

Stormwater Management Plan
Town of Laurel Park
NCS000478

January 31, 2023



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PART 1: INTRODUCTION

The purpose of this Stormwater Management Plan (SWMP) is to establish and define the means by which the Town of Laurel Park will comply with its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and the applicable provisions of the Clean Water Act to meet the federal standard of reducing pollutants in stormwater runoff to the maximum extent practicable.

This SWMP identifies the specific elements and minimum measures that the Town of Laurel Park will develop, implement, enforce, evaluate, and report to the North Carolina Department of Environmental Quality (NCDEQ) Division of Energy, Minerals and Land Resources (DEMLR) in order to comply with the MS4 Permit number NCS000478, as issued by NCDEQ. This permit covers activities associated with the discharge of stormwater from the MS4 as owned and operated by the Town of Laurel Park and located within the corporate limits of the Town of Laurel Park.

In preparing this SWMP, the Town of Laurel Park has evaluated its MS4 and the permit requirements to develop a comprehensive 5-year SWMP that will meet the community's needs, address local water quality issues, and provide the minimum measures necessary to comply with the permit. The SWMP will be evaluated and updated annually to ensure that the elements and minimum measures it contains continue to adequately provide for permit compliance and the community's needs.

Once the SWMP is approved by NCDEQ, all provisions contained and referenced in this SWMP, along with any approved modifications of the SWMP, are incorporated by reference into the permit and become enforceable parts of the permit. Any major changes to the approved SWMP will require resubmittal, review, and approval by NCDEW, and may require a new public comment period depending on the nature of the changes.


PART 2: CERTIFICATION

By my signature below I hereby certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

I am also aware that the contents of this document shall become an enforceable part of the NPDES MS4 Permit, and that both the Division and the Environmental Protection Agency have NPDES MS4 Permit compliance and enforcement authority.

- I am a ranking elected official.
- I am a principal executive officer for the permitted MS4.
- I am a duly authorized representative for the permitted MS4 and have attached the authorization made in writing by a principal executive officer or ranking elected official which specifies me as (*check one*):
 - A specific individual having overall responsibility for stormwater matters.
 - A specific position having overall responsibility for stormwater matters.

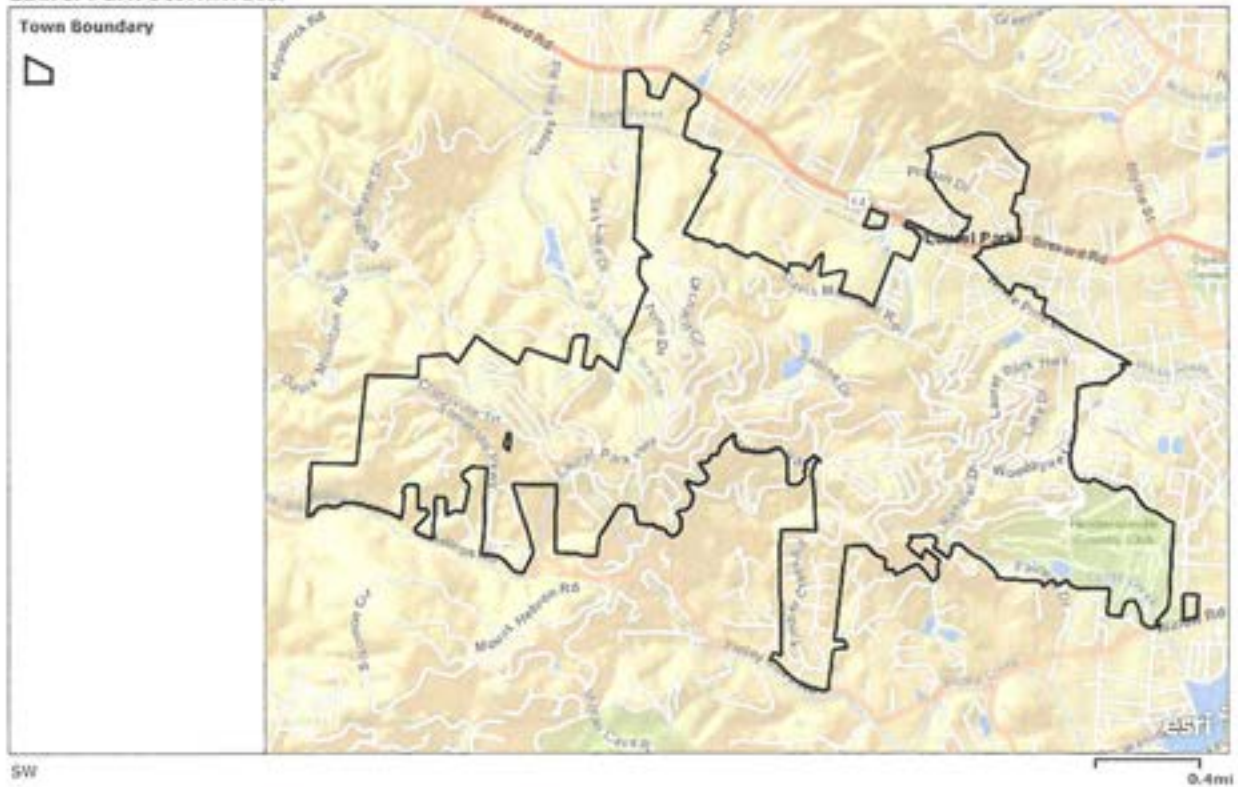
<i>Signature:</i>	
<i>Print Name:</i>	Alex Carmichael
<i>Title:</i>	Town Manager
Signed this August 4, 2023.	

PART 3: MS4 INFORMATION

3.1 Permitted MS4 Area

This SWMP applies throughout the corporate limits of the Town of Laurel Park, including all regulated activities associated with the discharge of stormwater from the MS4. The map below shows the corporate limits of the Town of Laurel Park as of the date of this document.

Laurel Park Stormwater



State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

3.2 Existing MS4 Mapping

The current MS4 mapping includes inlets and catch basins, pipes with flow direction, culverts, outfalls and receiving waters. Major outfalls are identified in a separate data layer. Information such as material, depth, diameter, and condition are also recorded, and a photo is linked to inlets and outfalls.

The stormwater system map is hosted by Land of Sky Regional Council and available online: <https://areg.is/1eTuOa>

Laurel Park Stormwater

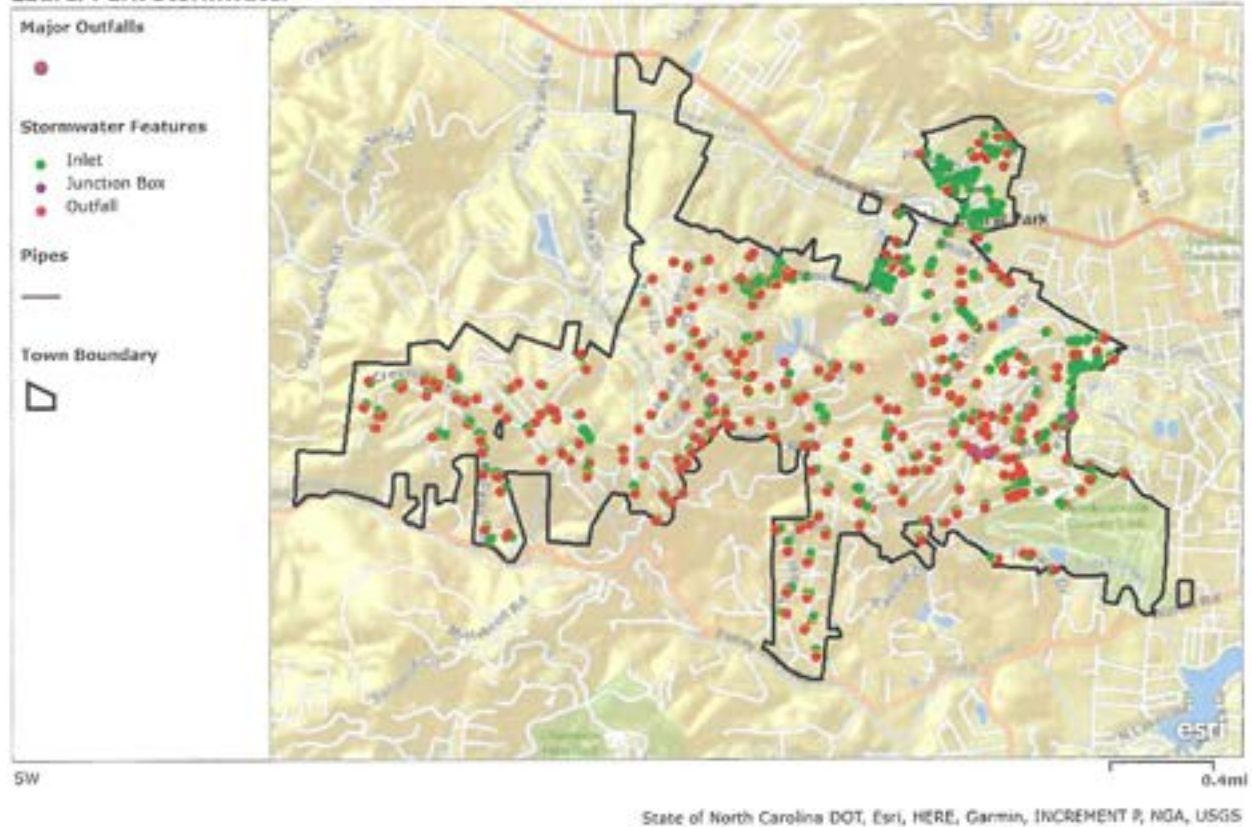


Table 1: Summary of Current MS4 Mapping

Percent of MS4 Area Mapped	95	%
No. of Major Outfalls* Mapped	5	total

*An outfall is a point where the MS4 discharges from a pipe or other conveyance (e.g. a ditch) directly into surface waters. Major outfalls are required to be mapped to meet permit requirements. A major outfall is a 36-inch diameter pipe or discharge from a drainage area > 50-acres; and for industrial zoned areas a 12-inch diameter pipe or a drainage area \geq 2-acres.

3.3 Receiving Waters

The Town of Laurel Park MS4 is located within the French Broad River Basin and discharges directly into receiving waters as listed in Table 2 below. Applicable water quality standards listed below are compiled from the following NCDEQ sources:

- [Waterbody Classification Map](#)
- [Impaired Waters and TMDL Map](#)
- Most recent NCDEQ Final [303\(d\) List](#)

Table 2: Summary of MS4 Receiving Waters

Receiving Water Name	Stream Index / AU Number	Water Quality Classification	303(d) Listed Parameter(s) of Interest
Shaw Creek	6-50	WS-IV	n/a
Echo Lake and Briar Lake	6-50-1	WS-IV	n/a
Brightwater Branch	6-50-2	WS-IV, B	n/a
Finley Creek	6-55-6-1-1	B	n/a
North Fork Big Willow Creek	6-46-2	C; Tr	n/a
Tony's Creek	6-55-6-2	B	n/a
Wash Creek	6-55-7	B	n/a

3.4 MS4 Interconnection

The Town of Laurel Park MS4 is not interconnected with another regulated MS4 and directly discharges to the receiving waters as listed in Table 2 above.

The MS4 does interconnect with the statewide NCDOT MS4 and includes:

- a. The interconnection may be receiving stormwater from the NCDOT MS4. The number of interconnections is unknown.
- b. The interconnection may be discharging stormwater into the NCDOT MS4. The number of interconnections is unknown.
- c. The Town of Laurel Park MS4 mapping does not yet identify interconnections with the NCDOT MS4.
- d. The Town of Laurel Park MS4 mapping does not include NCDOT MS4 outfalls.

As a part of the MS4 mapping update, the nature of the interconnection will be evaluated and documented.

3.5 Total Maximum Daily Loads (TMDLs)

No total maximum daily loads have been established in the MS4, as determined by the map and list provided on the [NCDEQ Modeling & Assessment Unit web page](#). There is a statewide TMDL for mercury; however, the French Broad River Basin was not an area of concern. The following link provides additional information on the NC Statewide Mercury TMDL.

https://files.nc.gov/ncdeq/Water%20Quality/Planning/TMDL/FINAL%20TMDLS/Statewide/NCMercuryTMDL_EPASubmit.pdf.

Table 3: Summary of Approved TMDLs

Water Body Name	TMDL Pollutant(s) of Concern	Stormwater Waste Load Allocation (Y/N)	Water Quality Recovery Program (Y/N)
N/A	N/A	N	N

3.6 Endangered and Threatened Species and Critical Habitat

Significant populations of threatened or endangered species and/or critical habitat are identified within the regulated MS4 urbanized area. Based upon a review of the [Endangered and Threatened Species and Species of Concern by County for North Carolina Map and Listed species believed to or known to occur in North Carolina map](#) as provided by the [U.S. Fish and Wildlife Service](#), the species listed in Table 4 have the potential to occur within the regulated MS4 urbanized area. Of those species listed, Table 4 summarizes the species that may be significantly impacted by the quality of surface waters within their habitat.

A description of Federal Listing Status codes is found below:

- **BGPA:** Bald and Golden Eagle Protection Act
- **T (S/A):** threatened due to similarity of appearance. A taxon that is threatened due to similarity of appearance with another listed species and is listed for its protection. Taxa listed as T(S/A) are not biologically endangered or threatened.
- **T:** “threatened”. A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- **E:** “endangered”. A species in danger of extinction throughout all or a significant portion of its range
- **ARS:** at-risk species. Species that are petitioned, candidates, or proposed for listing under the Endangered Species Act.
- **FSC:** federal species of concern. Informal term. It is not defined in the federal Endangered Species Act. In North Carolina, the Asheville and Raleigh Field Offices of the US Fish and Wildlife Service define Federal Species of Concern as those species that appear to be in decline

or otherwise in need of conservation and are under consideration for listing or for which there is insufficient information to support listing at this time.

Table 4: Potential Federally Listed Species/Habitat Impacted by Surface Water Quality

Scientific Name	Common name	Species Group	Federal Listing Status
<i>Haliaeetus leucocephalus</i>	Bald eagle	Vertebrate	BGPA
<i>Glyptemys muhlenbergii</i>	Bog turtle	Vertebrate	T (S/A)
<i>Glaucomys sabrinus coloratus</i>	Carolina northern flying squirrel	Vertebrate	E
<i>Myotis leibii</i>	Eastern small-footed bat	Vertebrate	ARS
<i>Myotis grisescens</i>	Gray bat	Vertebrate	E
<i>Aneides aeneus</i>	Green salamander	Vertebrate	ARS
<i>Cryptobranchus alleganiensis</i>	Hellbender	Vertebrate	ARS
<i>Myotis septentrionalis</i>	Northern long-eared bat	Vertebrate	T
<i>Desmognathus wrighti</i>	Pygmy salamander	Vertebrate	FSC
<i>Sphyrapicus varius appalachiensis</i>	Yellow-bellied sapsucker (Southern Appalachian population)	Vertebrate	FSC
<i>Alasmidonta raveneliana</i>	Appalachian elktoe	Invertebrate	E
<i>Cambarus reburus</i>	French Broad crayfish	Invertebrate	FSC
<i>Bombus affinis</i>	Rusty-patched bumble bee	Invertebrate	E
<i>Lasmigona holstonia</i>	Tennessee heelsplitter	Invertebrate	ARS
<i>Packera millefolium</i>	Divided-leaf ragwort	Vascular Plant	FSC
<i>Sagittaria fasciculata</i>	Bunched arrowhead	Vascular Plant	E
<i>Juglans cinerea</i>	Butternut	Vascular Plant	FSC
<i>Carex communis</i> var. <i>amplisquama</i>	Fort Mountain sedge	Vascular Plant	FSC
<i>Lysimachia fraseri</i>	Fraser's loosestrife	Vascular Plant	FSC
<i>Hexastylis rhombiformis</i>	French Broad heartleaf	Vascular Plant	FSC
<i>Lilium grayi</i>	Gray's lily	Vascular Plant	FSC
<i>Marshallia grandiflora</i>	Large-flowered barbara's-buttons	Vascular Plant	FSC
<i>Sarracenia rubra</i> ssp. <i>jonesii</i>	Mountain sweet pitcherplant	Vascular Plant	E
<i>Juncus caesariensis</i>	New Jersey rush	Vascular Plant	FSC
<i>Isotria medeoloides</i>	Small whorled pogonia	Vascular Plant	T
<i>Sarracenia purpurea</i> var. <i>montana</i>	Southern appalachian purple pitcherplant	Vascular Plant	ARS
<i>Helonias bullata</i>	Swamp pink	Vascular Plant	T
<i>Platanthera integrilabia</i>	White fringeless orchid	Vascular Plant	T

3.7 Industrial Facility Discharges

The Town of Laurel Park MS4 jurisdictional area includes the following industrial facilities which hold NPDES Industrial Stormwater Permits, as determined from the NCDEQ Maps & Permit Data web page.

Table 5: NPDES Stormwater Permitted Industrial Facilities

Permit Number	Facility Name
N/A	N/A

3.8 Non-Stormwater Discharges

The water quality impacts of non-stormwater discharges have been evaluated by the Town of Laurel Park as summarized in Table 6 below. The unpermitted non-stormwater flows listed as incidental do not significantly impact water quality. The Town of Laurel Park has evaluated residential and charity car washing and street washing for possible significant water quality impacts.

Street washing discharges are addressed under the Pavement Management Program in Part 10 of this SWMP. The Division has not required that other non-stormwater flows be specifically controlled by the Town of Laurel Park.

Wash water associated with car washing that does not contain detergents or does not discharge directly into the MS4 is considered incidental. However, these types of non-stormwater discharges that do contain detergents have been evaluated by the Town of Laurel Park to determine whether they may significantly impact water quality. The Town of Laurel Park will address the possibility of the below mentioned water quality impacts through public education and good housekeeping, as outlined in Part 5 and Part with a focus on the training of good housekeeping practices.

Table 6: Non-Stormwater Discharges

Non-Stormwater Discharge	Water Quality Impacts
Waterline and fire hydrant flushing	Incidental
Landscape irrigation	Incidental
Diverted stream flows	Incidental
Rising groundwater	Incidental
Uncontaminated groundwater infiltration	Incidental
Uncontaminated pumped groundwater	Incidental
Uncontaminated potable water sources	Incidental
Foundation drains	Incidental
Air conditioning condensate	Incidental
Irrigation waters	Incidental
Springs	Incidental
Water from crawl space pumps	Incidental
Footing drains	Incidental
Lawn watering	Incidental
Residential and charity car washing	Possible
Flows from riparian habitats and wetlands	Incidental
Dechlorinated swimming pool discharges	Incidental
Street wash water	Possible
Flows from firefighting activities	Incidental

3.9 Target Pollutants and Sources

In addition to those target pollutants identified above, the Town of Laurel Park is not aware of other significant water quality issues within the permitted MS4 area.

Table 7 below summarizes the water quality pollutants identified throughout Part 3 of this SWMP, the likely activities/sources/targeted audiences attributed to each pollutant and identifies the associated SWMP program(s) that address each. In addition, the Town of Laurel Park has evaluated schools, homeowners, and businesses as target audiences that are likely to have significant stormwater impacts.

Some target pollutants and sources pose a greater threat to water quality than others. For example, the Town of Laurel Park does not have many charitable car wash events, therefore, gray water runoff is not as pertinent of an issue. However, sediment runoff from construction sites is a more common issue facing the Town. Further differences in the threat level of types of target pollutants are discussed below.

Litter: Illegal dumping has occurred and been noted by code enforcement officers within the Town.

Cases of both illegal construction waste dumping and general residential or school dumping have been noted by code enforcement officers. This litter poses a threat to both our water bodies and the MS4 infrastructure, as the litter can create clogs and backups that damage the pipelines leading back to the stream. Some litter even poses a threat to groundwater if chemical leaching or breakdown of components into heavy metals occurs due to weathering of the litter. The dumping has been found typically roadside but also in secluded urban areas. Illegal dumping cases are rare in the Town of Laurel Park and poses a minimal threat in comparison to other pollutant sources.

Sediment: Previously installed erosion control measure has been removed or fallen

Sediment buildup is largely attributed to mismanaged construction sites with fallen or incorrectly installed sediment fences. It has been noticed in both reports from citizens and by code enforcement officers that there are several cases of construction sites not maintaining their erosion control fences during work. This has led to sediment buildup near storm drains, onto downslope private properties, and in some cases causing water to build up in nearby properties as the sediment is limiting the drain's ability to remove runoff. In all cases, code enforcement has responded and had the issue solved, but even being down for a short time can prove to have significant effects. Erosion control fences are required for sediment control permits during construction by the DEQ throughout the entire construction process. Sediment from construction sites is the most pertinent threat to water quality in Laurel Park. The Town of Laurel Park works with Henderson County to monitor construction sites to minimize the amount of erosion.

Gray Water: Residential, Charity, and Municipal Car Washes

Residential, charity, and municipal car washes allow for soaps or waxes to enter the storm drain when vehicles are not being cleaned in the correct areas (such as vegetated patches or in areas that do not have storm drains). This allows for toxic contaminants to enter our waterways via the storm drain system. There are very few cases of residential, charity or municipal car washes in the Town. Therefore, this is an

unlikely source of pollution. However, education and information are provided to residents about how to safely conduct car washes to reduce gray water.

Fats Oils and Grease: Health Department has noted cases where restaurants do not empty or own/rent grease traps for appropriate removal.

The Health Department has reported restaurants in Laurel Park not maintaining grease traps. This has led to cases of the restaurants allowing the grease to drip onto nearby impermeable surfaces – which would eventually lead to water quality issues. Overflow from a lack of maintenance or throwing out the grease with general waste contributes to this problem. This is a health violation since the grease poses a physical risk, but it also can impair water bodies with an influx of water-insoluble grease going down the storm drain. There are very few restaurants in the Town for this to be an issue. Town Code Enforcement and Henderson County Health Department do monitor the restaurants, but there are few cases. For this reason, fats, oils, and grease are a lower threat to water quality.

Underground storage tanks: Storage devices installed below ground that contain hazardous materials/waste.

These tanks can contain gasoline, fuels such as propane, industrial chemicals/oils, and most often human waste in areas not directly connected to the sanitary sewer. Any underground storage tank must be well maintained/monitored, and correctly installed due to the risk of them leaking. The leaks can cause whatever chemical the tank is storing to leak into the ground, harming the soil, groundwater/water table, and even surface waters as they are being fed from groundwater. If fuel or industrial chemical tank is leaking, the chemical will leach into the soil – leading to toxic soil, contaminated groundwater, and possibly impairing a stream/water body. The Town takes this potential threat seriously and will monitor underground storage tanks.

Illicit discharges: Originate from a variety of sources, with an equally varied number of effects depending on the chemical that is released.

Typically, illicit discharges come from businesses, residents, or municipal facilities that dump chemicals into storm drains either incidentally due to a lack of IDDE education or general carelessness. These chemicals can vary greatly and can include grease, oils, chemicals, cleaning solutions, paints, metals, etc. This is a recognized problem and regular inspections, and education of Town staff is used to minimize IDDE in Laurel Park. As mentioned, there are no 303(d) streams from causes related to substances or attributions given to unclean discharges into the streams; however, this is an issue the Town continually monitors if a problem does occur.

Illegal dumping: When residents, businesses, or municipal employees dump waste randomly in non-permitted dumping areas.

This waste can widely vary, causing a variety of problems. For example, citizens dumping televisions on the side of the road to avoid dumping fees, which allows for the metals or chemicals inside the tv to leach out as stormwater passes it (mercury, lead, and other metals). It can be a case of businesses dumping waste in watershed areas where runoff passes through the waste, either carrying it or residuals of the waste into water bodies. It can also be a case of graders dumping sediment into areas without the correct

allowances/precautions. The debris and chemicals accumulate over time and lead to chemical impairments, pH issues, turbidity impairments, or debris entering the stream/MS4 system.

Improper disposal of waste:

Improper disposal of waste is problematic because it allows chemicals, or difficult to manage waste, to enter the environment in ways that may be hard to track. For example, not giving a car battery to the correct waste management facility can allow for battery acid and lead to enter the soil which drains/collects in the groundwater. This problem has been noticed by municipal waste managers and is difficult to track as often the improper disposal waste is mixed in with the standard refuse. Other examples include grease going down sinks clogging MS4 systems, chemicals from batteries leaching into the groundwater, oil from oil changes not going to the correct facility, etc. Henderson County provides a facility where residents can properly dispose of materials.

Table 7: Summary of Target Pollutants and Sources

Target Pollutant(s)	Likely Source(s)/Target Audience(s)	SWMP Program Addressing Target Pollutant(s)/Audience(s)	Threat Level
Litter	Residents, Businesses, Schools	Public Education & Outreach Public Participation	Low
Sediment	Construction Activity	Public Education & Outreach, Construction Program Post-construction Program	High
Gray water	Residential	Illicit Discharge Public Education & Outreach	Low
Fats, Oils, and Grease	Businesses (Restaurants)	Illicit Discharge Public Education & Outreach	Low/Medium
Underground Storage Tanks	Business and Residents	Illicit Discharge Public Education & Outreach	Low/Medium
Illicit Discharges	General Public, Businesses, Municipal Employees	Illicit Discharge Public Education & Outreach Good Housekeeping	Low
Illegal Dumping and Improper Disposal of Waste	General Public, Businesses, Municipal Employees	Illicit Discharge Public Education & Outreach Good Housekeeping	Low

PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION

4.1 Organizational Structure

The Town of Laurel Park staff will use all departments to coordinate Stormwater Management Plan efforts, to ensure the Town is facilitating Best Management Practices to protect water quality. Primary responsibilities will be held within the office of the Town Manager and Public Works Departments. The rest of the Town of Laurel Park staff will be training to handle internal procedures and report action/s to the appropriate staff. While the Town Manager and Public Works Director are primarily responsible for most of the SWMP components, tasks will be delegated to the Assistant to the Manager and other Public Works staff as needed.

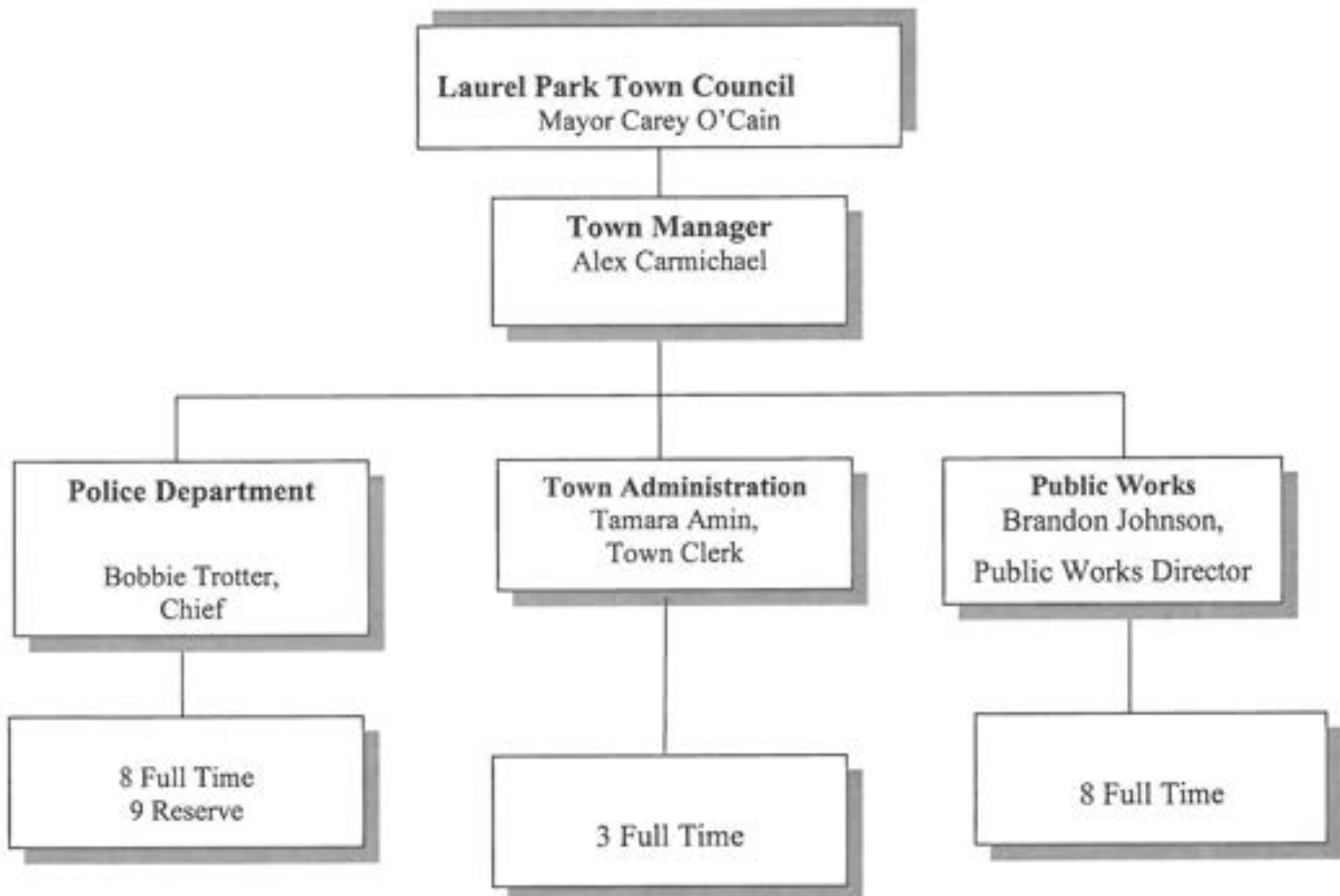


Table 8: Summary of Responsible Parties

SWMP Component	Responsible Position	Staff Name	Department
Stormwater Program Administration	Town Manager	Alex Carmichael	Town of Laurel Park
SWMP Management	Town Manager	Alex Carmichael	Town of Laurel Park
Public Education & Outreach	Town Manager	Alex Carmichael	Town of Laurel Park
Public Involvement & Participation	Town Manager	Alex Carmichael	Town of Laurel Park
Illicit Discharge Detection & Elimination	Town Manager Public Works	Alex Carmichael Brandon Johnson	Town of Laurel Park
Construction Site Runoff Control	Deb	Johnson	Henderson County
Post-Construction Stormwater Management	Director/ Engineer	Natalie Berry	Henderson County
Pollution Prevention/Good Housekeeping for Municipal Operations	Public Works Director	Brandon Johnson	Town of Laurel Park
Municipal Facilities Operation & Maintenance Program	Public Works Director	Brandon Johnson	Town of Laurel Park
Spill Response Program	Public Works Director	Brandon Johnson	Town of Laurel Park
MS4 Operation & Maintenance Program	Public Works Director	Brandon Johnson	Town of Laurel Park
Municipal SCM Operation & Maintenance Program	Public Works Director	Brandon Johnson	Town of Laurel Park
Pesticide, Herbicide & Fertilizer Management Program	Public Works Director	Brandon Johnson	Town of Laurel Park

Vehicle & Equipment Cleaning Program	Public Works Director	Brandon Johnson	Town of Laurel Park
Pavement Management Program	Public Works Director	Brandon Johnson	Town of Laurel Park
Total Maximum Daily Load (TMDL) Requirements	N/A		

4.2 Program Funding and Budget

In accordance with the issued permit, the Town of Laurel Park shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and comply with the requirements of the NPDES MS4 Permit. The budget includes the permit administering and compliance fee, which is billed by the Division annually.

The town provides \$3,000.00 in direct funds for stormwater management activities. Additionally, there is approximately \$70,000.00 annually for capital projects related to stormwater and stormwater drainage.

Any fees charged to the development community for BMP Inspections, Plan Review and other associated fees will help offset the cost. The Town implemented a \$5 monthly stormwater fee that is collected by the Town through utility bills. The goal for the funds collected is to support the stormwater program through mapping outfalls, stream repairs, and other water quality efforts.

4.3 Shared Responsibility

The Town of Laurel Park will share the responsibility to implement the following minimum control measures, which are at least as stringent as the corresponding NPDES MS4 Permit requirement. The Town of Laurel Park remains responsible for compliance if the other entity fails to perform the permit obligation and may be subject to enforcement action if neither the Town of Laurel Park nor the other entity fully performs the permit obligation. Table 9 below summarizes who will be implementing the component, what the component program is called, the specific SWMP BMP or permit requirement that is being met by the shared responsibility, and whether a legal agreement to share responsibility is in place.

Table 9: Shared Responsibilities

SWMP BMP or Permit Requirement	Implementing Entity & Program Name	Legal Agreement (Y/N)
3.5 Construction Site Runoff Control Program	Henderson County Delegated Erosion and Sediment Control Permitting	Y
3.6 Post-Construction Site Runoff Control Program	Henderson County Delegated Phase II Post-Construction Stormwater Permitting	Y

3.2.2, 3.2.4, 2.1.7, 3.2.3, 3.6.(c), 3.3.2, 3.4.1, 3.4.4, 3.4.6, 3.7.3	Land of Sky Regional Council	Y
3.6.6 On-Site Domestic Wastewater Treatment	Henderson County Department of Public Health	N/A

4.4 Co-Permittees

No other entities are applying for co-permittee status under the NPDES MS4 permit number NCS000478 for the Town of Laurel Park. Table 10 summarizes contact information for each co-permittee.

Table 10: Co-Permittee Contact Information

Co-Permittee MS4 Name	Contact Person	Phone & E-Mail	Interlocal Agreement (Y/N)
N/A	N/A	N/A	N/A

4.5 Measurable Goals for Program Administration

The Town of Laurel Park will manage and report the following Best Management Practices (BMPs) for the administration of the Stormwater Management Program.

Table 11: Program Administration BMPs

Permit Ref.	2.1.2 Program Implementation Measures to evaluate the performance and effectiveness of the SWMP program components at least annually. Results shall be used by the permittee to modify the program components as necessary to accomplish the intent of the Stormwater Program.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
1.	Annual Self-Assessment			
	Evaluate the performance and effectiveness of the program components at least annually. Results shall be used to modify the program components as necessary to accomplish the intent of the Stormwater Program.	1. Prepare, conduct and document an annual evaluation of the program components.	1. Annually for Permit Years 1 – 5	1. Yes/No
Permit Ref.	1.6: Permit Renewal Application Measures to submit a permit renewal application no later than 180 days prior to the expiration date of the NPDES MS4 permit.			
	A	B	C	D

Table 11: Program Administration BMPs				
BMP No.	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
2.	Permit Renewal Application			
	Submit a permit renewal application and Draft SWMP no later than 180 prior to permit expiration.	1. Draft SWMP applicable to the proceeding 5 years following permit re-issuance.	1. Permit Year 5	1. Yes/No
2. Certify the stormwater permit renewal application (Permit renewal application form and Draft SWMP for the next 5-year permit cycle) and submit to NCDEQ at least 180 days prior to permit expiration.		2. Permit Year 5	2. Date of permit renewal application submittal	
Permit Ref.	2.1.1: Adequate Funding and Staffing The permittee shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and meet all requirements of this permit.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
3.	Adequate Funding and Staffing			
	Evaluate program funding and staffing to determine if there are gaps affecting implementation.	1. Prepare gap analysis.	1. Permit Year 1	1. Yes/No Finding of adequate or inadequate.
2. Evaluate options for addressing any gaps identified.		2. Permit Year 2	2. Yes/No	
Permit Ref.	2.2.2: Written Procedures The Permittee shall maintain, and make available to the Division upon request, written procedures for implementing the six minimum control measures. Written procedures shall identify specific action steps, schedules, resources, and responsibilities for implementing the MCMs. Written procedures can be free standing or, where appropriate, integrated into the Stormwater Management Plan. The illicit discharge detection and elimination plan shall be free standing.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
4.	Written Procedures			
	Develop an implementation plan for the six MCMs including action steps, responsibilities, schedules and resources.	1. Prepare implementation plan.	1. Annually Permit Year 1-5	1. Yes/No

PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM

The Town of Laurel Park will implement a Public Education and Outreach Program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff.

The target audiences and identified pollutants listed in Part 3.9 of this SWMP, which will be addressed by the Public Education and Outreach Program, are summarized in Table 12 below. In addition, the Town of Laurel Park is required to inform businesses and the general public of the hazards associated with illicit discharges, illegal dumping, and improper disposal of waste.

Table 12: Summary of Target Pollutants & Audiences

Target Pollutants/Sources	Target Audience(s)
Litter	Residents, Businesses, Schools, General Public
Sediment	Construction Activity
Gray water	Residential
Fats, Oils, and Grease	Businesses (Restaurants)
Underground Storage Tanks	Businesses and Residents
Chemicals	Industrial, Business and Residential
Illicit Discharges	General Public, Businesses, Municipal Employees
Illegal Dumping	General Public, Businesses, Municipal Employees
Improper Disposal of Waste	General Public, Businesses, Municipal Employees

The Town of Laurel Park will manage, implement, and report the following public education and outreach BMPs.

Table 13: Public Education and Outreach BMPs				
Permit Ref.	3.2.2 and 3.2.4: Outreach to Targeted Audiences Measures to identify the specific elements and implementation of a Public Education and Outreach Program to share educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and how the public can reduce pollutants in stormwater runoff. The permittee shall provide educational information to identified target audiences on pollutants/sources identified in table 12 above, and shall document the extent of exposure of each media, event or activity, including those elements implemented locally or through a cooperative agreement.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
5.	Stormwater Flyers and Printed Materials			

Table 13: Public Education and Outreach BMPs				
	<p>The stormwater administrator will distribute stormwater informational flyers to target audiences through events like the Town's annual "Shred-It" day, Arbor Day Celebration, and town wide clean up days.</p> <p>The Town will also post flyers on town website, newsletter, and social media.</p>	1. Develop and distribute flyers at Town events and through outreach channels to create stormwater awareness.	1. Annually Permit Year 1 - 5	1. Yes/No
6.	Local Civic Organizations			
	Provide stormwater educational information to local civic organizations like Friends of Laurel Park and the Parks and Greenways board at regular meetings and events.	1. Staff will conduct presentations to share stormwater outreach materials.	1. Annually Permit Years 1-5	1. Yes/No
Permit Ref.	2.1.7, 3.2.3 and 3.6.5(c): Web Site Measures to provide a web site designed to convey the program's message(s) and provide online materials including ordinances, or other regulatory mechanisms, or a list identifying the ordinances or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of the permit and SWMP. The web page shall also provide developers with all relevant post-construction requirements, design standards, checklists and/or other materials.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
7.	Website			
	Update the website to include at minimum the following: <ul style="list-style-type: none"> • Links to pertinent permitting authorities. 	1. Maintain and update stormwater program information on the existing municipal website.	1. Annually Permit Years 1-5	1. Yes/No

Table 13: Public Education and Outreach BMPs

	<ul style="list-style-type: none"> • Links to applicable ordinances. • The MS4 Permit and SWMP. • The MS4 map. • Hotline and instructions for reporting illicit discharges and other environmental issues. • Opportunities for public involvement. • General stormwater awareness information. 			
Permit Ref.	3.2.5: Stormwater Hotline Measures for a stormwater hotline/helpline for the purpose of public education and outreach.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
8.	Hotline			
	Provide a stormwater hotline/helpline for public education and outreach.	1. Maintain a hotline number for stormwater complaints and information, and provide on website and in literature 2. Train staff in general stormwater awareness, complaint call protocols, and appropriate contacts for referral or typical stormwater issues.	1. Permit Year 1 - 5 2. Permit Year 1 and as needed.	1. Yes/No 2. Yes/No

PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

This SWMP identifies the minimum elements and implementation of a Public Involvement and Participation Program that complies with applicable State, Tribal and local public notice requirements. The Town of Laurel Park will manage, implement and report the following public involvement and participation BMPs.

Table 14: Public Involvement and Participation BMPs				
Permit Ref.	3.3.1: Public Input Mechanisms for public involvement that provide input on stormwater issues and the stormwater program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
9.	Town Meetings			
	Stormwater issues and program implementation items will be brought to the Town Council. Citizens can provide input.	1. Advertise Board meetings and agendas on website.	1. Annually Permit Year 1 - 5	1. Yes/No
10.	Stormwater Website Page			
	Provide a contact person and e-mail address for citizen's questions related to stormwater on the Stormwater website page.	1. Maintain contact information on website.	1. Permit Year 1 - 5	1. Yes/No
		2. Maintain reporting form on website.	2. Permit Year 1 - 5	2. Yes/No
Permit Ref.	3.3.2: Volunteer Opportunities Measures to provide volunteer opportunities designed to promote ongoing citizen participation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
11.	Encourage Participation in NC StreamWatch			

Table 14: Public Involvement and Participation BMPs

	Provide information about StreamWatch and promote participation.	1. Add information about StreamWatch to website.	1. Permit Year 2	1. Yes/No
		2. Monitor StreamWatch activity and highlight community participation on website.	2. Permit Years 2-5	2. Yes/No
12.	Support roadside cleanup			
	Promote and provide supplies for community roadside cleanup event.	1. Advertise event in newsletter.	1. Permit Year 1-5	1. Yes/No Date of event
		2. Provide clean up supplies (bags, gloves) and collect bagged trash.	1. Permit Year 1-5	2. Yes/No Number of participants

PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

The Town of Laurel Park will develop, manage, implement, document, report and enforce an Illicit Discharge Detection and Elimination Program which shall, at a minimum, include the following illicit discharge detection and elimination BMPs.

Table 15: Illicit Discharge Detection and Elimination BMPs				
Permit Ref.	3.4.1: MS4 Map Measures to develop, update and maintain a municipal storm sewer system map including stormwater conveyances, flow direction, major outfalls and waters of the United States receiving stormwater discharges.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
13.	MS4 Map			
	Maintain a municipal storm sewer system map including stormwater conveyances, flow direction, major outfalls, interconnections and receiving waters.	1. Add areas in ETJ to MS4 map.	1. Permit Year 2	1. Yes/No
		2. Add NCDOT interconnections to MS4 map.	2. Permit Year 2	2. Yes/No
		3. Evaluate drainage areas to determine if additional major outfalls need to be added to map.	3. Permit Year 3	3. Yes/No
		4. Add new infrastructure to map as new construction occurs.	4. Annually Permit Years 2-5	4. Yes/No
Permit Ref.	3.4.2: Regulatory Mechanism Measures to provide an IDDE ordinance or other regulatory mechanism that provides legal authority to prohibit, detect, and eliminate illicit connections and discharges, illegal dumping and spills into the MS4, including enforcement procedures and actions.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
14.	Maintain Legal Authority			

Table 15: Illicit Discharge Detection and Elimination BMPs

	Review existing ordinance confirming the Town's legal authority to enforce and take actions for prohibiting, detecting and eliminating illicit discharges and connections and illegal dumping and spills.	1. Review ordinance and make any necessary changes. Document any revisions.	1. Permit Year 1	1. Yes/No
Permit Ref.	<p>3.4.3: IDDE Plan Measures to maintain and implement a written IDDE Plan to detect and address illicit discharges, illegal dumping and any non-stormwater discharges identified as significant contributors of pollutants to the MS4. The plan shall provide standard procedures and documentation to:</p> <ul style="list-style-type: none"> a) Locate priority areas likely to have illicit discharges, b) Conduct routine dry weather outfall inspections, c) Identify illicit discharges and trace sources, d) Eliminate the source(s) of an illicit discharge, and e) Evaluate and assess the IDDE Program. 			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
15.	IDDE Plan			
	Develop a written IDDE Plan to detect and address illicit discharges, illegal dumping and any non-stormwater discharges identified as significant contributors of pollutants to the MS4.	1. Develop written IDDE Plan to define the process identifying, tracking and processing illicit discharge, illegal dumping and significant contributors of pollutants to the MS4.	1. Permit Year 1	1. Yes/No
		2. Implement/Enforce the IDDE Plan, including annual inspection of major outfalls.	2. Annually Permit Years 2-5	2. Yes/No Number of outfalls inspected.
3. Review and update the IDDE Plan based on reporting metrics from previous year's findings.		3. Permit Years 3-5	3. Yes/No	

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.4: IDDE Tracking Measures for tracking and documenting the date(s) an illicit discharge, illicit connection or illegal dumping was observed, the results of the investigation, any follow-up of the investigation, the date the investigation was closed, the issuance of enforcement actions, and the ability to identify chronic violators.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
16.	IDDE Tracking			
	Staff will create a mechanism for tracking and documenting the date(s) an illicit discharge, illicit connection or illegal dumping was observed, the results of the investigation, any follow-up of the investigation, the date the investigation was closed, the issuance of enforcement actions, and the ability to identify chronic violators will be recorded.	1. Integrate database application for tracking illicit discharge, illicit connections and illegal dumping, outlining who made the complaint, location of complaint, note prior offenses, status and action taken.	1. Permit Year 1	1. Yes/No
2. Track illicit discharge/connection and illegal dumping with the tool.		2. Annually Permit Years 2-5	2. Yes/No Number of illicit discharge reports received.	
Permit Ref.	3.4.5: Staff IDDE Training Measures to provide training for municipal staff and contractors who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge, illicit connection or illegal dumping. Training shall include identifying and reporting illicit discharges, illicit connections and illegal dumping. Each staff training event shall be documented, including the agenda/materials, date, and number of staff participating.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
17.	Staff Training			
	Train municipal staff to identify and report illicit discharges, illicit connections, illegal dumping and spills.	1. Develop training program.	1. Permit Year 1	1. Yes/No
2. Train staff in IDDE procedures.		2. Permit Year 2 and within first year hired	2. Yes/No Number trained	
Permit Ref.	3.4.6: IDDE Reporting Measures for the public and staff to report illicit discharges, illegal dumping and spills. The mechanism shall be publicized to facilitate reporting and shall be managed to provide rapid response by appropriately trained personnel.			

Table 15: Illicit Discharge Detection and Elimination BMPs

BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
18.	Stormwater Hotline			
	A Stormwater Hotline will be maintained for Town's residents and businesses to report stormwater issues and illicit discharges, illegal dumping, and spills. The hotline number will be available on the Town's website and in educational literature	1. Provide a hotline for reporting IDDE concerns.	1. Permit Year 1	1. Yes/No
19.	IDDE Reporting Web-based Reporting Form			
	Staff will maintain a web-based form where complaints can be entered and sent to the appropriate individual. Publicize reporting tool in education outreach materials.	1. Maintain reporting form on website and publicize in social media.	1. Permit Year 1	1. Yes/No
		2. Establish links to reporting form tool on the Town website and social media.	2. Permit Year 1	2. Yes/No

PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

In accordance with 15A NCAC 02H .0153, the Town of Laurel Park relies upon the North Carolina Sedimentation Pollution Control Act (SPCA) of 1973 as a qualifying alternative program to meet a portion of the NPDES MS4 Permit requirements for construction site runoff control measures. The SPCA requirements include reducing pollutants in stormwater runoff from construction activities that result in land disturbance of greater than or equal to one acre, and includes any construction activity that is part of a larger common plan of development that would disturb one acre or more. The state SPCA Program is either delegated to a city/town, delegated to a county, or implemented by NCDEQ in non-delegated areas.

Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program

Permit Reference	State or Local Program Name	Legal Authority	Implementing Entity
3.5.1 - 3.5.4	Henderson County Delegated SPCA Program	15A NCAC Chapter 04 Local Ordinance	Henderson County

* The local delegated SPCA Program ordinance(s)/regulatory mechanism(s) can be found at: <https://www.hendersoncountync.gov/waterresources/page/soil-erosion-and-sedimentation-control-ordinance>

The Town of Laurel Park also implements the following BMPs to meet NPDES MS4 Permit requirements.

Table 17: Construction Site Runoff Control BMPs				
Permit Ref.	3.5.6: Public Input Measures to provide and promote a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
20.	Municipal Staff Training			
	Train municipal staff who receive calls from the public on the protocols for referral and tracking of construction site runoff control complaints.	1. Train municipal staff on proper handling of construction site runoff control complaints.	1. Permit Year 2 and within first year hired	1. Yes/No Number trained
21.	Stormwater Hotline			

Table 17: Construction Site Runoff Control BMPs				
	The Stormwater Hotline will be maintained reporting sediment run-off from construction sites and for questions concerning construction site activities.	1. Provide the hotline and pertinent information on the web page and in all new stormwater literature.	1. Permit Years 1-5.	Yes/No
Permit Ref.	3.5.5: Waste Management Measures to require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impact to water quality. This must be implemented locally, the MS4 cannot rely on NCG010000 to meet this requirement.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
22.	Waste Management			
	Require construction site operators to control waste at the construction site that may cause adverse impact to water quality.	1. Evaluate options to require waste control.	1. Permit Year 1	1. Yes/No
		2. Implement preferred option to control waste.	2. Permit Year 2	2. Yes/No
		3. Provide information materials to building permit applicants and on website about construction waste management requirements.	3. Permit Year 2.	3. Yes/No

PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

This SWMP identifies the minimum elements to develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that are located within the Town of Laurel Park and discharge into the MS4. These elements are designed to minimize water quality impacts utilizing a combination of structural Stormwater Control Measures (SCMs) and/or non-structural BMPs appropriate for the community and ensure adequate long-term operation and maintenance of SCMs. All Post-Construction management is done through an agreement with Henderson County which maintains and enforces a checklist to ensure projects meet all standards.

In accordance with 15A NCAC 02H .0153 and .1017, the Town of Laurel Park implements the following State post-construction program requirements, which satisfy the NPDES Phase II MS4 post-construction site runoff control requirements as Qualifying Alternative Programs (QAPs) in the MS4 area(s) where they are implemented.

Laurel Park has two non-conflicting codes that address post-construction stormwater. In the Town Code of Ordinances, Chapter 53 outlines the Town's stormwater management policies. Additionally, there is a separate stormwater ordinance which is referenced in Table 19.

Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program

State QAP Name	State Requirements	Local Ordinance / Regulatory Mechanism Reference
Water Supply Watershed (WS-IV)	15A NCAC 2B .0620 - .0624	WS-IV Watershed Ordinance



Table 19: Summary of Existing Post-Construction Program Elements

Permit Requirements for Plan Review and Approval	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(a) Authority	Town of Laurel Park UDO 3.3.2	8/18/21
3.6.3(a) & 15A NCAC 02H.0153(c) Federal, State & Local Projects	Town of Laurel Park UDO 3.3.5	8/18/21
3.6.3(b) Plan Review	Town of Laurel Park UDO 6.3.18	8/18/21
3.6.3(c) O&M Agreement	Town of Laurel Park UDO 3.3.15	8/18/21
3.6.3(d) O&M Plan	Town of Laurel Park UDO 6.3.18	8/18/21
3.6.3(e) Deed Restrictions/Covenants	Town of Laurel Park UDO 3.3.15	8/18/21
3.6.3(f) Access Easements	Town of Laurel Park UDO 3.3.15	8/18/21
Permit Requirements for Inspections and Enforcement	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(b) Documentation	Town of Laurel Park UDO 3.3.18	8/18/21
3.6.2(c) Right of Entry	Town of Laurel Park UDO 3.3.18	8/18/21
3.6.4(a) Pre-CO Inspections	Town of Laurel Park UDO 3.3.18	8/18/21
3.6.4(b) Compliance with Plans	Town of Laurel Park UDO 3.3.18	8/18/21
3.6.4(c) Annual SCM Inspections	Town of Laurel Park UDO 3.3.15	8/18/21
3.6.4(d) Low Density Inspections	Town of Laurel Park UDO 3.3.13	8/18/21
3.6.4(e) Qualified Professional	Town of Laurel Park UDO 3.3.13	8/18/21
Permit Requirements for Fecal Coliform Reduction	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.6(a) Pet Waste	See BMP 23	N/A
3.6.6(b) On-Site Domestic Wastewater Treatment	Henderson County Septic Program	N/A

The annual reporting metrics for the post construction program are provided in Table 20: Post Construction Site Runoff Control BMPs below.

Table 20: Post Construction Site Runoff Control BMPs				
Permit Ref.	3.6.5(a), 3.6.5(b), and 4.1.3: Minimum Post-Construction Reporting Requirements			
	Measures to document activities over the course of the fiscal year (July 1 – June 30) including appropriate information to accurately describe progress, status, and results.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
23.	Standard Reporting			
	Implement standardized tracking, documentation, inspections and reporting mechanisms to compile appropriate data for the annual	1. Track number of low density and high density plan reviews performed.	1. Continuously Permit Years 1-5	1. Number of plan reviews performed for low density and high density.

Table 20: Post Construction Site Runoff Control BMPs

	self-assessment process. Data shall be provided for each Post-Construction/ Qualifying Alternative Program being implemented as listed in Tables 18 and 19.	2. Track number of low density and high density plans approved.	2. Continuously Permit Years 1-5	2. Number of plan approvals issued for low density and high density.
		3. Maintain a current inventory of low density projects and constructed SCMs including SCM type or low density acreage, location and last inspection date.	3. Continuously Permit Years 1-5	3. Summary of number and type of SCMs added to the inventory; and number and acreage of low density projects constructed.
		4. Track number of SCM inspections performed.	4. Continuously Permit Years 1-5	4. Number of SCM inspections.
		5. Track number of low density inspections performed - with the goal of inspecting all low density projects over the 5 year permit period.	5. Continuously Permit Years 1-5	5. Number of low density projects inspected.
		6. Track number and type of enforcement actions taken.	6. Continuously Permit Years 1-5	6. Number of enforcement actions issued.
Permit Ref.	2.3 and 3.6: Qualifying Alternative Program(s) Measures to develop, implement and enforce additional BMPs in order to comply with the QAP state program requirements.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
24.	Qualifying Alternative Program			
	The QAP requirements are applicable to a portion of the Town of Laurel Park; however, the Phase II Post-construction Stormwater Ordinance is being administer to fulfill both requirements.			

Table 20: Post Construction Site Runoff Control BMPs

Permit Ref.	3.6.2: Legal Authority Measures to maintain adequate legal authorities through ordinance or other regulatory mechanism to: (a) review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained, (b) request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program, and (c) enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with the Post-Construction Stormwater Management Program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
25.	Phase II Post-construction Stormwater Ordinance			
	The permittee will enforce the enacted ordinance in accordance with state law and guidance.	1. Enforcement of the Phase II Post-construction Stormwater Ordinance to ensure compliance.	1. Continuous Permit Years 1-5	1. Yes/No

Table 20: Post Construction Site Runoff Control BMPs

Permit Ref.	3.6.3: Plan Review and Approval Measures to maintain plan review and approval authority, standards and procedures to: (a) Require Federal, State, and local government projects to comply with Post-Construction Program requirements throughout the entire MS4 permitted area, unless the entity is subject to its own NPDES MS4 permit or a qualifying alternative program, (b) Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre, and sites that disturb less than one acre that are part of a larger common plan of development or sale for compliance with 15A NCAC 02H .1017 and the qualifying alternative programs that apply within your jurisdiction, (c) Ensure that each project has an Operation and Maintenance Agreement that complies with 15A NCAC 02H .1050(12), (d) Ensure that each project has an Operation and Maintenance Plan that complies with 15A NCAC 02H .1050(13), (e) Ensure that each project has recorded deed restrictions and protective covenants, that require the project to be maintained consistent with approved plans, and (f) Ensure that each SCM and associated maintenance accesses be protected in a permanent recorded easement per 15A NCAC 02H 1050 (9) and (10).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.			
Permit Ref.	3.6.4: Inspections and Enforcement Measures to maintain inspection and enforcement authority, standards and procedures to: (a) Conduct post-construction inspections prior to issuing a Certificate of Occupancy or a Temporary Certificate of Occupancy. Alternatively, the project owner may provide a surety bond to guarantee compliance with the approved plan(s), (b) Ensure that the project has been constructed in accordance with the approved plan(s), (c) Ensure annual inspection of each permitted SCM to ensure compliance with the approved Operation and Maintenance Agreement, (d) Ensure inspection of low density projects at least once during the permit term, and (e) Require that inspections be conducted by a qualified professional.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.			
Permit Ref.	3.6.6: Fecal Coliform Reduction Measures to control, to the maximum extent practicable, sources of fecal coliform per 15A NCAC 02H .1017(7). At a minimum, the program shall include: (a) A pet waste management component, which may be achieved by revising an existing litter ordinance, and (b) An on-site domestic wastewater treatment system component, if applicable, which may be coordinated with local county health department, to ensure proper operation and maintenance of such systems.			
	A	B	C	D

Table 20: Post Construction Site Runoff Control BMPs

BMP No.	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
26.	Pet Waste Management			
	Review pet waste management currently being implemented within the Town. Evaluate if there is a need to expand this initiative.	1. Evaluate what is currently in place.	1. Permit Year 3	1. Yes/No
		2. If determined additional mechanisms are needed for pet waste control provide for these measures.	2. Permit Year 4	2. Yes/No

PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS

This SWMP provides a comprehensive pollution prevention and good housekeeping strategy for the Town of Laurel Park municipal facilities and operations. Pollution prevention and good housekeeping is accomplished through the implementation of seven required programs, which collectively address the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and municipal storm sewer system maintenance.

Pollution prevention and good housekeeping for municipal operations includes the following programs:

1. Municipal Facilities Operation and Maintenance Program
2. Spill Response Program
3. MS4 Operation and Maintenance Program
4. Municipal SCM Operation and Maintenance Program
5. Pesticide, Herbicide and Fertilizer Management Program
6. Vehicle and Equipment Cleaning Program
7. Pavement Management Program

The Town of Laurel Park will manage, implement and report the pollution prevention and good housekeeping BMPs as specified in Table 21 below for each required program.

Table 21: Pollution Prevention and Good Housekeeping BMPs				
Permit Ref.	3.7.1: Municipal Facilities Operation and Maintenance Program Measures to manage facilities that are owned and operated by the permittee and have the potential for generating polluted stormwater runoff. The permittee shall maintain a current inventory of municipal facilities; perform facility inspections and routine maintenance; establish specific frequencies, schedules, and standard documentation; provide staff training on general stormwater awareness and implementing pollution prevention and good housekeeping practices. Please note that at a minimum, NCDEQ will require that all inventoried municipal facilities be inspected once per permit term to determine pollution potential, and facilities with potential be inspected at least annually.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
27.	Inventory Municipal Facilities			
	Create an inventory of all municipal facilities, including location, function, and document	1. List of all municipal facilities.	1. Permit Year 1	1. Yes/No Number of facilities

Table 21: Pollution Prevention and Good Housekeeping BMPs

	what activities have the potential to generate stormwater runoff pollution.	2. Perform a site inspection of municipal facilities to determine and document potential for spills or stormwater pollution.	2. Permit Year 2	2. Yes/No
		3. Perform inspections of facilities with pollution potential.	3. Permit Years 3-5	3. Yes/No
Permit Ref.	3.7.2: Spill Response Program Measures for facilities and operations that store and/or use materials that have the potential to contaminate stormwater runoff if spilled. The permittee shall maintain written spill response procedures and train staff on spill response procedures.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
28.	Spill Response			
	All municipal facilities with stormwater pollution potential shall have a written SPCC plan.	1. Develop a written SPCC for each identified facility.	1. Permit Year 2	1. Yes/No
		2. Train staff in SPCC procedures.	2. Permit Year 2, and within first year of new hire	2. Yes/No Number of staff trained.
Permit Ref.	3.7.3: MS4 Operation and Maintenance Program Measures to minimize pollutants in the stormwater collection system. The permittee shall provide operation and maintenance staff training on stormwater awareness and pollution prevention, perform MS4 inspections, maintain the collection system including catch basins and conveyances; and establish specific frequencies, schedules, and standard documentation.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
29.	MS4 Operation & Maintenance (O & M) Plan			

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	Develop a proactive plan for MS4 system maintenance which requires regular inspections and maintenance and verify, document, and prioritize maintenance activities identified by inspections or citizen reports continuously, as potential maintenance activities are identified.	1. Develop a SOP that includes inspection schedules, standard documentation, staff responsibilities, and proper maintenance training.	1. Permit Year 1	1. Yes/No
30.	Staff Training			
	Provide training to municipal and contracted staff to minimize pollutants in the stormwater collection system and prevent unnecessary damage and wear on the system.	1. Develop or identify an appropriate training program.	1. Permit Year 1	1. Yes/No
		2. Provide training for all existing and new employees with MS4 responsibilities.	2. Permit Year 2, and as needed with new hires	2. Yes/No Number trained
31.	MS4 Inspection and Maintenance			
	Perform inspections and maintenance on MS4 system.	1. Develop an inspection and maintenance tracking system to be used in accordance with the SOP.	1. Permit Year 1	1. Yes/No
		2. Perform regular inspections in accordance with the SOP.	2. Permit Years 2-5.	2. Yes/No Number of inspections
Permit Ref.	3.7.4: Municipal SCM Operation and Maintenance Program Measures to manage municipally-owned, operated, and/or maintained structural stormwater control measures SCMs that are installed for compliance with the permittee's post-construction program. The permittee shall maintain a current inventory of SCMs, perform SCM inspections and maintenance, and shall establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
32.	Inventory and Mapping of Municipal Structural SCMs			
	Develop and maintain a current inventory of Town-owned structural SCMs and reflect those structures on the Town's MS4 map.	1. Create inventory of municipally owned SCMs. Add new SCMs as they are constructed.	1. Continuous Permit Years 1-5	2. Yes/No Number of Town-owned structural SCMs

Table 21: Pollution Prevention and Good Housekeeping BMPs

		2. Locate and add Town-owned SCMs to the MS4 map with type of SCM indicated.	2. Continuous Permit Years 1-5	2. Yes/No
33.	Inspections and Maintenance of Town SCMs			
	Perform and document annual inspections and maintenance of existing and new Town-owned structural SCMs and perform maintenance tasks identified in inspections.	1. Maintain North Carolina SCM Inspections and Certification for appropriate personnel.	1. Continuously, beginning in Permit Year 2	1. Number of staff members with active certifications
		2. Develop SCM inspection form and tracking system.	2. Permit Year 2	2. Yes/No
		3. Inspect and maintain each SCM	3. Annually, beginning Year 3.	3. Yes/No Number of SCMs inspected
Permit Ref.	3.7.5: Pesticide, Herbicide and Fertilizer Management Program Measures to minimize water quality impacts from the use of landscape chemicals. The permittee shall provide routine pollution prevention and chemical use, storage and handling training, and shall ensure compliance with permits and applicator certifications.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
34.	Pesticide, Herbicide and Fertilizer Applicator Training			
	Town staff that are responsible for application of pesticides, herbicides and fertilizers shall be certified in proper storage, handling and application of landscape chemicals.	1. Create a list of all Town employees that hold certifications and their certification number.	1. Permit Year 1, update when new staff certified	1. Yes/No Number of staff
		2. Ensure that certified employees maintain their certification.	2. Permit Year 2-5	1. Yes/No
Permit Ref.	3.7.6: Vehicle and Equipment Cleaning Program Measures to prevent and minimize contamination of stormwater runoff from areas used for municipal vehicle and equipment maintenance and/or cleaning. The permittee shall ensure that municipal industrial facilities subject to NPDES industrial permitting comply with those permit requirements, provide routine pollution prevention training to staff, perform routine inspections, and establish specific frequencies, schedules, and documentation.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric

Table 21: Pollution Prevention and Good Housekeeping BMPs

Table 21: Pollution Prevention and Good Housekeeping BMPs				
35.	Vehicle and Equipment Cleaning and Maintenance Facility Inspection			
	Perform routine inspections to ensure that vehicle and equipment facilities are following proper procedures to minimize water quality impacts from vehicle and equipment cleaning and maintenance.	1. Develop an inspection checklist.	1. Permit Year 2	1. Yes/No
2. Perform inspections using inspection checklist and notify facility manager of any corrective actions required		2. Bi-annually, beginning in Permit Year 3	2. Yes/No	
Permit Ref.	3.7.7: Pavement Management Program Measures to reduce pollutants in stormwater runoff from municipally-owned streets, roads, and parking lots within the permittee's corporate limits. The permittee shall implement measures to control litter, leaves, debris, particulate and fluid pollutants associated with vehicles, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
36.	Litter Management			
	Collect litter in public areas and parking lots to reduce negative impacts on water quality.	1. Public waste receptacles are emptied on a weekly basis.	1. Continuous Permit Years 1-5	1. Yes/No
37.	Leaf Collection			
	Implement measures to control leaves and debris within the municipal Town limits	1. Leaves that have been bagged are collected when trash pickup occurs. Citizens can request pick up through a form on the town's website.	1. Continuous Permit Years 1-5	1. Yes/No
		2. Leaves are vacuumed from the streets annually.	2. Permit Years 1-5	2. Yes/No
38.	Vehicle Pollutant Management			
	Implement measures to prevent and reduce pollution from vehicles.	1. Provide spill kits and training to staff for municipal vehicles.	1. Permit Year 1 - 5	1. Yes/No
		3. Provide public education on vehicle pollution prevention.	2. Permit Year 3	2. Yes/No

