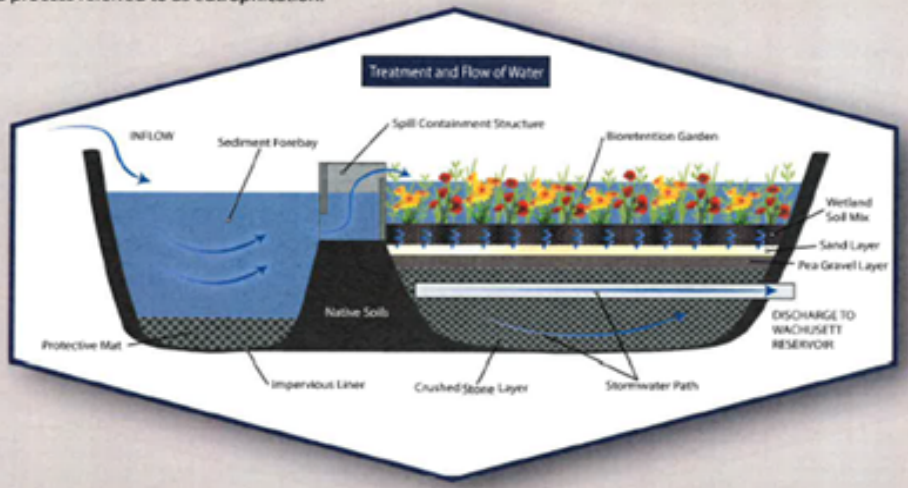
Wachusett Reservoir Direct Discharge Elimination Project

What is Stormwater Runoff?

Stormwater runoff is generated from rain events and snowmelt that flow over land and impervious surfaces like pavement or rooftops. The stormwater runoff picks up pollutants like trash, chemicals, nutrients and oils that can harm our lakes, rivers, streams, and coastal waters. Stormwater runoff carrying accidental spills from hard surfaces like streets, parking lots and driveways can threaten drinking water stored in surface reservoirs. Additionally, nutrients such as nitrogen and phosphorus which are found in animal wastes, fertilizers and faulty septic systems, are a significant source of pollution to nearby water bodies. Excess nutrients degrades water quality - a process referred to as eutrophication.



How can you help?

Pick up after you pet and dispose of waste • Use slow release fertilizers and apply only in appropriate concentrations • Apply pecticides and herbicides according to manufacturer specifications • Properly dispose of grass clippings and leaf litter • Wash cars on pervious areas that do not drain to catch basins • Maintain equipment and vehicles to prevent leaks and drips • Properly maintain all septic systems

Why was this constructed?

This project is a bioretention system similar to a large rain garden which also provides accidental spill containment. It is designed to collect stormwater runoff from approximately 2.5-acres of impervious areas around the reservoir. This stormwater treatment system contains accidental spills entering storm drains, and uses special shrubs, plants, soils, bacteria and natural processes to remove key stormwater pollutants including nitrogen and phosphorus. The Massachusetts Department of Conservation and Recreation is charged with protecting the reservoir and the watershed lands around it to ensure a clean drinking water supply. Removing pollutants from stormwater entering the drinking water source and containing potential accidental spills from roadways improves the water quality, ecological health and overall protection of the Wachusett Reservoir. With proper maintenance, this bioretention system will treat approximately 3 million gallons of runoff per year.

dcr Massachusetts

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