

The Town of Christiansburg MS4 Public Education and Outreach Plan

Revised November 2018

(Incorporated into the Town's MS4 Program Plan)

The Town of Christiansburg (Town) operates a Stormwater Management Program in compliance with the Virginia General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). The Town strives to improve local surface water quality and environmental stewardship through Program implementation, and sound technical guidelines, criteria and practices for stormwater management. Engaging the public is critical to achieving these goals. In accordance with Section II.B.1 of the MS4 General Permit, the Town implements a Public Education and Outreach Program (PEOP) on stormwater impacts. The PEOP aims to:



- Increase the knowledge of the Town's public audience about steps that can be taken to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;
- Increase the Town's public knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
- Implement a diverse program with strategies that target audiences most likely to have significant stormwater impacts.

These goals are intended to be met as part of an iterative program that will measure effectiveness of the Program by assessing the level of knowledge, over time, of the Town's Public that is defined as Town residents and staff. The Program is designed consistent with the MS4 General Permit to:

- Identify three high-priority water quality issues and provide rationale for the selection of each issue;
- Identify and estimate the population size of the target audience who is most likely to have significant impacts on each water quality issue;
- Identify the relevant message and associated educational and outreach materials for distribution to the target audiences.

Selection of high-priority water quality issues was based on feedback derived from Town Engineering Staff, suggestions from MS4 Consultants with their experience from public education surveys taken from other MS4s, local Total Maximum Daily Loads (TMDLs), the Towns' reissue of the Public Education and Outreach Stormwater survey results, and general knowledge of Town operations. The Town's high-priority water quality issues for the PEOP are provided below. Based on measures of effectiveness for each, any may be replaced or refined with approval of the Department of Environmental Quality (DEQ) as part of an iterative stormwater program.

Representative outreach materials are contained at the end of this plan. The materials include a Christiansburg Connection issue with a stream restoration article, and a Facebook post on pet waste.

Water Quality Issue No. 1: Education on special water quality concerns (PCBs)

Rationale: The Town has been assigned wasteload allocations for PCBs as part of the *December 2009 Roanoke River PCB TMDL Development (Virginia)*. The survey did not include questions about PCBs, so no conclusion about knowledge can be reached. Since there is a PCB TMDL in the approval process for the New River and Crab Creek, PCB education will continue to be addressed.

Target Audience:

The Town conducts a Spring and a Fall clean up when all residents may put out extra items for special trash pick-up. Some of these items may contain PCBs. Since all residents may participate, the target audience will include all households.

- ±9,400 households

Relevant Message: Inform town residents of possible household sources of PCBs and inform residents how to properly dispose of waste that may contain PCBs.

Outreach Methods to Convey the Relevant Message: The topic will be addressed with articles in The Christiansburg Connection newsletter and/or posted on the Town's Facebook page and Town website. The Christiansburg Connection is included as an insert in all mailed utility bills six times per year. It is also available as an electronic subscription and is promoted on the Town's website and Facebook page. Facebook will be preferred as an electronic media as documentation indicates it reaches more people. The town also can "push" Facebook posts which puts the post in front of more users. However, it cannot be determined if those people are residents of the Town. The Town will also use the outreach to the Montgomery County School System as an education and outreach strategy across all three of the identified water quality issues.

Schedule: Outreach material for each special water quality concern will be distributed a minimum of once a year to at least 20% of each target audience. The spring 2019 article will be timed to facilitate references to Spring Clean-up. The topic addressed will be staggered with Water Quality Issues #2 and #3 to ensure outreach to the entirety of the target audience.

Method to Determine Effectiveness: Provide PCB concerns message to a minimum of 20% of the target audience via Christiansburg Connection newsletter, Facebook posts and/or Town website posts.

Water Quality Issue No. 2: Education on special water quality concerns (*E. coli*)

Rationale: The Town has been assigned wasteload allocations for bacteria as part of two DEQ-approved TMDLs, the *Bacteria TMDLs for Wilson Creek, Ore Branch and Roanoke River Watersheds, Virginia* and the *Fecal Bacteria and General Standard Total Maximum Daily Load Development for Crab Creek*. Survey results indicate little to no increase in the knowledge about pet waste so continued outreach efforts are needed.

Target Audience:

The Town estimates approximately 5,040 households to have pets based on the estimate of 56% of households owning at least one pet according to the 2010 United States Census. However, since the specific pet-owning households are unknown, the target audience will include all households.

- ±9,400 households

Relevant Message: Inform pet owners about the effects of pet waste on water quality and encourage pet owners to pick up and properly dispose of pet waste. Include information on location of pet waste stations.

Outreach Methods to Convey the Relevant Message: The topic will be addressed with articles in The Christiansburg Connection newsletter and/or posted on the Town's website or Facebook page. The Christiansburg Connection is included as an insert in all mailed utility bills six times per year. It is also available as an electronic subscription and is promoted on the Town's website and Facebook page. Facebook will be preferred as an electronic media as documentation indicates it reaches more people. The town also can "push" Facebook posts which puts the post in front of more users. However, it cannot be determined if those people are residents of the Town. The Town will also use the outreach to the Montgomery County School System as an education and outreach strategy across all three of the identified water quality issues. Additionally, dog leash waste bag dispensers have been purchased to distribute at Public Participation events as a take home message on the importance of cleaning up after pets.

Schedule: Outreach material for each special water quality concern will be distributed a minimum of once a year to at least 20% of each target audience. The topic addressed will be staggered with Water Quality Issues #2 and #3 to ensure outreach to the entirety of the target audience. Dog leash waste bag dispensers will be distributed at at least two spring Public Participation events.

Method to Determine Effectiveness: Provide *E. coli* concerns message to a minimum of 20% of the target audience via Christiansburg Connection newsletter, Facebook posts and/or Town website posts. Distribute dog leash waste bag dispensers.

Water Quality Issue No. 3: Education on Stream Health (Stream restorations, lawn care/sediment)

Rationale: The Town has invested in three stream restorations to improve stream health. The re-issued Stormwater Survey again showed a high interest in the improvement of water quality. The Town has also been assigned wasteload allocations for sediment as part of two DEQ-approved TMDLs, the *Benthic TMDL Development for the Roanoke River, Virginia* and the *Fecal Bacteria and General Standard Total Maximum Daily Load Development for Crab Creek*. Poor vegetative cover is a potential contributor of pollutants causing the benthic and bacterial impairments in the Crab Creek and Roanoke River basins. The re-issued Stormwater Survey indicated that residents did not view sediment as a top water pollutant. Therefore, the role of poor vegetative cover on residential sites as a source of sediment pollution will continue to be addressed.

Target Audience: The target audience includes all residents within the Town along with homeowner associations and property management companies.

- 9,400 households

Relevant Message:

Inform households, homeowner associations, and property management companies of the expected improvements in stream health from the stream restoration projects. Communicate the positive environmental effects of good vegetative cover, as well cost savings of stream friendly lawn care.

Outreach Methods to Convey the Relevant Message: Both topics will be addressed with separate articles in The Christiansburg Connection newsletter and/or posted on the Town's website or Facebook page. The Christiansburg Connection is included as an insert in all mailed utility bills six times per year. It is also available as an electronic subscription and is promoted on the Town's website and Facebook page. Facebook will be preferred as an electronic media as documentation indicates it reaches more people. However, it cannot be determined if those people are residents of the Town. The Town will also use the outreach to the Montgomery County School System as an education and outreach strategy across all three of the identified water quality issues.

Schedule: Outreach material for each topic will be distributed a minimum of once a year to at least 20% of each target audience. The topics addressed will be staggered with Water Quality Issue # 1 and #2 to ensure outreach to the entirety of the target audience.

Method to Determine Effectiveness: Provide stream restoration and sediment reducing yard care message to a minimum of 20% of the target audience.

The Christiansburg Connection July/August 2018

Events Calendar

Christiansburg Farmers' Market
Every Thursday through Oct., 3-7 p.m.
Hickok Street NW

Fourth of July Celebration
July 4, 10 a.m. - 4 p.m.; downtown Main Street
Fireworks show begins at 9:15 p.m., view from the NRV Mall or Walmart parking lot

Movies in the Park: "The Sandlot"
July 27, movie begins at sundown
Downtown Park

SW VA 811 8-Mile Race & 5k Run/Walk
Aug. 11, race begins at 6:30 a.m.
Christiansburg Recreation Center

Movies in the Park: "The Greatest Showman"
Aug. 24, movie begins at sundown
Downtown Park

Stillborn Speak 5k Run/Walk
Aug. 25, race begins at 8:30 a.m.
Christiansburg Recreation Center

Heritage Day
Aug. 25, 10 a.m. - 3 p.m.
Montgomery Museum

To find out more information on events and programs, visit www.christiansburg.org/events or our Facebook page.

Upcoming Meetings

Town Council Meetings
Held at Town Hall, 100 East Main St.
- Tuesday, July 10, 7 p.m.
- Tuesday, July 24, 7 p.m.
- Tuesday, August 14, 7 p.m.
- Tuesday, August 28, 7 p.m.

Never miss a meeting! Sign up for notifications at www.christiansburg.org/notifyme

Closures
Independence Day, July 4
- The Aquatic Center will be closed.
- Town Hall will be closed.
- The Recreation Center will be closed.
- Garbage and recycling normally collected on Wednesdays will be collected on Tuesday, July 3, with Tuesday's regular collection.

Aquatic Center Information

July 13-15, Summer Awards Meet
July 20-21, RVAA City County Meet
July 26-29, Age Group Champs Meet
Aug. 13-24, CAC closed for annual maintenance

Stream restoration improving habitat for native wildlife

If you've been to Depot Park recently, you've probably noticed some changes. These changes are part of the Towne Branch stream restoration project, which will prevent approximately 160 tons of sediment from moving downstream every year. This puts Christiansburg closer to achieving a required reduction in the amount of sediment entering our waterways.

One of the benefits of reducing sediment is a better habitat for native aquatic animals and plants. As part of the project, 700 native trees were planted both behind the split rail fence and downstream of the Skate Park. Additionally, 4,700 native shrubs were planted along the stream's bank to control erosion. These areas were also seeded with native plants.

Planting young trees, shrubs and seeds requires a change in mowing practices. The tall grass you can find along the stream today is a "nurse crop." It sprouts and grows very quickly and helps protect the native plant seeds. Some



of the native plant seeds will germinate this summer as the nurse crop dies. Others will take up to a year to sprout. Mowing the nurse crop would damage the young native plants, trees and shrubs. The goal is to create a well-shaded stream with stable banks and a diverse aquatic animal community. With time and proper care, this area will transform into a native meadow and then a streamside forest.

Community Snapshot



Girl Scouts from Troop 51 plant huckleberries along the Huckleberry Trail in June as part of a service project.

Stormwater Survey

As part of the Town's MS4 (Municipal Separate Storm Sewer System) permit, we are gauging the public's perception of stormwater issues and our storm sewer system. If you would like to participate, please visit <https://bit.ly/2lhr1A1> by July 31 to take the survey. You may also complete the survey in person at the Christiansburg Aquatic Center, the Christiansburg Recreation Center or Town Hall before the end of July.

The survey does not require any identifying information and is only 11 questions long.

Frequently Asked...

Q: How can I pay my utility bills?
A: You may pay online at <https://utilitybilling.christiansburg.org> or in person at Town Hall, 100 E. Main St. in Christiansburg. You can also set up payments to be automatically withdrawn from your checking or savings account through the Direct Payment Plan. Visit Town Hall to set up direct payment. Visa, Mastercard and Discover debit/credit cards are accepted for payment, along with cash, checks and money orders.

Q: How can I monitor my water usage?
A: Sign up for an account at www.christiansburg.org/monitorwater. The online tool will allow you to monitor your usage and receive alerts if a leak is detected.

Representative outreach material # 2: Facebook post



Representative outreach material #3: Pet waste bag leash dispenser

