

Town of Hillsborough

NPDES Phase II Stormwater Management Program



ANNUAL REPORT

Fiscal Year 2019

TABLE OF CONTENTS

| | |
|--|----------|
| INTRODUCTION | 1 |
| 1. Storm Sewer System Information..... | 2 |
| 1.1 Population Served..... | 2 |
| 1.2 Growth Rate..... | 2 |
| 1.3 Jurisdictional Area..... | 2 |
| 1.4 MS4 Conveyance System..... | 2 |
| 1.5 Land Use Composition..... | 2 |
| 1.6 TMDL Identification | 3 |
| 2. Receiving Streams | 3 |
| 3. Existing Water Quality Programs | 3 |
| 3.1 Local Programs..... | 3 |
| 3.2 State Programs..... | 4 |
| 4. Permitting Information | 4 |
| 4.1 Responsible Party Contact List | 4 |
| 4.2 Signing Official..... | 4 |
| 5. Co-Permit Status Information | 4 |
| 6. Reliance on Another Entity..... | 5 |
| 6.1 Contact Information..... | 5 |
| 6.2 Legal Agreement..... | 5 |
| 7. Stormwater Management Program Plan | 5 |
| 7.1 Public Education and Outreach..... | 5 |
| 7.2 Public Involvement and Participation..... | 8 |
| 7.3 Illicit Discharge Detection and Elimination..... | 10 |
| 7.4 Construction-Site Stormwater Runoff Control..... | 12 |
| 7.5 Post-Construction Stormwater Management..... | 13 |
| 7.6 Pollution Prevention/Good Housekeeping for Municipal Operations..... | 15 |

INTRODUCTION

Why Care About Stormwater?

Adding impervious surface decreases the amount of stormwater that infiltrates into the ground. This increases the amount and velocity of stormwater runoff. This can cause accelerated erosion and downstream flooding. In addition, as stormwater flows across impervious surfaces, it picks up various pollutants. These include excess nutrients, oil and grease, bacteria and sediment. Polluted stormwater flows down storm drains and ditches where it is discharged, untreated, into local streams, rivers, and lakes. Stormwater runoff pollution causes adverse impacts to aquatic ecosystems, poses human health risks, and can greatly increase the cost of treating drinking water.

Program Background

In 1972, the National Pollutant Discharge Elimination System (NPDES) program was established under the authority of the Federal Clean Water Act. Phase I of the NPDES Stormwater program was established in 1990. It required NPDES permit coverage for municipalities with populations of 100,000 or more.

Phase II of the NPDES Stormwater program was signed into law in December 1999. The Phase II program extended permit coverage to smaller (< 100,000 pop.) communities and public entities that own or operate a municipal separate storm sewer system (MS4). It required these smaller communities to develop a stormwater program and obtain an NPDES permit for stormwater discharges.

In North Carolina, the Department of Environmental Quality (NCDEQ) administers the NPDES Stormwater program. NCDEQ issued the Town of Hillsborough's (Town) initial Phase II permit, on October 1, 2005. The permit required the Town to develop, implement, and enforce a stormwater program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable. The program was implemented in phases over five years of the initial permit. Pursuant to the permit the stormwater program included the following six minimum measures or best management practices (BMPs):

1. Public education and outreach on stormwater impacts;
2. Public involvement/participation;
3. Illicit discharge detection and elimination;
4. Construction site stormwater runoff control (Erosion Control);
5. Post-construction stormwater management for new development and redevelopment;
6. Pollution prevention/good housekeeping for municipal operations.

The Town's current permit, Number NCS000466, was issued on February 27, 2017. This annual report reflects reporting requirements pursuant to the permit. Numbers reported are for the fiscal year 2018-2019, which runs from July 1, 2018 to June 30, 2019 and is referred to hereafter as FY2019.

1. Storm Sewer System Information

1.1 Population Served

Estimated population served..... 7,364¹

1.2 Growth Rate

Estimated increase 2010-2017 21.0%²

Estimated annual increase 2010-2017..... 2.76%

1.3 Jurisdictional Area

Town Limits 5.5 sq. mi

ETJ..... 3.7 sq. mi.

1.4 MS4 Conveyance System

Due to the age of the town, MS4 consists of a variety of stormwater conveyances and components. These range from typical curb and gutter systems conveyed by concrete pipes to simple sheet flow. The predominate conveyance components include grass lined swales and vegetated drainage ditches with various pipes and culverts. There are also various detention systems within the Town's jurisdiction, however these are on private property.

MS4 system components are periodically inspected to ensure proper function. The North Carolina Department of Transportation (NCDOT) maintains systems within state road rights-of-way. Systems located on private property, including detention facilities and other engineered stormwater controls, are maintained by the owner.

1.5 Land Use Composition

Estimated Land Use³

Residential..... 34%

Commercial 19%

Industrial..... 5%

Open Space..... 42%

Total 100%

¹ July 2017 Data from North Carolina Office of Budget and Management, State Demographics Data, <http://www.osbm.state.nc.us/>.

² Percentage increase from 2010 to 2016 (North Carolina Office of Budget and Management, State Demographics Data, <http://www.osbm.state.nc.us/>.)

³ Land use percentages were estimated from the Town of Hillsborough Land Use GIS database. Area of parcels for each designated land use type were summed and calculated for relative percentage of the planning jurisdictional area.

1.6 TMDL Identification

Currently, no streams flowing into or out of the Town of Hillsborough’s jurisdiction have an associated Total Maximum Daily Load.

2. Receiving Streams

The Town of Hillsborough lies entirely within the Falls Lake Watershed, which is part of the Neuse River Basin. Specifically, the Town drains to the Eno River. Specific receiving waters are listed below.

| Receiving Stream | Description | Classification | Index No. |
|---|--|---------------------|--------------|
| Eno River (Corporation Lake, Lake Ben Johnston) | From a point 0.4 mile upstream of Dry Run to dam at Lake Ben Johnston (Orange County water supply intake & Town of Hillsborough water supply intake) | WS-II; HQW, CA, NSW | 27-2-(3.5) |
| Eno River | From dam at Lake Ben Johnston to Orange County SR 1561 | C; NSW, N | 27-2-(7) |
| Seven Mile Creek | From a point 0.4 mile upstream of I-85 to Lake Ben Johnston, Eno River | WS-II; HQW, CA, NSW | 27-2-6-(1.5) |
| Rocky Run | From a point 0.5 mile upstream of I-85 to Seven Mile Creek | WS-II; HQW, NSW | 27-2-6-2-(2) |
| Cates Creek | From source to Eno River | C; NSW | 27-2-8 |
| Strouds Creek | From source to Eno River | C; NSW | 27-2-9 |
| Stony Creek | From source to a point 0.4 mile upstream of Orange County SR 1710 | C; NSW | 27-2-13-(1) |

3. Existing Water Quality Programs

3.1 Local Programs

The following programs and ordinances are being implemented within the Town of Hillsborough’s jurisdiction.

Unified Development Ordinance (UDO) – regulates overall development and land use. Specific water quality aspects include local stream buffer rules and post construction stormwater requirements, including nutrient limits.

Flood Damage Prevention – through its UDO the Town protects water quality by preventing new development within flood hazard zones.

Local Nutrient Sensitive Waters (NSW) Strategy - through its UDO the Town adopted stormwater requirements for new development to meet the Falls Lake Nutrient Management Strategy (Falls Lake rules).

Delegated Erosion and Sediment Control Program - as noted in Section 6, the Town relies on Orange County to conduct an erosion control program. Orange County has local delegated authority from the state.

3.2 State Programs

State programs, including the Neuse, Falls Lake, and Water Supply Watershed rules are implemented at a local level. The Town of Hillsborough does rely on NCDOT to maintain stormwater facilities and programs within state-owned road rights-of-way.

4. Permitting Information

The Town's Stormwater Program is under direction of the Stormwater and Environmental Services Manager. Stormwater and Environmental Services is a division of the Town's Planning Department. The Stormwater and Environmental Services Division works closely with Utilities, Public Works and Planning departments, and is supervised by the Assistant Town Manager/Planning Director.

4.1 Responsible Party Contact List

Overall implementation and oversight of the Town's Stormwater Program is directed by:

Terry Hackett, Stormwater & Environmental Services Manager
Town of Hillsborough
P.O. Box 429
101 E. Orange Street
Hillsborough, NC 27278
Telephone: 919-296-9621
Email: terry.hackett@hillsboroughnc.gov

4.2 Signing Official

The Town of Hillsborough operates under a council-manager form of government. The town manager is responsible for management and oversight of the Town's daily operations. Contact information is listed below:

Eric Peterson, Town Manager
Town of Hillsborough
101 E. Orange Street
P.O. Box 429
Hillsborough, NC 27278
Telephone: 919-296-9421
Email: eric.peterson@hillsboroughnc.gov

5. Co-Permit Status Information

The Town of Hillsborough holds its own NPDES Phase II permit and does not co-permit with another entity.

6. Reliance on Another Entity

The Town of Hillsborough utilizes Orange County to implement the Construction Site Stormwater Runoff Control (i.e. erosion control) portion of its stormwater program.

6.1 Contact Information

Erosion Control Program: Howard Fleming Jr., P.E., Erosion Control Supervisor
Orange County Planning and Inspections Department
131 W Margaret Lane, Suite 201
Hillsborough, NC 27278
919-245-2586
hfleming@orangecountync.gov

6.2 Legal Agreement

The Town maintains an inter-local agreement with Orange County to provide erosion control services. The current agreement was approved in October 2012.

7. Stormwater Management Program Plan

The following sections briefly describe the Town's stormwater management program for each of the six BMPs. Detailed information regarding each program area can be found in the Town's comprehensive stormwater management plan, available on the Town's website.

7.1 Public Education and Outreach

The objective of the Town's stormwater public education and outreach program is to increase citizen awareness of stormwater runoff pollution and related issues. The Town's stormwater public education and outreach program includes the following primary components:

- *Disseminate Educational Materials*

The Town disseminates educational materials that are either developed in-house or use existing materials available from other agencies. These materials are distributed electronically, at educational programs, special events and directly to individual citizens or businesses.

- *Stormwater Newsletter, Articles and Press Releases*

The Town publishes the *Stormwater Almanac*, a newsletter that educates and informs citizens about stormwater management issues within the Town. In addition, Town stormwater staff often write articles on various stormwater program related topics that are published in other periodicals. Stormwater staff also coordinates with the town's Public Information Office for press releases from the Town highlighting stormwater management related issues, stormwater related volunteer events, etc.

- *School programs*

The Town conducts direct educational, stormwater related programs for local schools. This includes partnering with other local governmental agencies conducting environmental education programs in local schools. Annual programs include Earth Walk with local seventh grade students, Eno River field trip with Orange High AP Environmental/Earth Science classes, science night at The Expedition School, as well as other programs as requested.

- *Special Events and Civic Groups*

The Town provides stormwater education and outreach programs/materials at local special events such as “Last Fridays”, “Earth Evening” and “Citizens Academy.” Town stormwater staff also provides educational programs to various civic groups, including local scout units, homeowner associations, churches and various other groups.

- *Social Media*

The Town maintains a Facebook page (www.facebook.com/ToHGovSW/) and Twitter account (@ToHGovSW) for the Stormwater and Environmental Services Division. Weekly posts provide education on pollution prevention, encourage citizens to explore nature and enjoy the Town’s water resources, and promote special events and volunteer workdays.

- *Clean Water Education Partnership.*

The Town of Hillsborough actively participates in the Clean Water Education Partnership (CWEP). CWEP assists member governments with their stormwater outreach and education program by leveraging member dues to conduct various media campaigns. The FY19 CWEP annual report can be accessed from their website, <http://www.nccwep.org/>. CWEP summary statistics are provided in *Section 7.1.5*, below.

FY2019 Summary statistics for the primary components of the Town’s Public Education and Outreach Program are provided in the following sections.

7.1.1 School Program Statistics

| School Stormwater Education Programs - FY2019 | | |
|--|-----------------|------------------------------------|
| Program | Students | Giveaways/ Certificates |
| AL Stanback - Earthwalk | 240 | 23 |
| CW Stanford – Earthwalk | 220 | 21 |
| Gravelly Hill – Earthwalk | 157 | 18 |
| The Expedition School – Read Aloud About Water | 38 | 38 |
| Orange High - Environmental Science Class | 28 | -- |
| <i>Total</i> | 683 | 100 |

7.1.2 Outreach, Special Events and Other Program Statistics

| Outreach, Special Events and Other Programs - FY2019 | | |
|---|---------------------|--------------------------------|
| Program | Participants | Handouts/ Giveaways |
| Citizens Academy | 13 | 13 |
| The Expedition School - Science Night | 33 | 27 |
| Girls on the Run Club | 16 | -- |
| Science Fair – CW Stanford | 48 | -- |
| Skip The Straw – Orange County Library | 49 | 12 |
| Eno River Assessment Outreach | 5 | 5 |
| <i>Total</i> | <i>164</i> | <i>57</i> |

7.1.3 Newsletters, Articles and Press Release Statistics

| Newsletters, Articles and Press Release Statistics – FY2019 | |
|--|---|
| Stormwater Almanac (newsletter) Issues Published | 2 |
| Stormwater Related Press Releases | 4 |
| Stormwater Related Articles Written/Published | 1 |

7.1.4 Town of Hillsborough Social Media Statistics

| Social Media Posts - FY2019 | | |
|------------------------------------|-----------------|----------------|
| Statistic | Facebook | Twitter |
| Posts | 77 | 120 |
| Followers | 106 | 145 |

| Facebook Post Statistics - FY2019 | | |
|--|--------------|-------------------------|
| Statistic | Total | Average per Post |
| Post Reach ⁴ | 30,197 | 392 |
| Post Impressions ⁵ | 46,892 | 609 |
| Engaged Users ⁶ | 3,651 | 47 |

⁴ Count of people for whom the post entered their screen

⁵ Count of times a post entered a person's screen

⁶ Count of people who engaged with the post, including liking, commenting, and sharing

7.1.5 CWEP Media Statistics

| CWEP Statistics – FY2019 | |
|---|--|
| Town’s FY2019 Cost Share | \$2,274 |
| Market | Triangle Market |
| Television Outreach | 7,198,500 impressions |
| Radio Outreach | 1,108,000 impressions |
| Movie Theater Outreach ⁷ | 24,486 spots; 557,212 impressions |
| Spectrum Digital Campaign | 1,677,171 impressions |
| Capitol Broadcasting Company Digital Campaign | 470,082 impressions |
| Social Media Campaign | 307 Facebook engagements; 241 Twitter engagements |
| Website Performance | 2000 maximum unique visitors/month |

7.2 Public Involvement and Participation

The objective of the Town’s public involvement and participation program is to strengthen citizen engagement in stormwater and environmental issues affecting the Town. Public Involvement and participation includes providing volunteer opportunities, exchanging information with citizens and elected officials, and providing public assistance on stormwater related issues.

- *Volunteer Opportunities*

Town Stormwater and Environmental Services Division staff coordinates volunteer opportunities to raise awareness of stormwater runoff pollution, engage citizens and ultimately reduce target pollutants. Volunteer opportunities regularly include trash/litter clean-ups, wetland/riparian vegetation planting, invasive species removal/monitoring, qualitative stream monitoring, and maintenance of the Town’s pollinator/rain gardens and stormwater wetland.

- *Public Meetings*

At a minimum, Town Stormwater and Environmental Services Division staff presents one update to Hillsborough’s elected Town Board of Commissioners regarding the stormwater program, annually. As part of the presentation, Town Commissioners can provide input on pertinent issues. Staff may also provide presentations to other Town advisory boards as requested.

⁷ There are no movie theaters in Hillsborough, so these statistics are for the two closest movie theaters to Hillsborough. Spots were aired throughout the Triangle Market.

- *Public Assistance*

Town Stormwater and Environmental Services staff provides assistance to citizens regarding stormwater pollution prevention, riparian buffer regulation, drainage issues and other related topics. This includes site visits and investigations as necessary.

In addition to the items listed above, the Town maintains a website with pertinent stormwater information. This includes email and phone numbers of stormwater staff so that citizens can report concerns. Other than emails and calls received, Town Stormwater and Environmental Services staff does not report website statistics.

FY2019 Summary statistics for the primary components of the Town's Public Involvement and Participation Program are provided in the following sections.

7.2.1 *Volunteer Opportunity Statistics*

| Litter/Trash Clean-ups – FY2019 | |
|--|-------|
| Number of Events | 1 |
| Number of Volunteers | 31 |
| Miles Cleaned | 0.5 |
| Pounds Collected | 8,679 |

| Tree/Wetland Plantings - FY2019 | | | |
|---|---------------------|--------------------------|--------------|
| Name/Location | Participants | Trees/ Plants | Acres |
| Gold Park Pollinator Garden/Bioretenion | 7 | 25 | 0.01 |
| Cates Creek Linear Rain/Pollinator Garden | 9 | 112 | 0.01 |
| Girls on the Run Club – Gold Park Wetland | 16 | 10 | 0.01 |
| Public Works Restoration Site | 13 | 380 | 0.25 |
| Riparian Buffer Restoration (various) | 7 | 354 | 0.24 |
| <i>Total</i> | <i>52</i> | <i>894</i> | <i>0.52</i> |

| Volunteer Monitoring – FY2019 | |
|---|----|
| Number of Groups | 3 |
| Number of Monitoring Locations | 3 |
| Total Number of Volunteers | 24 |
| Number of Actions Completed as a result | 3 |

7.2.2 *Public Meeting Statistics*

| Stormwater Related Public Meetings FY2019 | |
|--|----|
| Number of Public Meetings | 1 |
| Number of Attendees | 19 |

7.2.3 *Public Assistance Statistics*

| Public Assistance – FY2019 | |
|-------------------------------------|----|
| Number of Calls, Complaints, Issues | 10 |
| Number Resolved | 9 |

7.3 Illicit Discharge Detection and Elimination

The Town’s stormwater illicit discharge detection and elimination program (IDDE) is outlined in its *Illicit Discharge Detection and Elimination Plan* and is enforced through the Town code. This plan details measures that Town Stormwater and Environmental Services Division staff follows to find and eliminate illicit discharges and connections to the MS4. The primary components of this plan are described below:

- *MS4 Mapping*

The Town maintains a GIS map and database of the stormwater infrastructure within town limits. This includes pipes, ditches, swales catch basins, inlets, outlets and stormwater outfalls. The Town defines stormwater outfalls more broadly than EPA definitions. This conservative approach allows Town Stormwater and Environmental Services Division staff to evaluate outfalls as time allows and may eliminate some as stormwater outfalls, if appropriate. Currently, there are approximately 123 stormwater outfalls located within the Town’s jurisdiction.

- *High Priority Areas*

The Town’s *Illicit Discharge Detection and Elimination Plan* calls for the identification of high priority areas for IDDE screening investigations. The Town has designated four high priority areas: Downtown, Central Business District, West Hillsborough, and Meadowlands. These areas reflect a relatively high development density as well as a concentration of light industrial and commercial land use.

- *Illicit Discharge Investigation*

In general, this includes screening of high priority areas, dry weather inspections of stormwater outfalls and investigation of complaints/concerns submitted by citizens or by other town employees.

- *Sanitary Sewer Overflows*

While a sanitary sewer overflow (SSO) is ultimately the responsibility of the Town’s Utility Department, overflows can reach the stormwater system and/or receiving waters and are considered an illegal discharge. Therefore, statistics for SSO’s are included below.

- *Employee Cross-Training*

An important aspect of the town’s IDDE program is to provide training to other town employees in recognizing and reporting possible illicit discharges and connections.

FY2019 Summary statistics for the primary components of the Town’s IDDE Program are provided in the following sections.

7.3.1 *Illicit Discharge Statistics*

| Illicit Discharge Summary – FY2019 | | |
|---|---|----|
| <i>Illicit Discharge Screening & Inspection</i> | Screening Investigations conducted | 26 |
| | Dry weather inspections conducted | 26 |
| | Illicit discharges found | 0 |
| | Illicit connections found | 0 |
| | Illicit discharges/connections resolved | 0 |
| | NOVs Issued | 0 |
| <i>Individual Complaints & Investigations</i> | Number of Complaints/Investigations | 6 |
| | Investigations resolved | 6 |
| | NOVs Issued | 0 |

7.3.2 *Sanitary Sewer Statistics*

| SSO Summary – FY2019 | |
|--|-------|
| Number of SSO’s | 2 |
| Reported to state | 2 |
| Causes identified | 2 |
| Sites repaired | 2 |
| Total Volume of SSO’s (gallons) | 7,800 |
| Volume reaching surface waters (gallons) | 7,500 |

7.3.3 Cross-Training Statistics

Stormwater and Environmental Services staff updated cross-training materials during FY2018 and FY2019 but are still refining them. Town meeting rooms were under renovation during FY2018, which carried into FY2019. This coupled with staff resources being devoted to other program components resulted in no staff cross-training being conducted. Now that renovations on Town meeting spaces are complete, staff intend to finalize the updated cross-training materials and schedule training during FY2020.

7.4 Construction-Site Stormwater Runoff Control

Orange County implements and enforces construction site stormwater runoff control for the Town of Hillsborough through its erosion control program. Orange County has local delegated authority from the state to implement an erosion control program. Legal agreements are in place allowing Orange County to enforce its sedimentation and erosion control ordinance within the Town’s jurisdiction except for publicly funded projects, which are subject to state jurisdiction.

Active construction projects are inspected regularly by Orange County Erosion Control staff. Inspection reports, notice of violations (NOVs) and stop work orders are provided to Town Stormwater and Environmental Services staff. In addition, the Town is required to conduct periodic audits/inspections of active construction sites, including Town construction projects, to help ensure compliance. Generally, Town Stormwater and Environmental Services Division staff typically inspect active construction sites once a month and conduct brief site visits more frequently.

FY2019 Summary statistics for the primary components of the Town’s Construction-Site Stormwater Runoff Control Program are provided in the following sections.

7.4.1 Erosion Control Projects Reviewed/Permitted FY2019

| ECP Review Summary – FY2019 | | |
|------------------------------------|-------------------------------|---------------------------------------|
| Project Name | Tract Size (acres) | Area Disturbed (acres) |
| Forest Ridge Subdivision Phase 7 | 14.25 | 10.30 |
| Healing Paws Vet Hospital | 2.02 | 2.02 |
| Matthewson/Douglas Lots | 3.70 | 1.20 |
| Sounds & Colors Daycare | 4.04 | 2.66 |
| <i>Totals</i> | 24.01 | 19.18 |

7.4.2 Erosion Control Inspection Statistics

| Inspection Summary – FY2019 | | |
|------------------------------------|---------------------|-----------|
| Active Projects | Privately Owned | 19 |
| | County Owned | 1 |
| | Town Owned Projects | 1 |
| | <i>Total</i> | <i>21</i> |

| Inspection Summary – FY2019 (continued) | | |
|--|--------------|------------|
| Inspections Conducted | OCEC Staff | 171 |
| | Town Staff | 36 |
| | <i>Total</i> | <i>207</i> |

| | | |
|---------------------|------------------|----------|
| Enforcement Actions | NOVs Issued | 1 |
| | Stop Work Orders | 1 |
| | <i>Total</i> | <i>2</i> |

7.5 Post-Construction Stormwater Management

The Town’s post-construction stormwater program includes two primary components: new development review/approval and stormwater control measure (SCM) inspection.

- *New Development Review*

Proposed development projects are reviewed to determine if the Town’s stormwater standards within the Unified Development Ordinance (UDO) are met. Projects meeting those requirements are issued a stormwater management plan approval. New development projects must currently meet both the NPDES Phase II post-construction stormwater requirements and the Falls Lake Rules nutrient loading requirements. Additionally, all SCMs must meet the state’s Minimum Design Criteria (MDCs).

- *SCM Inspection Program*

The Town is required to maintain an SCM inspection program pursuant to both the NPDES Phase II regulations and the Falls Lake rules. The Town requires the owner of each SCM to inspect at least annually and submit a report to the Stormwater and Environmental Services Division. Additionally, the Town is required to inspect (or what the Town staff now calls “audit”) SCMs approved through the UDO at least once every five years.

There are also SCMs within the Town’s planning jurisdiction that were approved prior to the Town’s NPDES stormwater permit issued in 2005. In March of 2013, Stormwater and Environmental Services embarked on a

program to bring all SCMs within the Town’s planning jurisdiction into compliance. This process includes conducting onsite audits of private SCMs by Town Stormwater and Environmental Services Division staff as time and resources allow. The intent is to exceed the audit/inspection interval required by the NPDES and Falls Lake regulations. The goal is to complete at least a third of SCM on site audits annually.

Town Stormwater and Environmental Services Division staff also tracks compliance with submittal of the required annual maintenance and inspection reports. The Town’s UDO requires all SCM owners to submit their annual inspection report by September first of each year.

Stormwater and Environmental Services began a new program in FY2018 to recognize those SCM owners who have exceptional compliance records. Annually in the early spring, staff evaluates SCM owner compliance and selects a small subset of owners to be recognized. Winners are recognized via social media, town press release, and the Stormwater Almanac publication. They are also given a certificate signed by the mayor.

FY2019 Summary statistics for the primary components of the Town’s Post-Construction Stormwater Management Program are provided in the following sections.

7.5.1 New Development Review Statistics

| Development Summary of Approved Projects – FY2019 | | | | |
|--|--------------|--------------|--------------------|----------------|
| Development Name | Type | Site Acreage | Impervious Acreage | Number of SCMs |
| Matthewson/Douglas Lots | Residential | 3.70 | 0.90 | 2 |
| Oakdale Village ABC Store | Commercial | 1.06 | 1.01 | 2 |
| Sounds and Colors Daycare | Commercial | 4.04 | 1.16 | 4 |
| Healing Paws Veterinary Hospital | Commercial | 2.00 | 0.64 | 2 |
| | <i>Total</i> | <i>10.80</i> | <i>3.71</i> | <i>10</i> |

| SCMs Approved for Development Projects – FY2019 | |
|--|----------|
| Stormwater BMP Type | Quantity |
| Bioretention | 4 |
| Filtrerra | 2 |
| Infiltration Trench | 1 |
| Underground Detention | 2 |
| Wet Pond | 1 |

7.5.2 *SCM Inspections Statistics*

| SCM Onsite Audit Summary – FY2019 | |
|--|----|
| Number of Mapped SCMs | 95 |
| Audits/Inspections Conducted | 41 |
| Maintenance Issues Identified | 18 |
| Maintenance Issues Resolved as a Result | 8 |
| Violations Noted | 1 |
| NOVs Issued | 1 |

7.5.3 *SCM Annual Maintenance Inspection Report Compliance*

| Annual Inspection Reports Received – FY2019 | | |
|--|-------------|-----------|
| Year | No. of SCMs | Compliant |
| 2013 | 63 | 13% |
| 2014 | 66 | 47% |
| 2015 | 72 | 71% |
| 2016 | 85 | 73% |
| 2017 | 87 | 76% |
| 2018 | 91 | 78% |
| 2019 | 95 | 87% |

7.6 Pollution Prevention/Good Housekeeping for Municipal Operations

The Town’s pollution prevention/good housekeeping program includes five primary components: evaluate Town operations, corrective action, MS4 maintenance, employee training, and public awareness.

- *Pollution Prevention/Good Housekeeping Inspections*

Evaluating Town operations and taking corrective action are part of the pollution prevention/good housekeeping inspection process. Stormwater and Environmental Services staff conduct annual inspections of each town-owned facility. Facilities are given one of three ratings: compliant, compliant with conditions or non-compliant. Facilities rated compliant with conditions typically have just one or two minor issues that need corrected. Non-compliant facilities either have a major issue or numerous minor issues that need corrected. Once corrective actions are completed, follow-up inspections are conducted to ensure issues were rectified.

- *MS4 Maintenance*

The Town is responsible for maintaining the MS4 within Town street rights-of-way and Town owned properties. MS4 maintenance includes street sweeping on all curb and gutter streets, parking lot sweeping on town-owned property, maintaining and removing debris from catch basins within town streets, and maintaining ditches/swales along town-maintained streets. Maintenance not only ensures proper drainage, it also helps keep pollutants out of the MS4.

Additionally, during the fall/winter months the Town removes leaves from streets, including those collected by citizens. This helps reduce excess nutrients—one of the Town’s target pollutants—reaching the MS4 and local waterways.

- *Employee Training*

An important aspect of the Town’s Pollution Prevention/Good Housekeeping program is to provide training that teaches town employees best practices in reducing stormwater runoff pollution.

- *Public Awareness*

This aspect of the Pollution Prevention/Good Housekeeping program is handled through the Public Education and Outreach program described in *Section 7.1*.

7.6.1 Pollution Prevention Inspection Results

As noted in the following table all but one facility was either Compliant or Compliant with Conditions. For the one Non-Compliant facility, corrective actions were completed. For the facilities that were Compliant with Conditions, corrective actions were either completed or are in progress. Follow up inspections of the non-compliant and compliant with conditions facilities will be conducted during the next fiscal year.

| Good Housekeeping Inspections – FY2019 | |
|---|------------------------|
| Facility | Status |
| 1. Cemetery | Compliant w/Conditions |
| 2. Cates Creek Park | Compliant w/Conditions |
| 3. Fairview Community Policing Center | Compliant w/Conditions |
| 4. Fleet Maintenance | Compliant w/Conditions |
| 5. Gold Park | Compliant w/Conditions |
| 6. Kings Highway Park | Compliant |
| 7. Murry Street Park | Compliant |
| 8. Museum | Compliant w/Conditions |
| 9. Old Landfill | Compliant |

| Good Housekeeping Inspections – FY2019 | |
|---|------------------------|
| Facility | Status |
| 10. Police Department | Compliant |
| 11. Public Parking | Compliant w/Conditions |
| 12. Public Works | Compliant w/Conditions |
| 13. Riverwalk | Compliant w/Conditions |
| 14. Town Hall | Compliant w/Conditions |
| 15. Town Hall Annex | Compliant w/Conditions |
| 16. Turnip Patch Park | Compliant |
| 17. Wastewater Treatment Plant | Compliant w/Conditions |
| 18. Water Distribution | Non-Compliant |
| 19. Water Tower (UNC Hospital) | Compliant |
| 20. Water Treatment Plant | Compliant w/Conditions |

7.6.2 *MS4 Maintenance Statistics*

| MS4 Maintenance/Cleaning – FY2019 | |
|--|------------|
| Number of Regular Roads/Parking Lot Cleanings | 15 |
| Percentage of Storm Drains/Catch Basins Cleaned ⁸ | 65% |
| Amount of Trash/Debris/Sediment Removed | 2,000 lbs. |
| Amount of Ditches/Swales Maintained ⁹ | 3,981 feet |

7.6.3 *Employee Training Statistics*

Stormwater and Environmental Services staff updated training materials during FY2018 and FY2019 but are still refining them. Town meeting rooms were under renovation during FY2018, which carried into FY2019. This coupled with staff resources being devoted to other program components resulted in no staff training being conducted. Now that renovations on Town meeting spaces are complete, staff intend to finalize the updated training materials and schedule training during FY2020.

During FY2019, Stormwater and Environmental Services staff did attend multiple stormwater program related training events, including updated NPDES compliance training sessions held by NCDEQ.

⁸ This represents cleaning of loose debris and not accumulated sediment. Note that due to staff resource constraints, repairs on ditches and swales was prioritized over storm drain and catch basin cleaning.

⁹ This may include removal of debris, removal of accumulated sediment, reshaping, revegetating, etc.