# COMPREHENSIVE STORMWATER MANAGEMENT PLAN

# For THE TOWN OF ELON

**JUNE 2017** 

REV. DECEMBER 2020

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#### **DEFINITIONS**

BMP – Best Management Practice also known as a Stormwater Control Measure

DEMLR - Division of Energy, Mining, and Land Resources

DEQ – Department of Environmental Quality (formerly DENR)

EPA – Environmental Protection Agency

Illicit Discharge – Any discharge to an MS4 that is not entirely composed of stormwater. Exceptions include discharges from NPDES-Permitted industrial sources and discharges from fire-fighting activities

MS4 – Municipal Separate Storm Sewer System. A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins curbs, gutters, ditches, manmade channels, or storm drains)

NPDES - National Pollutant Discharge Elimination System

SCM - Stormwater Control Measure

TMDL – Total Maximum Daily Load

#### 1 STORM SEWER SYSTEM INFORMATION

Population Served: 10,532 (2016 estimate from the NC Office of Budget & Management)

Annual Growth Rate: 11.9%

Jurisdictional and MS4 Service Areas: Jurisdictional area: 3.81 square miles,

MS4: 3.81 square miles

#### 1.1 MS4 Conveyance System

The Town of Elon MS4 consists of a combination of storm drain piping, roadside ditches, and sheet flow. New developments are required by Town ordinance to have curb and gutter drainage systems except low density projects that can have grass lined drainage ditches and swales. High density developments are required to treat the first 1" of runoff from the developed property. Town streets are maintained by the Town's Public Works Department. State roads are maintained and managed by NCDOT.

#### 1.2 LAND USE COMPOSITION ESTIMATES:

Residential: 46.79%

Commercial: 30.23%

Industrial: 1.45%

Open Space: 21.53%

#### 1.3 ESTIMATE METHODOLOGY:

The land use estimate was based on the zoning within the jurisdictional area as of June 2009. The Piedmont Triad Council of Government's GIS system provided the zoning data, and includes the right-of-way areas.

#### 1.4 TMDL IDENTIFICATION

There are no receiving streams within the Town of Elon's watershed that are identified as TMDL designated.

## 2 RECEIVING STREAMS

Table 1. Cape Fear River Basin

Receiving Stream Name	Stream Segment	Water Quality Classification	Use Support Rating	Water Quality Issues
Dry Creek	16-13	WS-V; NSW	1	NA
Gunn Creek	16-19-7	WS-V; NSW	1	NA
Unnamed Tributary to Dry Creek (Joins Dry Creek north of Town's ETJ)	16-19-7	WS-V; NSW	1	NA
Michael's Branch	16-19-5-1	WS-V; NSW	1	NA
Unnamed Tributary to Travis Creek (Cable Branch)	16-12	WS-V; NSW	1	NA

<sup>&</sup>lt;sup>1</sup> Aquatic life and secondary recreation, fish consumption

#### 3 EXISTING WATER QUALITY PROGRAMS

#### 3.1 LOCAL PROGRAMS:

The Town has a Stage 1 Adaptive Management Program for Existing Development in the Jordan Lake Basin. The Stage 1 Adaptive Management Program is very similar to the NPDES Phase II Program and is part of a Jordan Lake Watershed Nutrient Sensitive Waters Strategy.

#### 3.2 STATE PROGRAMS:

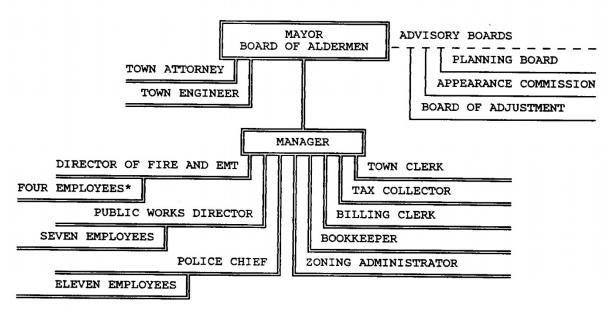
None

## 4 PERMITTING INFORMATION.

Table 2. Responsible Contacts

Position	Name	Phone No.	Fax No.	Email
Town Manager	Richard Roedner	336-584-3601	336-584-5334	rroedner@elon.gov
Asst., Town Manager/Town Planner	Pam Desoto	336 584-3601	336/584-5334	pdesoto@elon.gov
Town Special Events Coordinator (SEC)	Phyllis Creech	336/449-9255	336/584-5334	pcreech@ci.elon.nc.us
Town Clerk	DiAnne Enoch	336/584-3601	336/584-5334	denoch@elon.gov
Town Engineer	Josh Johnson	336/226-5534	336/226-3034	josh@awck.com
Town Public Works Director	Donnie Wood	336/584-9600	336/584-8307	dwood@elon.gov
Town Attorney	Joe Kalo	336/584-3388		Joe.kalo@wnhplaw.com

## TOWN OF ELON COLLEGE ORGANIZATIONAL CHART



<sup>\*</sup>There are approximately 32 volunteer firemen under the direction of the Elon College Volunteer Fire Department Board of Directors.

Signing Official: Town Manager - Richard Roedner

Duly Authorized Representative: NA

## COMPREHENSIVE STORMWATER MANAGEMENT PROGRAM REPORT TOWN OF ELON

## 5 CO-PERMITTING INFORMATION

Not applicable

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#### 6 RELIANCE ON OTHER GOVERNMENT ENTITY TO SATISFY ONE OR MORE PERMIT OBLIGATIONS

The Town of Elon will rely on the State Erosion and Sediment Control Program and the Department of Water Quality's general stormwater permit program for construction activities to meet the construction site stormwater runoff control requirement. There are no legal agreements in place to establish responsibilities.

The Town also contracts with the Piedmont Triad Regional Council's Stormwater Smart program. The program handles most of the Town's educational responsibilities.

#### Contact Information:

NC Sedimentation and Erosion Control Program
Winston-Salem Regional Office
Matthew Gantt, P.E.
450 West Hanes Mill Road, Suite 300, Winston-Salem, NC 27105-7407
336/771-4800

Piedmont Triad Regional Council Stormwater Smart Danica Heflin 1398 Carrollton Crossing Drive, Kernersville, NC 27284 (336) 904-0300

#### 7 STORMWATER MANAGEMENT PROGRAM

#### 7.1 Public Education and Outreach on Storm Water Impacts

## 7.1.1 BMP Summary Table

ВМР	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
Maintain an education plan	Maintain education plan. Include in Plan the BMPs, schedule, targeted audiences, and measurable goals. Summarize plan and implementation progress in each annual report.	Х	Х	X	X	Х	Town Planner Town Engineer Town SEC
School Programs	Maintain school children education program. Focus on basic messages regarding clean water and the things they can do at home to help. Track the number of children reached and the subject covered and report annually.	х	х	х	х	х	Town Planner Town Engineer Town SEC
Mailers, brochures, posters	Distribute bilingual mailer for insert in utility bills. Distribute bilingual brochures and posters for distribution at Town Hall. Target homeowners and businesses with messages about how they can reduce pollution picked up by stormwater. Track number of homes and businesses reached by mailer and report annually.		X	х	Х	х	Town Planner Town Engineer Town SEC
Town's web page	Link to other stormwater websites. Give tips on reducing pollution. Report annually.	Х	Х	Х	Х	Х	Town Planner Town Engineer
Festivals, parades, local fairs	Participate in local festivals annually by providing a stormwater information booth starting. Provide bilingual messages on the importance of clean water and on specific activities that can be carried out to help keep stormwater clean.	х	х	Х	х	х	Town Planner Town Engineer Town SEC
Business and Industry education and outreach	Maintain program for educating business and industry using brochures or pamphlets and report annually on number of businesses reached and number of employees educated. Focus on workplace issues to reduce pollutant loading. Target hot spot businesses.		х		х		Town Planner Town Engineer Town SEC
Helpline / Hotline	All stormwater related calls will be forwarded to the Town Planner who will then distribute the information to other employees.	х	х	х	х	х	Town Planner

## 7.1.2 Target Audience

Elon residents, school children, local businesses (including gas station owners and landscaping companies) and industry, will be targeted because these groups have the most impact on stormwater pollution prevention.

#### 7.1.3 Target Pollutant Sources

The education program will target total suspended solids and nutrient loading because turbidity, sedimentation, and nutrients are the pollutants of concern in downstream waters. In addition, floatables, trash, and debris will also be targeted. The education program will also address the proper use and disposal of typical household chemicals, garden chemicals, and used motor oil.

#### 7.1.4 Outreach Program

School programs, printed materials to be distributed via mail and public events, and participation in state cleanup programs will be used to reach the target audience. By using these methods, the education program will be expected to reach all residents of Elon, as well as those that do business here, over the course of the five year permit period. As a result of this outreach program, the target audience will be informed of the importance of reducing storm water pollution and ways they can incorporate pollution reduction in their daily lives.

Direct Education was chosen over mass media due to availability of the cooperative stormwater education program, Stormwater Smart, and due to studies showing the effectiveness of direct education over mass media.

#### 7.1.5 Decision Process

The formation of the storm water public education and outreach program was based on the mechanisms currently in place, and their means and effectiveness of communicating and educating the public about the issues of stormwater pollution prevention. Each of the BMP's selected was judged to be an effective and economical tool for educating the general public and/or specific groups within the community, with a specific measurable goal with which to gauge its effectiveness.

#### 7.1.6 Evaluation

The education and outreach program will be evaluated based on how each individual BMP is meeting its measurable goal at the end of each reporting period. Changes will be considered for any BMPs that are not meeting the measurable goals.

#### 7.2 Public Involvement and Participation

## 7.2.1 BMP Summary Table

ВМР	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
Public Meeting	A public meeting will be held annually to discuss the implementation of the permit beginning in year 2. This meeting will provide the public with the opportunity to be involved with the stormwater program and will serve as a better conduit for public input than the stormwater committee used previously. More meetings may be held if public involvement is substantial.		х	Х	х	х	Town Planner Town Clerk Town SEC
Volunteer Stormwater Program	The Town will promote various volunteer stormwater programs annually. These will include Big Sweep, Adopt-A-Stream programs, and Storm Drain Stenciling. The number of participants will be reported annually.	Х	Х	Х	Х	Х	Town SEC Town Planner
Helpline / Hotline	All stormwater related calls will be forwarded to the Town Planner who will then distribute the information to other employees.	X	Х	Х	Х	Х	Town Planner

#### 7.2.2 Target Audience

The Town's stormwater committee will be discarded in favor of an annual public meeting. The public meetings will allow the public an opportunity to review the stormwater management program and will target all interested and affected members of the Elon community. Additional meetings may be held if public involvement is substantial.

The Town's committee was ineffective in soliciting widespread public input.

#### 7.2.3 Participation Program

The public was originally involved in the development of the stormwater permit and management program through a public hearing in 2005. Public participation opportunities will be implemented throughout the life of the permit through the Volunteer Stormwater Programs and the Annual Public Meeting.

#### 7.2.4 Decision Process

A public meeting is necessary for public participation and input. The other BMPs were selected to give the public a choice of both active and passive participation roles.

#### 7.2.5 Evaluation

The Public Involvement and Participation program will be evaluated based on how each individual BMP is meeting its measurable goal at the end of each reporting period. Changes will be considered for any BMPs that are not meeting the measurable goals.

## 7.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

## 7.3.1 BMP Summary Table

ВМР	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
Review Illicit Discharge Ordinance	Review Illicit Discharge Ordinance and make any	Х	Х	Х	Х	Х	Town Attorney
	necessary revisions.						Town Engineer
							Town Planner
Review Illicit Discharge Program	Review Illicit Discharge Program and make any	Х	Х	Х	Х	Х	Public Works Director
	necessary revisions.						Town Engineer
							Town Planner
Maintain storm sewer system map	Maintain system map in support of inspection program.	Х	Х	Х	Х	Х	Town Engineer
showing outfalls and the receiving body of water.	The map will note outfalls and receiving body of water for each outfall. Report annually on progress.						Town Planner
							Public Works Director
Maintain an inspection and	Define areas of the community that will be inspected	Х	Х	Х	Х	Х	Public Works Director
elimination program within the community.	for illicit connections and show on a map the progress made year by year.						Town Engineer
Coordinate with local health	Provide a fact sheet on septic system management,		Х		Х		Public Works Director
department on failing septic systems, locating problem areas in the system	Note date of distribution and number of copies placed. Complete by end of year two and update in year five.						Town Engineer
map. Provide public information on septic system management.							Town Planner
Train employees on how to inspect	Provide materials through HR to all public employees	Х	Х	Х	Х	Х	Public Works Director
for illicit connections and establish a tracking system for managing	in illicit connections and how to recognize one. Summarize in annual report.						Town Engineer
reported problem areas.	Cumulate in amual reports						Town Planner
Dry Weather Flow Detection	Dry Weather testing will be done at least bi-annually in	Х	Х	Х	Х	Х	Town Engineer
	accordance with the IDDE program, dependent upon other IDDE investigations.						Public Works Director

#### 7.3.2 Storm Sewer System Map

Storm sewer system has been mapped and will be inspected during the course of normal maintenance operations by the public service department. The route of the system, locations of pipes, drainage ditches, and outfalls will be maintained on a paper map and/or electronic map. The map will be updated as needed during subsequent maintenance operations.

#### 7.3.3 Regulatory Mechanism

The Town has an Illicit Discharge Ordinance which allows for inspection, maintenance, and prohibits illicit discharges.

#### 7.3.4 Enforcement:

There are provisions in the amended ordinance for enforcement actions and penalties for dumping, spills, and willful illicit connection.

#### 7.3.5 Detection and Elimination

After the field screening is complete, the Town will take measures to identify and remove illegal discharges. Identifying illegal discharges may require a combination of office and field work. After the field screening, staff will consult the jurisdiction-wide information they have compiled to obtain information about the land uses, infrastructure, industries, potential sources and types of pollution that may exist in the drainage area of the outfall.

After priority areas have been identified in the office, a systematic field investigation will be planned that minimizes the amount of resources required to identify the source. The following field methods may be used to identify and trace the source of illegal discharges:

- Site Investigation
- Dry weather flow observations
- Smoke Testing/Dye Testing
- Television Inspection

The right of entry established in the ordinance will provide access for inspection if the origin of the discharge is in doubt. Once an illegal discharge is located and confirmed through field screening, staff will notify the responsible party verbally if possible and follow-up with written notification. If the responsible party does not comply with the removal schedule provided by the Town, or receive approval for a revised schedule, the Town will take enforcement action and the connection will be removed at the responsible party's expense.

## 7.3.6 Non Stormwater Discharges

Currently there are no known non-stormwater discharges that are a significant contributor to the MS4. If any are identified in the future, they will be addressed at that time.

#### 7.3.7 Outreach

Town employees will be informed of the hazards associated with illegal discharges and improper disposal of waste as part of their general training requirements. These will be addressed in the Pollution Prevention/Good Housekeeping section of this plan, and will include training in hazardous material handling and disposal, as well as notices and signs posted in the appropriate areas.

The general public will be educated through the BMP's listed in the Public Education section of this plan. These educational BMP's will include brochures, public service announcements, and business education and outreach programs.

#### 7.3.8 Decision Process

The formation of the storm water Illicit Discharge Detection and Elimination program was based primarily on regulatory mechanisms. The regulatory, educational, procedural BMP's selected were judged to be an effective means of detecting and eliminating illicit discharges.

#### 7.3.9 Evaluation

The effectiveness of the program will be gauged by the total number of illicit connections detected and removed each year and with public complaints. If the total number remains constant, or increases, changes will be made to the public education program and/or the Town ordinance to allow for greater enforcement and penalties.

#### 7.4 Construction Site Stormwater Runoff Control

The Town of Elon will rely on the North Carolina State Erosion and Sediment Control Program and the Department of Water Quality's general stormwater permit program for construction activities to meet the construction site stormwater runoff control requirement.

## 7.5 POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

## 7.5.1 BMP Summary Table

вмР	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
Review the Post Construction Ordinance	Review the Post Construction Ordinance for			Х			Town Planner
	compliance with NC DWQ guidance and local effectiveness. Phase II Post-Construction						Town Attorney
	Ordinance will incorporate Jordan Lake Nutrient Strategy Regulations in conjunction with NC Session Law and DWQ regulations.						Town Engineer
Review standards and policies that ensure	Review local standards to remain in compliance	Х	Х	Х	Х	Х	Town Engineer
structural BMPs will be in conformance with the state's Stormwater Management Design Manual	with the NC DWQ BMP Manual. Additional measures and techniques may be added to the local ordinance as they are investigated.						Town Planner
Review maintenance standards and	Review the maintenance standards and		Х		Х		Town Engineer
inspection program to ensure that on-site controls continue to function as designed.	inspection program for local on-site controls.						Town Planner
Maintain the education program created for	Maintain the education program created for land		Х		Х		Town Engineer
land developers and the public.	developers and the public detailed in other BMP's. Report annually on progress made.						Town Public Works Director
	, , , ,						Town Planner
Coordinate with the county health	Coordinate with county health department. Report		Х	Х	Х	Х	Town Engineer
department on developing and implementing an oversight program to	Annually on progress made.						Town Planner
minimize the potential for fecal coliform contamination by ensuring proper operation and maintenance of on-site wastewater treatment systems.							Town Public Works Director
Green Infrastructure Practices and	Green Infrastructure Practices and Strategies will			Х			Town Engineer
Strategies will be encouraged.	be encouraged and existing standards may be eased to encourage green projects.						Town Planner
							Town SEC

#### 7.5.2 Stormwater Management Options

The existing land usage ordinance has a post-construction stormwater runoff management program for new development and redevelopment projects that disturb greater than, or equal to, one acre. This ordinance may be revised prior to the end of year 3 of the permit to incorporate Low Impact Development (LID) provisions and Nutrient Reduction limits as defined in the Jordan Lake Nutrient Reduction Strategy will be adopted within the timeline established by NC Session Laws and NC DWQ Regulations.

#### 7.5.3 Non-Structural BMP's

The receiving streams in the Town's watershed are classified as Nutrient Sensitive Waters; therefore the post construction ordinance ensures that best management practices for reducing nutrient loading are implemented. In addition, a nutrient application (both inorganic fertilizer and organic nutrients) management program has been developed and is included in the stormwater management program.

#### 7.5.4 Structural BMPs

The Town has certified its BMP manual as equal to the NC DWQ BMP Manual. The Town reviews structural BMP's based on the NC DWQ BMP Manual and will continue to do so in the future. The Town may investigate additional qualified BMP's in the future. These additional techniques are to be evaluated based upon field testing and evaluation by the Town's Engineer.

#### 7.5.5 Regulatory Mechanism

The Town's Post-Construction Ordinance establishes the Town's ability to regulate new development for water quality compliance.

#### 7.5.6 Operation and Maintenance

The Town's Post-Construction Ordinance establishes the Town's ability to regulate new development for water quality compliance. The ordinance includes guidelines for delegating routine and non-routine maintenance responsibilities to ensure access for inspections, and providing a mechanism for enforcement.

The Town will require annual submissions of BMP inspection reports and the Town will inspect each BMP during each permit cycle.

#### 7.5.7 Education

An education process for developers and citizens about new development with respect to stormwater and water quality has been established and is ongoing.

#### 7.5.8 Decision Process

#### COMPREHENSIVE STORMWATER MANAGEMENT PROGRAM REPORT

TOWN OF ELON

The post-construction stormwater management program ensures that controls are in place that will prevent or minimize water quality impacts from new development and redevelopment projects. These controls include post-construction ordinance to address post-construction runoff control from new development and redevelopment projects and ensure adequate long-term operation and maintenance of BMPs. Future revisions to this ordinance will be intended to enhance water quality.

#### 7.5.9 Evaluation

The post-construction site management for new and re-development activities program will be evaluated based on how each individual BMP is meeting its measurable goal at the end of each reporting period. Changes will be considered for any BMPs that are not meeting the measurable goals.

## 7.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

## 7.6.1 BMP Summary Table

ВМР	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
Maintain Inventory and O&M Manual of Municipal Facilities and Operations	Maintain, update, inspect annually all Municipal Facilities and update as needed Operation and Maintenance Manual for every facility and operation.	Х	Х	Х	Х	х	Town Public Works Director Town Engineer
Spill Response Procedures	Maintain or create Spill Response Procedures	Х	Х	Х	Х	Х	Public Works Director
Streets, Roads, and Public Parking Lots Maintenance Program	Evaluate and select BMP's by end of year 1, implement BMP's by end of year 2. Evaluate Annually for cost and effectiveness.	х	х	х	Х	Х	Town Engineer Public Works Director
O&M for municipally owned or maintained catch basins and conveyance systems	Continue implementation of the O&M Program for the MS4, including catch basins and conveyance systems. Reassess program annually.	Х	Х	Х	Х	х	Town Engineer Public Works Director
O&M for municipally-owned or maintained structural stormwater controls	Continue to implement and maintain the O&M Program for municipally-owned or maintained structural stormwater controls.	Х	Х	Х	Х	х	Town Engineer Public Works Director
Pesticide, Herbicide and Fertilizer Application Management	Ensure municipal employees and contractors are properly trained and all permits, certifications, and other measures for applicators are followed.	х	х	х	х	х	Public Works Director
Staff Training	Implement an employee training program for employees involved in pollution prevention and good housekeeping practices.	Х	Х	Х	Х	Х	Town Engineer Public Works Director
Vehicle Washing	Implement measures to minimize or prevent contamination of stormwater runoff from all areas used for vehicle and equipment cleaning.	х	х	х	х	Х	Town Engineer Public Works Director

#### 7.6.2 Affected Operations

The Town of Elon operates a municipal building that serves as a Town hall and fire station, a police station, a Public Works vehicle and equipment storage yard, and a maintenance facility for the Parks & Recreation Department. All vehicles, equipment, and materials at the storage yard and Park maintenance facility are stored in covered buildings. There are no floor drains in any of the buildings at these two facilities.

#### 7.6.3 Training

Training materials have been developed on pollution prevention for public facilities, using similar materials as will be used in the public outreach program. All employees will be educated on the need for controls to protect stormwater from exposure to potential pollutants. This training will also serve as the training requirement for public employees as specified in the outreach component of the Illicit Discharge section of this program.

All public employees involved in vehicle, open space, or building maintenance operations will be provided training in BMPs, the processes and materials they are working with, safety hazards, practices for preventing discharges, and procedures for responding quickly and properly to toxic and hazardous material incidents.

All public employees involved in stormwater drainage system maintenance will be specifically trained in the disposal of floatables, grit, sediment, and other pollutants removed from the system. Additional training, or certification, will be provided to employees that manage and apply chemicals for control of dust, pests, vermin, and weeds and/or to enhance the growth or condition of public urban landscape and recreation facilities. Training will target the safe and effective application, storage and disposal of chemicals used.

## 7.6.4 Maintenance and Inspections

A preventive maintenance program has been developed that includes routine inspections of catch basins and other stormwater systems for the municipal building and vehicle storage yard. The objective of the inspections is to reduce pollutant loading from municipal sites. Inspections include noting any problems or issues that may have an impact on stormwater quality, and any corrective actions needed. Schedules, procedures, and a record-keeping system are used to schedule and document inspections.

#### 7.6.5 Vehicular Operations

All vehicles, equipment, and associated material at both the Public Works and Parks & Rec. facilities are stored inside buildings. The Public Works vehicles (pickup and dump trucks) are currently washed outside, with the untreated wash water discharging into a nearby drainage ditch. Washing of these vehicles at another location has been investigated but is non-cost effective and pollution runoff is minimized by runoff not going across impervious areas and not going directly into surface waters. Minor vehicle and equipment maintenance take place at these facilities.

#### 7.6.6 Waste Disposal

Garbage, recyclables, and heavy trash collection are contracted out to private companies.

#### 7.6.7 Flood Management Projects

Future flood management projects will be reviewed from a water quality standpoint.

#### 7.6.8 Decision Process

The most effective and practical BMPs for minimizing stormwater pollution were selected for this program.

#### 7.6.9 Evaluation

The pollution prevention/good housekeeping for municipal operations program will be evaluated based on how each individual BMP is meeting its measurable goal at the end of each reporting period. Changes will be considered for any BMPs that are not meeting the measurable goals.

## 7.7 TOTAL MAXIMUM DAILY LOADS (TMDL)

## 7.7.1 BMP Summary Table

ВМР	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
Establish if a TMDL exists on a receiving water of the MS4	Verify TMDL's annually.	Х	Х	X	X	X	Town Engineer
Identify, Describe, and Map watershed, outfalls, and streams.	Identify watershed WLA for stormwater, describe watershed, map watershed, identify location of major outfalls in watershed, identify impaired streams in watershed, and identify schedule to discover and locate other possible contributing sources.	х					Town Engineer
Existing Measures	Create Water Quality Recovery Program.		Х				Town Engineer
Monitoring Plan	Create and submit to NC DWQ a monitoring program for each pollutant of concern in the TMDL.			X			Town Engineer
Additional Measures	Additional measures that improve water quality may be started at anytime.			X	X	X	Town Engineer
Implementation Plan	Determine final implementation schedule, including when in the permit additional items will be implemented.				Х		Town Engineer
Incremental Success	Determine if and/or how incremental success will be measured.					Х	Town Engineer
Annual Assessment	Submit Annual Report on program to DWQ	Х	Х	Х	Х	Х	Town Engineer

#### 7.7.2 Determination of TMDL's

A TMDL on a receiving water with a stormwater Waste Load Allocation (WLA) will trigger the need for compliance with this section of the CSWMP. A TMDL with no WLA will not require a Water Quality Recovery Plan, but rather the need to evaluate existing strategies and if any can be tailored or expanded to improve the water quality in the TMDL watershed.

#### 7.7.3 Establishing a Water Quality Recovery Plan

Based on the above schedule the Town of Elon would begin creating a Water Quality Recovery Plan (WQRP) within 12 months of establishment of the TMDL, would have evaluated existing measures within 24 months, developed a monitoring plan within 36 months, and would be implementing or have planned for implementation within 48 months. The WQRP would be submitted and approved by NC DWQ and EPA.

#### 7.7.4 Decision Process

TMDL planning and implementation will be done in an effort to improve water quality and with the approval of NC DWQ staff.

#### 7.7.5 Evaluation

Progress toward restoring water quality standards will be difficult to determine and most evaluation tools will be based upon programs rather than through water quality monitoring or water quality improvements. While the goal of a WQRP is to improve water quality standards, the NPDES MS4 permit obligation is to reduce non-point source pollutant loading to the maximum extent practicable (MEP). The MS4 is not required to meet water quality standards. Evaluation of successful techniques will be evaluated over time, probably multiple permit cycles.