

Stormwater Runoff Impacts

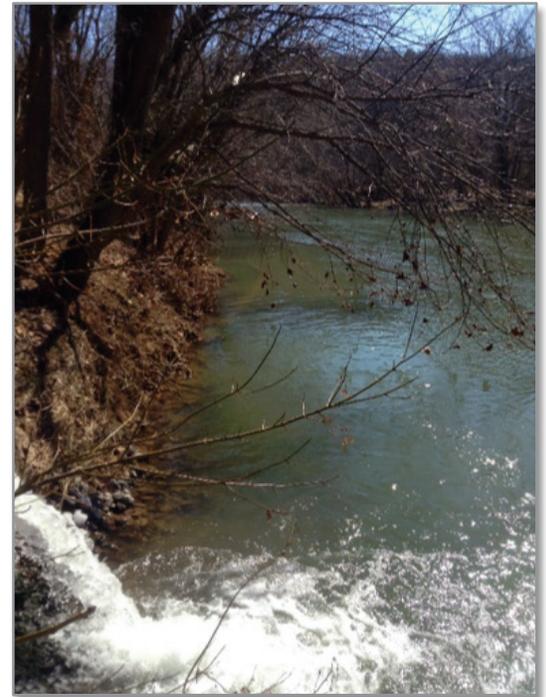
What Is Stormwater Runoff?

Stormwater runoff is precipitation such as rain or snow that does not soak into the ground. Impervious surfaces such as driveways, parking lots, roofs, sidewalks and roads prevent stormwater runoff from naturally soaking into the ground. Stormwater runoff flows over vegetated areas and impervious surfaces into the storm sewer system and ultimately a natural waterway.



Why is Stormwater Important?

As stormwater runoff flows over vegetated areas and impervious surfaces, it picks up pollutants such as pesticides, pet waste, oil and debris along the way. These pollutants are then carried through the storm sewer system and discharged to natural waterways. Urban stormwater runoff is the number one source of surface water pollution in the United States, causing public safety hazards, health risks and environmental threats.



What is an Illicit Discharge?

Any substance other than stormwater that enters the storm sewer system or receiving waters is considered an illicit discharge. Many illicit discharge sources originate from maintenance facilities or construction sites, such as vehicle maintenance areas or equipment washout bays. Daily activities at these sites, specific spill incidents, or illegal dumping can result in illicit discharges. Examples of source pollutants include automotive fluids, paints, solvents, pesticides and herbicides, sediment, and trash. Exceptions are made for non-stormwater discharges that do not significantly contribute pollutants to the storm sewer system, including fire-fighting activities, water line flushing, and landscape or lawn irrigation. These discharges may flow into the storm sewer or waterway without consequence.

Illicit discharges are significant due to the threat stormwater pollution poses to public safety, public health, and the environment. Due to the importance of reducing and preventing stormwater pollution, illicit discharges, potential sources for illicit discharges, and illegal dumping should be reported to the locality immediately so that appropriate corrective actions can be taken. Corrective and/or legal actions are taken as necessary.

How Can I Report an Illicit Discharge?

If you see an illicit discharge, a potential source for an illicit discharge, or witness illegal dumping, you should contact the Director of Facilities.

How Can I Help Reduce Stormwater Pollution?

- Pick up and properly dispose of pet waste
- Appropriately clean up vehicle fluid leaks and spills
- Properly dispose of hazardous substances such as automotive oil, cooking oil, paint, cleaners, etc.
- Exercise caution when using pesticides, herbicides, and fertilizers
- Report illicit discharges, potential illicit discharge sources, and any illegal dumping



Stormwater Issues?

Flooding: Stormwater runoff from intense rainfall can at times exceed the carrying capacity of the stormwater pipe system, creating a backup in the system which can lead to the flooding of roads, yards and structures.

Pollution: When rain falls, stormwater flows across grass and impervious surfaces such as sidewalks, driveways, parking lots, rooftops and roads. It mobilizes contaminants such as animal waste, chemicals, pesticides, trash and sediment. These contaminants are then transported downstream to streams, rivers and ultimately the ocean.

Water quality: Stormwater runoff is a leading cause of nutrient contamination, predominately responsible for algae blooms and low oxygen levels, which can result in fish kills and elimination of native vegetation.

Soil erosion: Uncontrolled stormwater rapidly increases the amount of water flowing into a stream, which can wash away stream banks and over time, cut streambeds down deeper to bedrock.

CVCC's Stormwater Program

The U.S. Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (DEQ) regulate stormwater and require most localities to implement and maintain a comprehensive stormwater management program. CVCC has a Municipal Separate Storm Sewer System (MS4) permit, which further obligates the college to manage their stormwater runoff and achieve an allocation of pollutant reductions. CVCC is required to meet specific pollutant TMDL (total maximum daily load) reductions for nitrogen, phosphorus, sediment, and E. coli. CVCC is working to implement measures that improve water quality in its waterways. Some of these measures include:

- Street sweeping to help prevent debris and sediment from being washed into the storm system and waterways
- Storm drain inspections to screen for illicit discharges
- Employee and public education on pollutants in stormwater runoff to help determine pollutant sources and increase public awareness.



Please visit CVCC's "Facilities Management" web page to find more detailed information or contact the Director of Facilities at 434.825.7736 or facilities@centralvirginia.edu.

CentralVirginia.edu/Facilities-Management

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