

Town of Mansfield

Stormwater Phase II Permit

Background and Summary

The Town of Mansfield recently had to obtain a Stormwater Phase II Permit from the Environmental Protection Agency (EPA). This EPA mandated program requires small municipalities, such as Mansfield, to develop and implement stormwater management programs to reduce pollutant discharges and protect water quality.

The Town approved and obtained State Loan Financing of \$1,005,000 at 0% interest for the initial development of the Stormwater Management Plan for the Town, in order to file for the required Town permit in March 2003. This major effort involved both applying for the stormwater permit and developing GIS, which provided us with identification and mapping of the Town's drainage system as required by the EPA. This work was completed in 2003, with the Town filing of its required stormwater plan permit on July 23, 2003, which outlined a 5-year plan for improvement of the quality of stormwater runoff.

On September 11, 2003, The U.S. Environmental Protection Agency and the Massachusetts DEP notified us that this Stormwater Permit Plan was complete, and issued the 5-year permit to Mansfield, Permit No. MAR041126. The EPA considered that the first year of the 5-year plan was from March 2003 through March 2004, with the first annual report due by May 1, 2004. The annual report was issued on April 30, 2004, and is summarized in the attached memorandum to the Selectmen. We were able to take credit for work we performed under the initial State financing for the first-year permit requirements. We will also be able to do the same for the second-year permit requirements, but then **funding will be needed in FY2006 and beyond to make drainage improvements and to remain in compliance with our permit.**

The improvements under the Stormwater Permit will include cleaning of lines and basins, public education and outreach programs, detection and elimination of illicit discharges and constructing water quality structures prior to stormwater discharge to rivers or streams. Specific detailed actions are contained in Mansfield's Stormwater Phase II Plan, (i.e., "Stormwater Permit") as part of the National Pollution Discharge Elimination System (NPDES) Permit. This EPA/DEP permit requirement will require the Town to identify pollutant sources, and to do something about them. Copies of this permit are available at the Engineering Department.

What is Stormwater Runoff and Why Worry About It?

What is Stormwater Runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces, like driveways, sidewalks, and streets prevent stormwater from naturally working into the ground.

Why is Stormwater Runoff a Problem?

Stormwater can pick up debris, chemicals, dirt and other pollutants and flow into a storm system or directly into a lake, stream, river, wetland or coastal waters. Anything that enters a storm

system is discharged into the waterbodies we use for swimming, fishing and providing drinking water.

What are the Effects of Stormwater Runoff Pollution?

Polluted stormwater runoff can have many adverse effects on plants, fish, animals and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris, plastic bags, six-pack rings, bottles and cigarette butts washed into waterbodies can choke, suffocate or disable aquatic life, like ducks, fish, turtles and birds.
- Household hazardous wastes, like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.