

# 2016 Stormwater Utility Reporting Form Due to DEQ by October 1, 2016

Name of Locality: City of Chesapeake Person Completing Survey: Barbara Brumbaugh Email: bbrumba@cityofchesapeake.net Phone: (757) 382-6919 Date: 09/29/2016

The purpose of this form is to implement the following stormwater utility reporting requirement established by Paragraph H.1. of Item 363 of the FY15-16 State Budget: "Each locality establishing a utility or enacting a system of service charges to support a local stormwater management program pursuant to § 15.2-2114, Code of Virginia, shall provide to the Department of Environmental Quality by October 1 of each year, in a format specified by the Department, a report as to each program funded by these fees and the expected nutrient and sediment reductions for each of these programs."

Each Locality subject to the reporting requirement set forth above shall complete and submit this form to the DEQ by each October 1, to: <u>Shawn Smith</u>. The first report is due October 1, 2015.

## SECTION 1 – LOCALITY INFORMATION

| Locality Name:   | City of Chesapeake                                    |
|------------------|---|
| Contact Name:    | Barbara Brumbaugh – Environmental Quality Coordinator |
| Contact Address: | 306 Cedar Rd, Chesapeake, VA 23322                    |
| Contact Email:   | bbrumba@cityofchesapeake.net                          |
| Contact Phone:   | (757) 382-6919  |

## **SECTION 2 - STORMWATER UTILITY FEES**

For your stormwater utility fees provide the following information from your most recent annual financial statement.

*Fund Name:* Stormwater Management *Fiscal year:* **2015 – most recent audited statement** 

| Revenue      | Expenditures | Balance      |
|--------------|--------------|--------------|
| \$15,644,842 | \$11,605,679 | \$67,323,205 |

## SECTION 3 - FUNDED PROGRAMS AND OTHER MAJOR ACTIVITIES

*Provide a brief description of each major program funded by the utility fee system and, where applicable, the expected nutrient and sediment reductions for each of these programs.* 

#### A. Operations & Maintenance Program

There are currently 100 funded full time positions funded by the Stormwater Utility, with various vacancies at any given time. Inmate crews Sheriff's Deputies are also funded. For the fiscal year 2016 the following programs were funded:

Storm Sewer System Maintenance and Operations: Responsible for maintenance of the City's storm sewer system including ditches, pipes, catch basins, and stormwater management facilities in order to maintain drainage, improve water quality, and prevent flooding. For the FY16 the following maintenance activities were completed (including preventive and reactive): 166 structures were cleaned/serviced; 23.08 miles of blocked ditch were cleared; 51.3 miles of ditch was regraded; 24.47 miles of ditch was cleaned/cleared; 196.88 miles of lead ditch was maintained; and 15.84 miles of roadside ditch was maintained. These activities resulted in 182,950 gallons and 752 tons of sediment and debris removed. Additionally 232 cave-in repairs were made and 8 stormwater management facilities were maintained.

<u>Contractual Services:</u> \$1.5 million was allocated for contractor cave-in repairs with 107 locations repaired. <u>Street Sweeping Program:</u> Streets with curb and gutter are swept. For FY16 6023.85 miles were swept with 3495 tons of debris collected. Additionally, inmate crews and community service workers conducted "hard surface mowing" removing built up sediment and vegetation from City gutter pans and roads. 52.17 miles of hard surface were cleaned.

Environmental Quality Program: This program has responsibility for the MS4 Permit compliance and conducting Erosion and Sediment Control and Stormwater Management Program inspections in compliance with the Virginia Stormwater Management Program. Staff conduct stormwater management facility inspections; investigate customer service requests and complaints; conduct dry weather screening; conduct drainage final inspections for acceptance of facilities to the City's MS4; inspect high priority City facilities for housekeeping measures; conduct inspections of land disturbing activities; conduct public education and outreach; and manage TMDL compliance efforts. Program highlights include: 302 commercial, 1618 single-family, and 185 multi-family ESC/Stormwater Inspections conducted; 155 reports/complaints of illicit discharges or illegal dumping investigated; 25 dry weather screening sites inspected; and 430 post-construction stormwater management facilities inspected. The City's MS4 VPDES Permit was reissued effective July 1, 2016. During FY16 several contractual tasks were funded or partially funded in anticipation of new permit requirements including: MS4 Service Area mapping; TMDL Action Planning; preparation of SWPPPs for high priority municipal facilities; a 8/15/2014

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regional water quality monitoring program; and a new homeowner engagement program for stormwater environmental conservation services.

**Planning and Scheduling:** This division is responsible for estimating, planning, and scheduling in-house stormwater work orders and projects, assessing drainage and outfall conditions, completing in-house design work for stormwater projects, oversight of the lead ditch ranking and preventive maintenance program, and oversight of "snag and drag" projects.

**Engineering:** Responsible for environmental engineering and watershed planning, selection and oversight of stormwater-related capital projects, and Design/Construction Services which has inspection and oversight responsibilities for City projects.

<u>Major Equipment Purchases</u>: During FY16 the following equipment was purchased: three Felling 12 ton deckover trailers, one CAT excavator, one CAT skid steer, two 2016 Freightliner M2 w/Elgin Broom Bears, one pipe washer, two tandem dump trucks, one 2017 Freightliner M2106 flat bed with Scorpion and arrow board, one medium excavator and five Ford F150s.

**Emergency Response:** Stormwater staff are called upon to respond to flooding and other stormwater-related incidents before, during, and after storm events. This requires training, planning, equipment and supplies, and significant preparation.

While volume of sediment and debris removed from the system is being tracked, it has not been possible to accurately estimate and quantify nutrient reductions achieved through Maintenance, Operations, and Inspection activities.

### **B.** Capital Improvement Program

Please see the attached Stormwater Capital Improvement Plan and associated budget. The budget is developed for a 5 year cycle.

# CAPITAL IMPROVEMENT PLAN FOR FIVE YEARS ENDING JUNE 30, 2020 PROJECT LIST

| Project Name  | Project # | Page #       |
|---|-----------|--------------|
| Public Utilities (cont.)  |           |              |
| Northwest River WTP - Replace Ground Storage Tank                     | 29-200    | I-17         |
| Northwest River WTP - Riverbank Filtration System                     | 36-200    | I-18         |
| Raw Water Transmission Main   | 39-120    | I-19         |
| Sewer and Water Renewal - Elbyrne Drive                               | 23-170    | I-20         |
| Sewer Improvements (Gravity) Service Area - Phase I (Pump Station #3) | 35-170    | I-21         |
| Sewer Management Operations & Maintenance                             | 13-160    | I-22         |
| Sewer Pump Station Safety Improvements                                | 35-200    | I-23         |
| Sewer Renewal - 18th Street   | 15-170    | I-24         |
| Sewer Renewal - Additional Consent Order Capital Requirement          | 05-180    | I-25         |
| Sewer Renewal - Chesapeake Ave - Guerriere to Ohio Sewer              | 18-170    | I-26         |
| Sewer Renewal - Liberty Street (500 Block to Collingswood)            | 26-170    | I-27         |
| Sewer Renewal - Phase I SSES Implementation                           | 32-120    | I-28         |
| Sewer Renewal - Raleigh Place (Pump Station #7 Basin)                 | 33-170    | I-29         |
| Sewer Renewal - Westwood and Redstart Avenue                          | 42-170    | I-30         |
| Sewer Replacement - Orville Ave Alleyway - Bainbridge to Seaboard     | 31-170    | I-31         |
| Unserved Areas/Cost Participation Phase II                            | 25-200    | I-32         |
| Water Control Laboratory - Upgrade HVAC                               | 26-200    | I-33         |
| Water Production Security System Upgrades                             | 31-200    | I-34         |
| Water Renewal - Buchanan Street                                       | 24-200    | I-35         |
| Water Renewals - Waterline Upgrading Phase II                         | 14-160    | I-36         |
| Water Residuals Disposal  | 32-200    | I-37         |
| Water Treatment Plant Control System Upgrade                          | 27-200    | I-38         |
| Western Branch Elevated Tank Rehabilitation                           | 33-200    | I-39         |
| stormwater Projects   |           |              |
| BMP Restoration Citywide  | 73-120    | J-1          |
| Citywide Outfall Re-grading and Restoration                           | 03-160    | J-2          |
| Citywide System Rehab   | 43-170    | J-3          |
| Citywide Undesignated Drainage Phase III                              | 07-150    | J-4          |
| Major Equipment Purchases - PW Stormwwater Division                   | 07-180    | J-5          |
| Neighborhood Drainage Improvements II                                 | 07-180    | J-6          |
| Oakdale Area BMP and Drainage Improvements                            | 09-150    | J-7          |
| Shillelagh Road Drainage Outfall Improvement                          | 77-120    | J-8          |
| Stormwater Mapping & Master Drainage Plan III                         | 10-150    | J-8          |
| Stormwater Quality Program Phase II                                   | 11-150    | J-10         |
| Sunray Area Outfall Re-Grading  | 13-130    | J-10         |
| Welch Lane Drainage Improvements                                      | 19-200    | J-12         |
|   | 19-200    | J-12<br>J-13 |

Note: Detail on "Fully Funded" Projects begins on page L-1

| CAPITAL IMPROVEMENT PLAN FOR THE FIVE YEAR PERIOD ENDING JUNE 30, 2020<br>ALLOCATION OF RESOURCES |           |           |           |           |           |           |              |                     |                        |               |
|---|-----------|-----------|-----------|-----------|-----------|-----------|--------------|---------------------|------------------------|---------------|
| Project Name  | Project # | FY 2016   | FY 2017   | FY 2018   | FY 2019   | FY 2020   | 5 Year Total | Previous<br>Funding | Future<br>Requirements | Project Total |
| Cash - Other City Funds   |           |           |           |           |           |           |              |                     |                        |               |
| Fentress Encroachment Protection  | 10-190    | -         | -         | -         | -         | -         | -            | 666,133             | -                      | 666,133       |
| Cash - Other City Funds Total   |           | -         | -         | -         | -         | -         | -            | 666,133             | -                      | 666,133       |
| Cash - South Norfolk TIF  |           |           |           |           |           |           |              |                     |                        |               |
| 22nd Street Bridge Replacement  | 21-120    | -         | 6,450,000 | -         | -         | -         | 6,450,000    | 6,049,300           | -                      | 12,499,300    |
| Cash - South Norfolk TIF Total  |           | -         | 6,450,000 | -         | -         | -         | 6,450,000    | 6,049,300           | -                      | 12,499,300    |
| Cash - Stormwater   |           |           |           |           |           |           |              |                     |                        |               |
| BMP Restoration Citywide  | 73-120    | 100,000   | 300,000   | 200,000   | 400,000   | 300,000   | 1,300,000    | 1,300,000           | -                      | 2,600,000     |
| Citywide Outfall Re-Grading and Restoration2  | 03-160    | 100,000   | 200,000   | 100,000   | 150,000   | 150,000   | 700,000      | 720,000             | -                      | 1,420,000     |
| Citywide System Rehab   | 43-170    | 300,000   | 400,000   | 500,000   | 500,000   | 500,000   | 2,200,000    | 1,200,000           | -                      | 3,400,000     |
| Citywide Undesignated Drainage - Phase III  | 07-150    | -         | 50,000    | 50,000    | 100,000   | 100,000   | 300,000      | 506,347             | -                      | 806,347       |
| Major Equipment Purchases - PW Stormwater<br>Division   | 07-180    | 666,000   | _         | _         | _         | _         | 666,000      | 3,308,000           | _                      | 3,974,000     |
| Neighborhood Drainage Improvements II   | 08-150    | 600,000   | 500,000   | 570,000   | 650,000   | 750,000   | 3,070,000    | 1,224,600           | _                      | 4,294,600     |
| Oakdale Area BMP and Drainage   | 00 100    | 000,000   | 500,000   | 370,000   | 030,000   | , 50,000  | 3,070,000    | 1,22 1,000          |                        | 1,251,000     |
| Improvements  | 09-150    | -         | 500,000   | 1,500,000 | 2,000,000 | 1,000,000 | 5,000,000    | -                   | -                      | 5,000,000     |
| Shillelagh Rd. Drainage Outfall Improvement   | 77-120    | 2,000,000 | 1,100,000 | -         | -         | -         | 3,100,000    | -                   | -                      | 3,100,000     |
| Stormwater Mapping and Master Drainage  |           |           |           |           |           |           |              |                     |                        |               |
| Plan Phase III  | 10-150    | 100,000   | 200,000   | 100,000   | 200,000   | 200,000   | 800,000      | 200,000             | -                      | 1,000,000     |
| Stormwater Quality Program - Phase II   | 11-150    | -         | 2,000,000 | 2,000,000 | 1,500,000 | 2,500,000 | 8,000,000    | 340,565             | -                      | 8,340,565     |
| Sunray Area Outfall Re-Grading  | 13-130    | 1,200,000 | -         | -         | -         | -         | 1,200,000    | -                   | -                      | 1,200,000     |
| Welch Ln. Drainage Improvements   | 19-200    | -         | -         | 480,000   | -         | -         | 480,000      | -                   | -                      | 480,000       |
| Whittamore Rd. Outfall Improvements   | 20-200    | -         | 300,000   | -         | -         | -         | 300,000      | -                   | -                      | 300,000       |
| Cash - Stormwater Total   |           | 5,066,000 | 5,550,000 | 5,500,000 | 5,500,000 | 5,500,000 | 27,116,000   | 8,799,512           | -                      | 35,915,512    |

City of Chesapeake, Virginia

Exhibit C