agencies involved, priority status and follow up requirements as needed.
- 2) Tracking illicit discharges will be accomplished by data entry in the database.

Procedures for tracking non-IDDE Complaints

Sevier Stormwater Group receives complaints through a variety of contact avenues (phone calls, email, electronic messages, office visits, etc.). Each complaint is documented using approved applications. The application is used to document information such as Notification Information, Complainant Details (when available), Complaint Details (such as the date observed, address, currently discharging, narrative section, discharge color, priority status, investigation required, drainage basin and sub basin information), Agencies Contacted, and Alleged Responsible Party Information.

Procedures for requiring IDDE Testing

When the MS4 is investigating an Illicit Discharge, as part of the goal of elimination, the MS4 may require the owner or operator of any facility or property engaging in any activity where an illicit discharge is occurring to undertake such reasonable monitoring deemed necessary. Such testing shall be done in writing and may be part of an enforcement action or order.

Third Party testing may also be required. Per TDEC, testing and analysis should be in accordance to TDEC Environmental Assistance Center (EAC) protocols.

A copy of the data results from testing should be submitted and stored in the appropriate file (complaint, construction, etc., for inclusion in the Annual Report)

Procedure for Preserving the Chain of Evidence -

Where any physical evidence (other than field notes or digital photography) is collected during an inspection, the evidence must be noted on the Chain of Custody Notes section of the inspection form. Date and time of collection should be recorded as well as the signature of the person collecting the evidence.

Any other evidence collected (i.e. E-coli samples, turbidity meter readings, copies of self-inspection reports, die test results, chemical analysis, etc.) should be detailed on a Site Evaluation and Complaint Form.

The evidence chain of custody section on page (2) two of the Site Evaluation and Complaint Form should be used to track custody of the evidence. When evidence is removed from the Sevier Stormwater Group office the date, time signature of the responsible person (s) and destination should be documented accordingly. Any results of testing should be attached to the form and filed appropriately. When evidence is returned, the date, time, and signature of the responsible party should be recorded.

Once evidence has been adjudicated in any fashion (i.e. civil penalty case becomes final, Circuit or Chancery Court case closed, Illicit Discharge is mitigated, Complaint is resolved and closed, Construction site issue is mitigated, etc.) then evidence is to be destroyed in front of a witness and in accordance with environmentally sound practices. The chain of custody portion of the appropriate form should bear both witness signatures upon destruction of any evidence.

Procedures for requiring a Corrective Action Plan -

If the elimination of an illicit discharge will take more than fourteen (14) days from the notification of the discharge, a corrective action plan shall be required to be submitted to the MS4 for concurrence only due to the complexity and specialized techniques needed to eliminate the discharge. This corrective action plan will be made in writing and will at a minimum describe:

1. The steps to be taken
2. The persons or company to conduct the elimination process
3. The proper disposal method or facility
4. A time line for completion

The corrective action report shall be maintained and updated by the owner of the property through completion and elimination. The corrective action report will be attached to the complaint file and stored electronically.

5. MCM – Construction Stormwater

5.1 BMP – Construction site stormwater runoff control

Objective: Address pollutants in stormwater runoff from construction activities that result in land disturbance activities.

Description: Land disturbances of equal to or greater than one acre requires a land disturbance permit. Land disturbance activities less than one acre must also be required to obtain permit coverage if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

Responsible Party: Each Municipality

Frequency: Daily

Goals: Maintain (and improve if possible) water quality of streams within or adjacent to land disturbance activities and active construction sites. This is to be accomplished through use of sediment prevention measures, erosion controls, control of waste (such as construction debris) concrete truck washout, chemicals, litter and sanitary waste at the construction site.

Metric:

Schedule: Year 1 – Continue permit review, issuance, and inspections
 Year 2 – Continue permit review, issuance, and inspections
 Year 3 – Continue permit review, issuance, and inspections
 Year 4 – Continue permit review, issuance, and inspections
 Year 5 – Continue permit review, issuance, and inspections

Procedures for issuing a Land Disturbance Permit

At present, erosion and sediment control plans are submitted, reviewed and permitted by Tennessee Department of Environment and Conservation (TDEC) and Sevier Stormwater Group by dual permitting. Work cannot begin on the proposed site until a Notice of Coverage is issued by **both** TDEC and the appropriate municipality within the Sevier Stormwater Group. However, local MS4's cannot issue a Notice of Coverage until TDEC has permitted the site. To expedite this process of review and permitting, engineers and developers are encouraged to submit applications and plans to both the state and local agencies at the same time.

Construction site runoff control standards are addressed by the appropriate ordinance/resolution specific to each municipality within the Sevier Stormwater Group.

Land Disturbance permit standards include land disturbance activities, exemptions, Land Disturbance permits, review and approval of applications, review and approval of plans, issue Notice of Coverage, performance guarantees (bond/letter of credit), and inspections.

In each ordinance/resolution the process of applying for a permit is set forth. Each permit application must include a permit fee and plans. Sevier Stormwater Group has developed a Land Disturbance Permit approval checklist to ensure quality and consistency in reviewing of plans. This checklist includes a review of the application packet, erosion and sediment control plans review requirements (including identifying priority construction sites), onsite review standards (that are used during pre-construction site inspections), and stormwater management plan details. Each ordinance/resolution also gives details about the inspection requirements not only for the MS4 but also lists inspection requirements placed on the owner/ developer of the project.

If Construction outfalls directly to or immediately upstream of an *Outstanding Natural Resource Waterway*, the applicant will apply and receive coverage from TDEC for an individual permit before being issued a permit by the MS4.

Each ordinance/resolution establishes basic minimum standards for the design of Stormwater Pollution Prevention Plans (SWPPP). These plans must meet the minimum standards of the current Tennessee Construction General Permit, using the current TDEC Sediment and Erosion Control Manual and the current TDEC manual for Permanent Stormwater Construction as references for best management practice (BMP) standards.

Each ordinance/resolution sets forth general criteria for erosion and sediment controls that help establish performance standards for each approved construction site.

1. A Land Disturbance Permit application must be completely filled out.
2. The permit application must be accompanied by a Stormwater Pollution Prevention Plan (SWPPP).
3. The permit application must also be accompanied by payment that is equal to ½ the current TDEC permit fee.
4. The permit application must be assigned a tracking number and information is entered into the department database.
5. Payment is recorded in the department receipt book and a receipt is issued to the applicant/ as applicable based on department fee processing procedures.
6. The application and SWPPP are placed into a review folder and have a Land Disturbance Permit Checklist attached.
7. If the project calls for a Decentralized Sewer System for (Sevier County only), there is a TDEC application with documents also submitted to the County Review Committee made up of Planning, Stormwater and other department officials. When the local review is complete and the TDEC permit is issued, Planning has procedures for construction, as built, a 50% reserve of drip line area, and tracking

of number of bedrooms to prevent over building, and a third-party inspection to verify installation is according to the plans and sound engineering practices.

7. Erosion and Sediment Control Plans are reviewed by the MS4 designee. Each plan is reviewed individually by MS4 designee using the most current BMP standards available.

8. Once plans have been approved and the Notice of Coverage showing TDEC coverage has been obtained, a Notice of Coverage from MS4 designee shall be issued.

Procedures for Preconstruction Meetings

A preconstruction meeting shall be held on all priority sites as well as any other projects deemed necessary by the MS4. The developer and/or the contractor(s) shall meet MS4 personnel to discuss the process of construction for the particular site, concerns that need attention for this site and issues (if any) that may need to be addressed during different phases of construction. This meeting gives the developer and/or contractor(s) an opportunity to discuss concerns, ask questions and seek input if need be. This preconstruction meeting is documented through use of an "Attendance" form. Notes may be taken and shall be filed in the folder with the approved SWPPP. This meeting may be conducted at the location and time most convenient for all parties.

Procedures for Sites working without a permit

If the MS4 designee becomes aware that construction activity is ongoing, but is not permitted, the MS4 designee will issue a Stop Work Order with conditions that allow for erosion prevention and sediment control BMPs as well as necessary stabilization measures to be installed while the owner obtains Land Disturbance Permit coverage.

Then, TDEC should be notified of this situation by supplying the following information to the Knoxville Environmental Field Office:

1. Construction project or industrial facility location;
2. Name of the owner and/ operator;
3. Estimated construction project size or type of industrial activity (including SIC code, if known);
4. Records of communication with the owner or operator regarding filing requirements.

Procedures for Construction Plans Review

When plans are received with the proper application requirements, the project is entered into the department database and assigned a pending permit number.

A Land Disturbance Permit Review Checklist is used during plans review to determine permit compliance.

This checklist outlines the Application Review requirements such as Owner/ developer information, project name, size/ acreage, start and completion dates, ESCP, etc.

This checklist also lists a set of requirements known as the Erosion and Sediment Control Plan Review. This includes but is not limited to such information as check boxes for recognition of priority sites, existing site description, Level 1 Training Certification designee, identification of streams/ wetlands/ sinkholes and their locations, topography requirements, proposed land use descriptions, intended sequence of major events, buffer requirements, site map showing location and details of proposed erosion and sediment controls, run off curve number and calculations, stabilization plan, sediment basin design and location, TDEC Notice of Coverage, steep slope requirements, hot spot site plan requirements, Aquatic Resource Alteration permit requirements, Alternative Sewer Systems, steep slopes, Runoff reduction requirements, etc.

* Note – This department shall not grant a Notice of Coverage for discharges into waters that are designated as “Outstanding National Resource Waters” until the project receives an Individual Permit Notice of Coverage from TDEC.

Each permit review requires a preconstruction site visit to verify such data as: all streams and wetlands that exist on the site are properly located on the ESCP; existing contours, outfalls, roads, structures, and drainage ways are properly located and described in the ESCP; the ESCP accurately describes the existing cover; can the proposed erosion and sediment controls be properly installed and maintained at the site based on the existing and proposed conditions.

Plans are also reviewed for preconstruction and post construction runoff calculations; details and locations of all proposed stormwater facilities; easements to and around permanent stormwater facilities; plans for long term maintenance of stormwater facilities and naming of responsible parties.

If an Aquatic Resource Alteration Permit (ARAP) or any other related state permit is required for a site in areas proposed for active construction, the NOC will not be issued until all necessary state permits are obtained. The treatment and disposal of wastewater (including, but not limited to sanitary wastewater) generated during and after the construction must also be addressed. The issuance of the NOC may be delayed until adequate wastewater treatment and accompanying permits are issued. The inclusion of any such permits in the application shall not prevent the municipality from imposing additional development requirements and regulations of the municipality on the development of property covered by those permits.

Further, where there are outstanding or unpaid civil penalties, pending civil penalty appeals, and/or appeals in any governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8, the permit holder nor his/ her representative(s) may receive any additional land disturbance permit until such time as all civil penalties have been paid in full and all matters have been adjudicated.

Once a project has been permitted, an active permit number is assigned in the MS4 database.

If, for any reason, the Authority determines that an application and the accompanying SWPPP do not satisfactorily meet the provisions of the appropriate ordinance/resolution, within a reasonable time the Authority shall deny the application and shall notify the applicant in writing of all deficiencies/ reasons for denial.

If, once all requirements are met, the Authority issues a permit subject to “Conditional Approval”, then those conditions are detailed in the permit issued.

Procedures for Construction Site Inspection

Inspections are conducted on each active construction site by TDEC Level 1 certified inspectors/ TDEC Level 2 certified inspectors. Each inspection details overall conditions of the site as well as installation, maintenance, repairs, replacement of BMPs as needed. Each inspection is documented on a Site Inspection form **either on the iPad or within the permit software**. Other inspections required by the Construction General Permit (pg. 14) include a quality assurance inspection and a site assessment.

All information from the Site Inspection Sheet is entered into the department database (or approved software) as soon as practical.

Sites where all BMPs including final stabilization have been achieved and are being properly maintained are placed on a bimonthly inspection rotation until a Notice of Termination can be obtained by the developer.

In the event that an inspection reveals a permittee is complying with the SWPPP, but contributing to the impairment/ degradation of a receiving stream, then the discharger will be notified by the Authority in writing that the discharge is no longer eligible for coverage under the general permit. The permittee may update the SWPPP and implement the necessary changes designed to eliminate further impairment/ degradation to the stream. This notification may be through the use of a

Procedures for Permit Amendments

Permitted plans may be need to be modified by either the developer/owner or at the discretion of the appropriate municipality based on the current TDEC Construction General Permit Section 3.4. Where it is determined by the stormwater inspector that the owner/developer significantly deviates from the permitted plan the owner/developer shall be required to file an amended stormwater plan representing “as built” construction as well as proposed new construction along with appropriate adequate sediment and erosion controls.

A permit that has been issued where the owner/developer adds additional potential disturbance to the existing permit the owner/developer shall revise the existing Land Disturbance Permit for the additional property. All necessary forms, fees, review process and approval procedures shall apply.

When the municipality determines that a modification to the approved plans is necessary, the owner/ permittee shall be notified in writing of the necessary modification(s) in order to continue to work under

the existing permit. However, the appropriate municipality may deem it necessary to revoke coverage under the permit until such time as improvements the plan and site can be made. The permittee may update the SWPPP within a reasonable amount of time or MS4 may refer the project to TDEC for review and requirement of an individual permit.

Procedures for Permit Revocation

Where a Land Disturbance permit has been revoked for any reason, a Notice of Revocation shall be issued. A copy of the Notice of Revocation shall be placed in the project file as a permanent record. This notice shall require the owner/developer to submit a written, detailed plan for remediation within 10 business days of revocation. Only activities necessary for mitigation of site deficiencies will be allowed during the revocation period. All other construction activities must cease.

The owner/developer is responsible for submission and execution of the remediation plan.

When such mitigation as the MS4 deems sufficient has been accomplished, a Notice of Re-Instatement shall be issued. A copy of the Notice of Re-Instatement shall be placed in the project file as a permanent record.

Procedures for Transfer of Responsibility

When a Land Disturbance permit has been issued for a property and the property is annexed by another municipality, the Sevier County Land Disturbance permit becomes null and void.

Upon receipt of a written notification of annexation, a Transfer of Responsibility letter shall be issued to advise the permittee of the annexation and the subsequent closing of the permit. The Transfer of Responsibility letter shall contain instructions for permittee to contact the applicable municipality in order to obtain a new permit from said municipality. A copy of the Transfer of Responsibility letter shall be forwarded to the appropriate municipality. A third copy of the Transfer of Responsibility shall be placed in the project file and the approved permitting software shall be updated as necessary.

Procedures for Expired Permits

All Land Disturbance permits that are issued are considered active permits from the date of issuance. Any active permit where construction has not begun within (1) one year from the date of issuance is considered expired. In order to continue under the terms and conditions of the expired permit, a new application form should be filed. No new plans or resubmission of any other forms or paperwork will be required unless plans or permit information have changed.

Procedures for Notice of Termination

Owners or developers seeking a Notice of Termination (NOT) should first file for a NOT with TDEC. When termination has been granted by TDEC, then a local Notice of Termination form may be obtained from the appropriate municipality, completed and returned. A Final Inspection will be scheduled. Once verification of site stabilization has been done and the appropriate forms are on file, the MS4 will sign the NOT granting termination of the local permit.

Procedures for Determining a portion(s) of a site stabilized

Phasing is a requirement on **all** sites and encouraged on others by TDEC. During inspections by the MS4 a portion of the site where grade work has been completed, stabilized and/or re-vegetation efforts have achieved 75% sustainable coverage and no more disturbance is planned for this portion of the site, this portion of the site may be deemed temporarily stabilized and not subject to such stringent inspection requirements for the MS4. **Stabilization shall be initiated within 7 days on priority sites and critical slope developments. Temporary stabilization shall be accomplished with 15 days on non-priority sites after final grading or other earth work has ceased.**

6. MCM – Permanent Stormwater Controls

6.1 BMP – Water Quality Buffer

Objective: Adopt and implement a water quality buffer

Description: All new and redevelopment projects are to be designed to reduce pollutants from post construction runoff to the maximum extent practicable. For design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants. Permanent stormwater control measures (SCMs) shall be designed by a registered engineer or a registered landscape architect to reduce pollutants through management practices, control techniques and systems implemented to the maximum extent practicable.

Frequency: Once

Goals: Vegetated, preferably native, water quality buffers protect water bodies by providing structural integrity and canopy cover, as well as stormwater infiltration, filtration and evapotranspiration.

Metric:

Schedule:

- Year 1 – SCM Inspection and Maintenance training, documentation requirements, conduct live engineer input meeting,
- Year 2 – Conduct live engineer input meeting, adopt regulations, Permit Checklist update, Permit Inspection form update, Construction Final Inspection form update, device inspection procedures, procedures for mapping,
- Year 3 – Issue permits with new requirements
- Year 4 – Continue under new regulations
- Year 5 – Continue under new regulations

Procedures for Buffer Variance Approval

Each municipality has an ordinance/resolution for streamside buffers. These buffers are established at 30 feet from top of bank for all waters of the state including all free-flowing bodies of water such as ponds, lakes, etc. The undisturbed buffer is established at 30 feet from the top of the stream bank.

TDEC has established a 60-foot buffer average over the length of the disturbance on all Exceptional and/or Unavailable Parameters streams from the top of the stream bank.

Each ordinance/resolution allows for a variance to the established buffer requirements. A variance has to prove mitigation that is at least as protective of the natural resources and the environment as the undisturbed buffer.

An application for such variance may be obtained at the appropriate municipal permitting office. This application requires owner information, contractor/ engineer information, address/ location of the property where the variance is needed, size/ acreage of the property, a description of the property before disturbance, a description of the proposed disturbance inside the buffer, the party responsible for installation and inspection of erosion controls, and a detailed statement explaining the justification for the variance.

A site map must also be submitted. Requirements include but are not limited to showing proposed encroachment areas, showing proposed land use such as roads, utilities, structure footprints, drainage structures, etc., within the specified buffer area.

A site stabilization plan shall also be submitted. This includes seeding/ re-vegetation schedules, types of matting or other controls used to help re-establish an annual stand of vegetation and/ or structural stabilization.

The review process of a buffer variance application may take up to thirty (30) days for review of the site. A Buffer Variance checklist shall be used.

Buffer variances are approved by the Sevierville City Engineer, Sevier County Stormwater Management Director, Pigeon Forge Stormwater Appeals Board and/or the Gatlinburg Municipal Board of Appeals.

Once a variance is granted, a Quality Assurance inspection shall be performed by the design engineer to ensure that all work in the buffer meets the variance design.

6.2 BMP – Permanent Stormwater Control Measures (SCM)

Objective: Develop and implement Stormwater Control Measures regulations

Description: TDEC has issued the 2022 iteration of the MS4 permit requiring local programs to adopt new Permanent Stormwater Management requirements.

Responsible Party: Individual municipalities

Frequency: Once

Goals: Continue to require the first one inch of rainfall to be 100% managed with no stormwater runoff being discharged to surface waters.

Metric:

Schedule: Year 1 – Continue under the previous permit
 Year 2 – Continue under the previous permit
 Year 3 – Continue under the previous permit
 Year 4 – Continue under the previous permit
 Year 5 – Continue under the previous permit

6.3 BMP – BMP Maintenance

Objective: Establish and manage regulations requiring perpetual maintenance of all BMPs and SCMs that have been designed to be installed per the approved site plan on all permitted sites.

Description: Where BMPs/SCMs are installed, the owner(s) is required to maintain proper function of the facility/device perpetually. To ensure maintenance is performed, the MS4 will require a Maintenance Agreement addressing maintenance requirements. This Agreement must allow the MS4 or its designee to conduct inspections of the stormwater BMPs/SCMs. This Agreement must be recorded at the Sevier County Register of Deeds office to assure transfer of accountability for maintenance. When maintenance of BMPs/SCMs are completed, verification of maintenance may be required if requested by the MS4.

Responsible Party: Co-permittees

Frequency: As Applicable

Goals: NOI Compliance

Metric:

Schedule: Year 1 – Approval of a Maintenance Agreement
 Year 2 – Require recording of Maintenance Agreements
 Year 3 – Require recording of Maintenance Agreements
 Year 4 – Require recording of Maintenance Agreements
 Year 5 – Require recording of Maintenance Agreements

6.4 BMP – Mitigation Program

Objective: Develop a permanent stormwater mitigation program

Description: To Be Determined

Responsible Party: Co-permittees

Frequency: Once

Goals: A mitigation program is to be determined.

Metric:

Schedule: Year 1 – To Be Determined
 Year 2 – To Be Determined
 Year 3 – To Be Determined
 Year 4 – To Be Determined
 Year 5 – To Be Determined

Procedures for Permanent Stormwater Construction Runoff Control

Permanent Stormwater runoff management is addressed in each municipal ordinance/resolution. Permanent stormwater system designs shall seek to maintain pre-development conditions through the use of structural and non-structural BMPs/SCMs described in the current TDEC Sediment Prevention and Erosion Control Manual and the current Tennessee Permanent Stormwater management and Design Guidance manuals. The design plan should incorporate ways to minimize the percent of impervious surfaces after development, protect sensitive areas such as wetlands and riparian areas. It should include structural BMPs/SCMs which provide infiltration and storage, and inspection and maintenance plans for facilities. The stormwater management plan shall include sufficient information to allow the MS4 to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site (both present and future) on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the site. The plan shall be sealed by a registered professional engineer licensed in the state of Tennessee.

Post construction standards are based on proven engineering standards and plans developed by licensed engineers and quality engineering practices. Evaluation of such best management practices shall be subject to observation and scrutiny by MS4 inspections and performance evaluations conducted as deemed necessary by the appropriate municipality.

Procedures for a Permanent SCM Maintenance Plan

A maintenance plan shall be included in the swppp by the design engineer specifically for the SCM and shall include:

1. A brief description of the type of SCM and/ or treatment features
2. A periodic inspection schedule
3. An inspection description describing the evaluation of the effectiveness of the SCM
4. Detailed maintenance and repair procedures to ensure continued performance. These plans will identify parts or components of the SCM that need to be maintenance and the equipment and skills or training necessary.

7. MCM – Good Housekeeping

7.1 BMP – Municipal Employee Training

Objective: Implementation of an operation and maintenance plan that will prevent or reduce pollutant runoff from municipal operations.

Description: The MS4 must consider the following in developing the program: maintenance activities, maintenance schedules, long-term inspection procedures for structural and non-structural stormwater controls to reduce floatable and other pollutants discharged from the municipal separate storm sewer system; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/ sand storage locations and snow disposal areas operated by the MS4, waste transfer stations, procedures for properly disposing of waste removed from separate storm sewer systems and areas listed above (such as dredged spoil, accumulated sediments, floatable, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices.

Responsible Party: Co-permittees

Frequency: Daily

Goals: Develop employee training to prevent and reduce stormwater pollution from activities such as municipally owned golf courses, solid waste transfer station, fleet and building/public works maintenance, solid waste convenience centers, new municipal construction, and storm sewer system maintenance.

Metric: track # of employees receiving newsletters, payroll stuffers, employee training

Schedule:

- Year 1 – Continue training for employees annually
- Year 2 – Continue training for employees annually
- Year 3 – Continue training for employees annually
- Year 4 – Continue training for employees annually
- Year 5 – Continue training for employees annually

Sevier Stormwater Group will prepare SWMPs for municipal facilities. A copy of the SWMP will be given to the department head for internal use. The plan will include a site map identifying drainage, outfall(s), areas in need of protection, material storage areas, as well as emergency numbers and contact information in the event of an illicit discharge. A copy will be maintained by the MS4.

Sevier Stormwater Group will conduct an annual inspection of each facility and report findings to the appropriate department employees with recommendations based on deficiencies identified (if any) along with annual training.

Corrective Action Plan for deficiencies notes in municipal inspections

1. A facility inspection will be completed and given to the facility department head.
2. The inspection report with deficiencies will require follow up inspection within 30 days and the 2nd inspection report will be forwarded to the department head supervisor.
3. Deficiencies that are still unresolved/not corrected will be forwarded to Administration.

Appendix A – PIE Plan

The PIE Plan is required to address 8 groups of target audiences specified in the current Municipal Separate Storm Sewer System (MS4) permit language. Each target audience must have an education message, a method of delivery and a metrics to evaluate effectiveness of the material. The revised PIE Plan has identified each target audience, a list of applicable education materials and a metrics to be used to gather statistics and data.

A. General public awareness of the impacts on water quality from general housekeeping maintenance/activities;

Proposal – Water quality impacts and potential impacts will be posted to Facebook

Metrics – We will count the number of hits per post

B. Home owner association and other operators of permanent BMP's of the importance of maintenance activities;

Proposal – HOA bmp maintenance material will be distributed while conducting inspection/re-inspections.

Metrics – We will count the number of handouts and detail repairs as needed

C. Local engineering and development community awareness of the stormwater ordinances, regulations, and guidance materials related to long-term water quality impacts;

Proposal – Preconstruction meetings will be conducted and education conducted during the preconstruction meeting

Metrics – An email survey with general permanent stormwater knowledge each June

D. General public and professional chemical applicators awareness on the proper storage, use, and disposal of pesticides, herbicides, and fertilizers;

Proposal – This target audience will be reached by mailers

Metrics – The mailer will have contact information as well as facebook page information where they will be asked to please respond to the mailer through their choice of contacts – mail/email/facebook and numbers will be counted

E. General public and related commercial and professional stakeholders awareness on the proper storage, use, and disposal of oil and other automotive-related fluids;

Proposal – Handouts, mailers will be sent out as the business is mapped as a hot spot

Metrics – Numbers will be counted based on the number handouts distributed

F. General public and municipal employees on the awareness on identifying and reporting procedures for illicit connections/discharges, sanitary sewer seepage, spills, etc.;

Proposal – Education trainings are being conducted, IDDE facebook posts are being sent out, IDDE posters are being given out

Metrics – Numbers will be counted and totaled collectively

G. Local engineering, development, and construction community awareness of stormwater ordinances, regulations and guidance materials related to construction phase water quality impacts;

Proposal – Inspection sites are already being conducted. During inspections contractors and subcontractors will be educated in water quality impacts

Metrics – Names will be added to the inspection sheet along with the trade details and numbers will be counted

H. Municipal employee/contractor awareness of water quality impacts from daily operations.

Proposal – Education presentations will be conducted annually

Metrics – sign-in sheet names will be counted

TDEC suggested a link from each stormwater web page to the joint use facebook page. Our goal is to draft a biography of the stormwater program with contact information, and links back to each stormwater web page as well.

Public School Education – Elementary school education has been a backbone of this public education program. Classroom education has been accomplished by partnering with Keep Sevier Beautiful to reach 2nd and 4th grade students county wide. Other events such as Earth Day and Farm Days are also annual education events. All of these programs and events will require a method and metrics for effectiveness evaluation.

Public Involvement -

Permittees shall implement a public involvement and participation program that involves developing methods for promoting public participation in stormwater-related events and facilitating opportunities for citizen involvement (TDEC permit language). This has been accomplished by sponsoring and participating in a variety of cleanup events with Keep Sevier Beautiful such as Roads and Rivers spring and fall events, Haz Mat Day, Spur Cleanup Day, Project Restore clean up events, as well as advertise these events via social media for public participation opportunities.

B – Illicit Discharge Detection and Elimination Plan

1. System Mapping
2. Dry weather screening
3. Monitoring Results (may include sampling, visual assessment data, TDEC data, etc.)
4. Prioritize data based on population, recreational use/ activity, sewer availability, watershed characteristics and type of pollutant or discharge.
5. Target highest priority sites for elimination.
6. Target highest priority stream sheds for education materials
7. Tracking of data for discharges eliminated will be accomplished through a database.
8. Tracking of remaining data will be accomplished through the same database for comparison and historical improvement documentation.
9. All Illicit Discharge complaints must have investigations initiated within 7days.
10. The plan to eliminate identified illicit discharges should be completed within 90 days of the initial report.

Appendix C – Bonding

Procedures for requiring a bond

A form of surety (bond or letter of credit referred to as  bond) is typically requested by the owner, developer or engineer for a project. Bonds may be accepted by the MS4 for final stabilization only unless specified by the individual co-permittee. No bond will be accepted for stormwater infrastructure (detention ponds, permanent sediment traps, tiles or drainage to be installed in unconstructed roads, SCMs, etc.) Final stabilization efforts such as rip rap, down slope drains, vegetation, matting, sodding, etc., may be bonded for Sevier County, Sevierville and Gatlinburg. Pigeon Forge will allow the entire development to be bonded.

Bond calculations will be performed by the developer and/ or engineer and shall include materials, labor, oversite and overhead/ supervision as well as “as built” fees, ongoing construction inspections, and final inspections.

Bonds are typically issued for 12 months unless otherwise specified by the institution issuing the bond. At maturity, the bond must be re-issued, allowed to expire or “called in” (collected). Renewing a bond may be done by request from the lending institution, the owner, engineer, or the MS4. Notification of the intent to renew a bond may be made in person, via phone, or in writing.

“Calling in” (collecting) a bond is accomplished by written request from the MS4 to the lending institution requesting release of the funds to the MS4 for the sole purpose of completion of final stabilization of a construction site. The funds received shall be for deposit directly into the government account (general fund in most cases). Funds shall be distributed at the request of the Stormwater Official at the appropriate municipality having jurisdiction for contractor payment for required final stabilization of the construction site.

A bond may be released when a final inspection is complete documenting final stabilization and any other stipulations made within the bond are accomplished. The bond number and date released shall be noted in the final inspection and kept with the permit. A written notification to the owner may be made but is not required upon release. The bond may simply be allowed to mature and expire as an acceptable means of releasing a bond in the eyes of the lending institute.

Appendix D – Enforcement Response Plan

I. Enforcement Authority

The Sevier Stormwater Group ordinance/resolution gives the following:

(1) Enforcement authority

- (a) The MS4 “through its Inspector and other agents shall have the authority to issue notices of violation and to enforce the provisions” of this Ordinance/Resolution/Municipal Code.

All Illicit Discharge complaints must have investigations initiated within 7days.

II. Enforcement Continuum – “Progressive Enforcement”

The Sevier Stormwater Group ordinance/resolution establishes:

(1) Enforcement authority...

- (b) Enforcement procedures follow a standardized progression of events that are collectively known as a force continuum to be applied by the Inspector and all other authorized agents. Each enforcement action shall be based on its own merit and all steps of this continuum, therefore, may be bypassed based on the (1) discretion of the Inspector, (2) egregiousness of violation, (3) amount of discharge, (4) damage to public or private property, (5) number of previous violations, (6) and any other pertinent circumstances.

- (c) The establishment of this continuum shall include but not be limited to:
 - (i) Site inspection;
 - (ii) Verbal or written notice of inspection findings and corrective actions suggested;
 - (iii) Follow up inspection;

- (iv) Notice of Violation, Compliance Order, or Consent Order;
- (v) Cease and Desist Order or Stop Work Order;
- (vi) Withholding of Plans Approvals or Other Authorizations
- (vii) Civil penalty assessment;
- (viii) Suspension or revocation of permit

ii. Verbal warnings as well as written notices may be conducted at the site with contractors, may be conducted through phone contact with contractors, engineers, developers and/ or the property owner. This contact is left to the discretion of the municipality responsible for the inspection. Such contact should specify the nature of the violation(s) and the corrective actions suggested.

iv. A Notice of Violation should stipulate the nature of the violations(s) and the required corrective actions to be taken as well as a deadline for actions to be taken. Compliance Orders and Consent Orders will be issued following a Compliance Review Hearing. These Orders will specify violations addressed in the Hearing as well as the corrective actions that have been agreed to by all parties. These Orders will also stipulate deadlines for actions to be taken.

v. Cease and Desist Orders and Stop Work Orders may be issued requiring construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures, or any other actions allowed by the discretion of the Authority.

vi. Withholding of Plans Approvals or Other Authorizations - Where a facility is in non-compliance, the ERP may address how the permittee's approval process affecting the facility's ability to discharge to the MS4 can be used to abate the violation.

vii. The Sevier Stormwater Group ordinance/resolution gives the following:

(1) Any person or entity that violates the provisions of this Resolution shall be subject to a civil penalty of not less than fifty dollars (\$50.00) or more than five thousand dollars (\$5,000.00) per day for each day of violations. Further, the MS4 shall also be entitled to recover damages caused to the appropriate municipality or the MS4 by such violations.

(2) The Inspector in assessing a civil penalty may consider the following factors:

- (a) The harm done to the public health or the environment;
- (b) Whether the civil penalty imposed will be substantial economic deterrent to the illegal activity;
- (c) The economic benefit gained by the violator;
- (d) The amount of effort put forth by the violator to remedy this violation;
- (e) Any unusual or extraordinary enforcement costs incurred by the municipality;
- (f) The amount of the penalty established by ordinance or resolution for specific categories of violations; and

(g) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(h) Repeat offenses – see Chronic Violators below

III. Other Remedies

The Sevier Stormwater Group ordinance/resolution gives the following:

The municipality may bring legal action to enjoin the continuing violation of this ordinance, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

The inspector may prosecute the alleged violator of this Ordinance/Resolution criminally in General Sessions Court of Sevier County pursuant to TCA 5-1-123. Any appeal of criminal convictions shall be made through the Circuit Court of Sevier County.

Whenever any civil penalty and/or damage assessment has become final, the appropriate municipality may apply to the Chancery Court of Sevier County for a judgment and seek execution of such judgment.

In addition to other remedies the Inspector shall have the authority to file for injunctions and other appropriate relief to abate the violation of this Ordinance/Resolution or the provisions of any permit issued thereunder in the Chancery Court of Sevier County.

The remedies set forth in this Section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

IV. Referrals to TDEC

For land disturbance activities that are ongoing where no Notice of Coverage has been issued by the MS4 and the project has not received coverage under the state NPDES permit, Sevier Stormwater Group ordinance/resolution states the following:

(1) Land disturbance activities...

(e) If the Authority becomes aware that construction activity is ongoing, but is not permitted, the Authority must notify TDEC of this situation by supplying the following information to the Knoxville Environmental Field Office:

- (i) Construction project or industrial facility location;
- (ii) Name of the operator or owner;
- (iii) Estimated construction project or size or type industrial activity (including SIC code, if known);
- (iv) Records of communications with the owner or operator regarding filing requirements.

If the Authority has not been able, through its enforcement mechanisms and protocol, to bring a permittee into compliance with the MS4's stormwater resolution, then the Authority must notify TDEC, at the local EFO, of the situation. In making such referrals, the Authority must provide, at a minimum, the following:

- (i) Construction project or industrial facility location;
- (ii) Name of the operator or owner;
- (iii) Estimated construction project or size or type industrial activity (including SIC code, if known);
- (iv) Records of communications with the owner or operator regarding the violations including at least two follow-up inspections, two warning letters or notices of violation, and any response from the owner or operator.

V. Enforcement Tracking

The Authority must track instances of non-compliance either in paper files or electronically. The enforcement case documentation must include, at a minimum, the following:

- (i.) Name of owner/ operator
- (ii.) Location of construction project or industrial facility
- (iii.) Description of violation
- (iv.) Required schedule for returning to compliance
- (v.) Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner
- (vi.) Accompanying documentation of enforcement response (e.g. Verbal or Written Notices of Non-compliance, Notices of Violation, etc.)
- (vii.) Any referrals to different departments or agencies
- (viii.) Date violation was resolved

VI. Chronic Violator Limitations

Where there are outstanding or unpaid civil penalties, pending civil penalty appeals, existing documented non-compliance issues and/or appeals in any governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8, neither the permit holder nor his/ her representative(s) may receive any additional land disturbance permit related or unrelated until such time as all civil penalties have been paid in full and all matters have been adjudicated. All violations must be documented and tracked until compliance is achieved.

VII. Civil Penalties

Procedures for Issuing Civil Penalties

When considering the issuance of civil penalties, each violation shall be considered separately (e.g. If silt fencing is failing, each **documented** site visit where silt fencing is failing is a separate violation). The Sevier Stormwater Group uses the Civil Penalties Reference Scale sheet to document violations.

The Civil Penalties Reference Scale sheet is used to document each violation and determine the civil penalty to be assessed. Details such as date/time, description of the violation, number assigned for repeat violation factors, mitigation factors, etc. shall be assigned. The penalty scale value will then be determined for each violation.

All civil penalties are then transferred to the Civil Penalties Summary Sheet. This summary is used to determine the amount of penalties assessed and the amount of penalties if any that will be considered contingent. This summary sheet also gives areas for consideration for mitigation efforts already made whereby some or all penalties may be set aside.

Another crucial part of the Civil Penalty Summary Sheet is the detailed list of contingency requirements that must be met by a specified review date to allow for contingent penalties to be set aside or included in the overall enforcement.

The Civil Penalties Summary Sheet shall be issued along with an official notice detailing penalties, contingencies, damage assessments and a set review date. TCA 68-221-1106 states that notification by "... any legal means..." shall serve as an official notice. The official notice letter shall be issued to the owner of the property that is listed on the permitted land disturbance application. It is the responsibility of the property owner to keep permit information current and correct. The official notice shall also include appeals process information for violators.

A follow up site inspection shall be made at a minimum of 30 days after the Civil Penalties are issued to allow sufficient notification time and response time by the owner. However, the person/ persons receiving penalties and or damage assessments only have 30 days from the verified receipt of official notification to file an appeal. After 30 days the penalties are final.

Damage assessments are also detailed in the Civil Penalty Summary sheet. Damage assessments are to be included on all civil penalty cases where civil penalties assessed total over \$5000.00.

Damage assessments procedures are given in this manual chapter XVII.

VIII. Damage Assessments

Procedures for Damage Assessments

Damage assessments shall include in an itemized form, but not be limited to:

5. dollar amount - numbers of hours at an hourly rate to be determined
6. dollar amount - number of miles at the current standard mileage rate
7. dollar amount - number of hours for equipment at an hourly rate
8. dollar amount – cost of cleanup materials
9. other agency documented expenses
10. any reasonable expenses incurred in the investigation and enforcement

Damage assessments shall be included in all enforcement procedures where civil penalties exceed \$5000.00.

Where civil penalties do not exceed \$5000.00, inclusion of damage assessments shall be at the discretion of the Stormwater Director.

An itemized copy of the damage assessments shall be included in the enforcement procedures. A second itemized copy shall be placed in the project file as a permanent record.

IX. Appeals

Procedures for the Appeals Hearing

Appeals shall be made to the Sevier County BZA, the Sevierville City BZA, the Pigeon Forge Stormwater Appeals Board, or the Gatlinburg Municipal Board of Appeals respectively.

- (1) A person or entity who incurs a civil penalty, damage assessment or other order, decision or determination ruling from the appropriate municipality shall have the right to appeal.
- (2) The appellant shall file a written appeal with the respective municipality within thirty (30) days after the civil penalty, damage assessment or other order or ruling has been issued. An appeal filing deadline is established at a minimum of ten (10) working days prior to the next hearing or stated periodic meeting. This filing deadline will also be used by all MS4 established appeals boards as the deadline for notification of board members as well as the necessary public notice deadline.
- (3) Each municipality shall make available the applicable appeal applications to each appellant.
- (4) The appellant shall file appropriate appeals documents such as appeal applications accompanied by a checklist (if required by the municipal department).
- (5) The appellant shall pay the appeals fee to the appropriate municipality upon filing an appeal. This fee is for public advertisement of a public hearing and is non-refundable.
- (6) The municipality shall promptly present the appellate documents to the Board.
- (7) The Board shall schedule a hearing for the appeal within thirty (30) days after receiving the appellant documents from the municipality, or at the stated periodic meeting.
- (8) Once a ruling has been issued by the Board, an appellant who is not satisfied with the ruling may by law file an appeal in any governing body pursuant to the provisions of TCA tile 27, chapter 8.

Appendix E – Monitoring Plan

The Sevier Stormwater Group MS4 has chosen to develop an Option 2 monitoring plan for the 2022-2026 permit cycle. This co-permittee has evaluated the streams indicated on the TDEC GIS map and concluded that more streams are listed as having unavailable parameters for ecoli than any other source of impairment.

Option 2

The permittee may develop a jurisdiction-specific monitoring plan as an alternative to the plan identified in Option 1 (subpart 4.6.1.1.1). The jurisdiction-specific monitoring plan must be designed to meet, at a minimum, the following objectives:

- a. Measure the effectiveness of the permittee's Stormwater Management Program;
- b. Evaluate stormwater impacts to the receiving waters;
- c. Identify sources of specific pollutants, including nutrients, pathogens, siltation or other parameters related to stormwater discharges from the MS4 System;
- d. Gather data to inform program decisions and prioritization of future activities related to the protection of water quality; and
- e. Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring.

When developing the alternative monitoring plan, the permittee must examine and consider a variety of factors, including, but not limited to, land use conditions, stream status/characteristics, and utilization of monitoring results. The alternate plan must contain:

- a. A justification for the stream selection(s);
- b. Identification and source determination of pollutant(s) of concern;
- c. Monitoring details;
- d. Records requirements;
- e. Description of how MS4 will evaluate stormwater impacts to receiving waters;
- f. Description of how data will be gathered to inform program decisions and prioritization of future activities related to the protection of water quality;
- g. Acknowledgement that division protocols will be used for instream monitoring or alternative protocols for division approval; and
- h. Provisions for an administratively continued small MS4 general permit.

A proposed Option 2 plan must be submitted to the Nashville Central Office at Water.Permits@tn.gov within 24 months of the effective date of this permit for review and authorization. The permittee must submit any revisions requested by the division within 30 days of being notified. The plan must be implemented upon written authorization and completed by the end of the permit cycle.

2. Justification –

The Sevier Stormwater Group (having successfully completed all analytical monitoring requirements for the permit issued 2010-2015) has developed a baseline for water quality for all streams identified by the Division with unavailable parameters (impaired) due to pathogens (E. coli specifically) where the MS4 was indicated to be a source. With this data in hand, the Sevier Stormwater Group has collected data, developed resources and been very successful at bringing in a variety of stakeholders for collaboration.

The results have been that Sevier Stormwater Group, working with TDEC Water Resources and other stakeholders were able to show data and historical documentation of much of the work that was done to be able to de-post streams from the 305b Report, The Status of Water Quality in Tennessee. Four other streams (tributaries to the West Prong of the Little Pigeon River) Holy Branch, Roaring Fork, Gnatty Branch and Kings Branch have also been removed from the 303d list in the last ten years. The Sevier continued to sample TDEC unassessed streams during the last permit cycle. Several streams were identified to be minor contributing sources of ecoli to the West Prong of the Little Pigeon River.

During the 2016-2021 permit cycle, two HUC twelve watersheds within Sevier County that cross multiple co-permittee jurisdictional boundaries have had all major stream tributaries mapped as contaminated by ecoli. Middle Creek HUC twelve has had all major tributaries now listed as unavailable for ecoli. Birds Creek has had all major tributaries listed as unavailable as unavailable parameters for ecoli in what the MS4 thinks was to help with a grant for Gatlinburg to obtain a grant to install sewer service form Caton's Chapel School to help replace a failing decentralized system on school property. These streams along with segments of Gist Creek will be the main focus of the Option 2 monitoring plan for the current permit cycle.

The Sevier Stormwater Group has demonstrated the ability to develop and implement a monitoring plan that has already been a great benefit to the community as well as demonstrated a proficiency understanding;

1. The risk to the general public especially for recreational usage;
2. The potential for commercialization of the West Prong in areas that may have high E. coli counts;
3. The large number of unassessed tributaries that may have significant E. coli source influence;
4. The cross-jurisdictional cooperation that has already been fostered; and
5. A strong water quality improvement awareness and momentum.

The Sevier Stormwater Group believes there is sufficient justification for developing an alternative analytical monitoring plan.

3. Identification of the pollutant(s) of concern –

E.coli (*Escherichia coli*) is the main pollutant of concern for bacteriological sampling for the proposed permit cycle.

4. Monitoring Details –

TDEC Quality System Standard Operating Procedures for Chemical and Bacteriological Sampling of Surface Water (2018) was implemented.

Year 1 – 2022-23 The MS4 will conduct sampling 5/30 of TDEC mapped red streams where the pollutant is identified as ecoli and the MS4 is listed as the source.

Year 2 – 2023-24 The MS4 will continue to conduct ecoli monitoring on TDEC mapped grey (unassessed) streams. The stream segments and sampling results will be included in the annual report.

Year 3 – 2024-25 The Ms4 will conduct source tracking for the streams identified and prioritized based on the last year and historic general sampling. Source tracking will be completed by stream sampling, and then visual assessments based on the Maryland Stream protocol. Documentation will be included in the annual report.

Year 4 – 2024-25 The MS4 will continue to conduct ecoli monitoring on TDEC mapped grey (unassessed) streams. The stream segments and sampling results will be included in the annual report.

Year 5 – 2025-26 The Ms4 will conduct source tracking for the streams identified and prioritized based on the last year and historic general sampling. Source tracking will be completed by stream sampling, and then visual assessments based on the Maryland Stream protocol. Documentation will be included in the annual report.

5. Measure the effectiveness of the Stormwater Management Program –

The data collected will be used to demonstrate stream segment influence to the West Prong of the Little Pigeon River, Middle Creek, Birds Creek and Gist Creek. This data will serve to set a basic understanding of the whole Lower French Broad River HUC 10, and help locate previously unknown ecoli sources within the tributaries, and to allow source tracking and point source as well as non-point source elimination to improve water quality.

6. Description of how the MS4 will evaluate Stormwater impacts to receiving waters –

The proposed watershed approach will shed light on water quality in low flow/ high temperature conditions during summer months. This constraint will also bring in high intensity/ short duration storms that can greatly vary bacteriological counts during sampling.

7. Description of how data will be gathered to inform program decisions and prioritization of future activities.

The data will be analyzed each year based on 5/30 ecoli counts. The highest ecoli count streams will be the first streams to be source tracked on the next permit year. All stream monitoring data will be included in the annual report. Streams that are determined to meet water quality standards will be monitored the next year to establish documentation and added to the annual report. All data collected will be analyzed by the City of Pigeon Forge Water Department state approved lab. All samples collected will utilize the 2018 SOP for Chemical and Bacteriological Sampling of Surface Waters.

8. Acknowledgement that division protocols will be used

Sevier MS4 co-permittees will follow the 2018 SOP for Chemical and Bacteriological Sampling of Surface Waters.

9. Provisions for administratively continued MS4 permits

If the small MS4 permit cycle extends beyond the designated time, the MS4 will continue to monitor streams and conduct source tracking and visual assessments until the watersheds identified are completely documented.