Stormwater Management Program Fact Sheet

Stormwater Pollution - What happens when it rains at UMass Boston

Once rain hits the ground, water that does not infiltrate into the soil flows into storm drains in paved areas and then it flows quickly via underground pipes to Boston Harbor. When this happens, all the pollutants that the water comes in contact with on pavement, sidewalks, grassed areas and roofs also goes into Boston Harbor.

When properties in urban settings are developed, like the university, more of the natural ground surface is changed to hard or paved surfaces, such as roads, parking lots, and buildings.

This reduces the amount of storm water infiltrating into the ground and causes more storm water to flow into nearby surface water bodies. Unless properly managed, this increased storm water runoff which can contribute to flooding, erosion, and water quality problems because of the contaminants the storm water can pick up.

Why is stormwater runoff pollution a problem?

Most people do not realize that the university’s storm drainage system discharges directly to Savin Hill Cove and Dorchester Bay, both of which are part of the larger Boston Harbor watershed. Anything that gets washed off from roadways, parking lots, or lawns is carried directly to the Harbor. Unlike sanitary sewage, which is piped to the MWRA’s Deer Island Treatment Plant, storm water flowing into storm drains is not treated for pollutants before it reaches the Harbor.

**Boston Harbor, including Dorchester Bay has been identified as an impaired water body by the State Department of Environmental Protection and it is included in the Massachusetts “303(d) list of impaired water bodies”. The specific area of Dorchester Bay (ID# MA70-03_2008) is impaired based on the following pollutants: priority organics, pathogens, suspended solids, and turbidity.**

What causes stormwater runoff pollution?

When storm water flows across parking lots and other paved surfaces and enters the University’s storm drainage system, the water can pick up various pollutants, such as:

- Motor oil, gasoline, and chemicals in parking lots and streets.
- Fertilizers, herbicides, and pesticides on lawns, parks, and residential areas.
- Paint, cleaners, and household hazardous waste that may be poured into storm drains.
- Mud and debris from construction sites, stream bank erosion, and other bare areas.
- Pet waste contains bacteria and parasites (pathogens) that can cause illness and make it unsafe to swim.
- Trash, litter, and solid waste dropped on ground or dumped into catch basins and storm drains.
- A good thing to remember is: **Only Rain Down the Drain.**

When materials/pollutants enter the storm drainage system either by contact with storm water or by illegal dumping, they are considered “illicit discharges” and are prohibited.
Why is the university addressing stormwater runoff?
To protect water quality and to ensure compliance with state and federal regulations, the UMass Boston Environmental Health and Safety Office administers the Storm Water Management Program for the campus. More information about the Storm Water Management Program can be found at the Environmental Health & Safety website: [https://www.umb.edu/ehs](https://www.umb.edu/ehs). The Storm Water Management Program follows guidelines prepared by the US Environmental Protection Agency (EPA) as part of the National Pollutant Discharge Elimination System (NPDES) Program. NPDES permits, regulate and prohibit certain pollutants from entering storm water that is discharged to waters of the United States. More information on NPDES permits can be found at: [www.epa.gov/region1/npdes/storm water](http://www.epa.gov/region1/npdes/storm water).

What is the University doing?
University staff prepared a Storm Water Management Program (SWMP) to address storm water regulations, operations and maintenance of the storm water management system. The University was required to re-apply for the permit under the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II General Permit.

UMass Boston has already implemented various best management practices (BMPs) to reduce the potential for storm water pollution and to the quality of storm water runoff from the campus. For example, UMass Boston conducts annual parking lot sweeping, catch basin cleaning and training of facilities personnel. The University will be incorporating additional storm water BMPs in the Master Planning program.

What can you do to help?
Everyone contributes to the problem. And everyone can help to reduce pollutants washed into drains by storm water runoff. Here are some simple steps that you can take to reduce storm water pollution:

- Never pour chemicals, including soap, motor oil, antifreeze, and cleaners on the ground, on paved areas, or into storm drains.
- Properly dispose of all solid waste, trash, and recyclable materials in designated and covered dumpsters and bins.
- Keep your car regularly tuned up to prevent fluids from leaking onto the ground.
- Do not litter/place trash/debris on the ground or in storm drains.
- Pick up and properly dispose your pet’s waste.

You can also help UMass Boston in maintaining the storm drainage system by calling the Environmental Health and Safety Office at [617.287.5445](tel:617.287.5445) or emailing [umbehs@umb.edu](mailto:umbehs@umb.edu). Use this number to provide feedback on Storm Water Management Program and report drainage problems or potential storm water pollution issues, such as:

- Clogged storm drains or ditches, which may cause flooding problems.
- Excessive litter or trash found in or near the storm drainage system.
- Illegally dumped chemicals, batteries, or debris that could make its way into the storm drainage system.
- Sanitary sewer pipes, RV holding tank emptying, car washing, or other illicit discharges to storm drains or ditches.
- Heavy sediments from construction sites or bare land flowing into storm system.