# Merrimack River

# Environmental Challenges for the Merrimack River

## Bacterial Challenges

Reducing high levels of bacteria in the Merrimack River is a top priority.
The primary source of bacteria pollution to the Merrimack River is untreated sewage. The solution is expensive: cities and towns in the watershed must spend hundreds of millions of dollars in municipal wastewater infrastructure improvements to assure that sanitary sewer systems capture and fully treat all sewage before discharge. Many communities on the Merrimack River are working to find and remove illicit connections of sewers to storm drains. In addition, six sanitary sewer systems (all of them located above drinking water intakes) have very old combined sewers which discharge untreated sewage during wet weather.
Elevated bacteria levels are primarily caused by the following sources:

### Illicit Sewage Discharges to Storm Drain Systems

Illicit discharges are generally any discharge from a storm drain system that is not composed entirely of stormwater. Illicit discharges are a problem because, unlike wastewater which flows to a wastewater treatment plant, stormwater generally flows to waterways without any treatment. Illicit discharges often include sewage, bacteria, viruses, phosphorus and nitrogen (nutrients), surfactants, and various toxic pollutants.
Over the last few years, EPA Region 1 has been conducting sampling of storm water pipes discharging into the Merrimack River and its tributaries. The samples are analyzed for bacteria as well as a suite of pharmaceutical compounds, high levels of which point to an illicit cross connection between sanitary sewers and storm drains.

### Combined Sewer Overflows (CSO)

CSOs occur when wastewater containing untreated human waste, industrial waste and other debris is carried through the stormwater pipes and discharged into the River. Many sewer systems originally were designed to carry sewage and stormwater in the same pipe to a sewage treatment plant. After heavy rainfall or snowmelt, however, the wastewater volume can be more than the sewer system or treatment plant can handle. For this reason, combined sewer systems

# Litter

Litter and trash in water ways is a significant concern in some sections of the Merrimack River. Lawrence community stakeholders identified litter and trash as one of their top priorities. EPA's Trash-Free Waters program is reducing the volume of trash entering U.S. waterways. Common trash from consumer goods makes up the majority of what eventually becomes marine debris, polluting our waterways and oceans. Plastics in the aquatic environment are of increasing concern because of their persistence and effect on the environment, wildlife, and human health. The Clean River Project is how one of the partners is addressing litter in the Merrimack River.

## H820

## By Messrs. Kelcourse of Amesbury and Mirra of West Newbury

## An Act relative to combined sewer overflow

SECTION 1. Notwithstanding any general or special law to the contrary, Chapter 21 of the General Laws, as appearing in the 2016 Official Edition, is hereby amended by adding at the end thereof the following new section:-
Section 68. The department shall produce updated rules and regulations governing combined sewer overflows in the commonwealth. The department may consult with other state or municipal agencies to establish such regulations and shall require public warnings to be issued when a combined sewer overflow becomes a threat to the health of the public.
The department shall adopt regulations for the implementation of this section no later than 12 months after the passage of this Act.

## H752

## By Mrs. Campbell of Methuen

## An Act requiring reserve electric power at wastewater treatment facilities

SECTION 1. Chapter 21 of the General Laws is hereby amended by inserting after section 43 the following section:-
Section 43A. Any publicly owned wastewater treatment facility shall have an on-site reserve source of electric power available when there is failure to receive adequate electric power from a utility or other primary source. Such reserve source shall have the capability to generate as needed, electric power of sufficient capacity for the full operation of the facility during a power failure, independent of any local utility, regional electrical grid or other primary source.
The operator of the facility shall conduct regular tests of the reserve power source to assess its proper operation, at least once each annual quarterly period.
On and after January 1, 2022, every publicly owned wastewater treatment facility shall have and maintain an on-site reserve source of electric power that complies with this section, and any applicable regulation and requirement, including under an approved facility operations plan or permit, of the department of environment protection.

## S457

## By Ms. DiZoglio of Methuen

## An Act to create a Merrimack River District Commission

SECTION 1: Chapter 92A1/2 is hereby amended to insert after Section 6 the following:-
Section 6A
The general court hereby creates and establishes a commission to be known as the Merrimack River District Commission:
There shall be a commission established to review the state of health of the Merrimack River and its tributaries in order to improve and restore water quality and to make recommendations to the general court regarding changes that may be appropriate to ensure the present and future health of these public waterways. Notwithstanding any law to the contrary, in conducting this review, the commission shall seek to determine the infrastructure, equipment, communication systems, funding, and necessary programs to establish the baseline health goal for the river for environmental,