

PHOSPHORUS CONTROL PLANNING

THE CHARLES RIVER IS IMPACTED BY ELEVATED LEVELS OF PHOSPHOROUS, WHICH CAUSES WATER QUALITY PROBLEMS.

What is Phosphorus?

Phosphorus is a naturally occurring nutrient. However, excess phosphorus in the environment is a source of pollution.

Where do excessive levels of Phosphorus come from?

High levels of Phosphorus can come from excessive or improper use of fertilizers, deteriorating leaves and yard waste, improper disposal of pet waste, and illicit connections where sewage can enter the drainage systems.

How does Phosphorus travel to our waterways?

As stormwater flows over hard surfaces, like streets, roofs and parking lots, it collects various pollutants like phosphorus. In Cambridge, stormwater enters drainage systems through storm drains on streets, and discharges to the Charles River and Alewife Brook.



The City's Phosphorus Control Plan includes areas within the Charles River Watershed. Some of these areas have separated sewer systems, where stormwater and wastewater are conveyed through two distinct sets of pipes. While other areas are not separated yet, there are plans for them to be separated in the future.

Why is Phosphorus bad for our waterways?

Too much Phosphorous can cause algae growth in our waterways. This can produce harmful algal blooms that affect public health, deplete oxygen levels, and harm the marine ecosystem.



What is the City doing to lower Phosphorus levels?

As part of the City's stormwater program, Cambridge is working to reduce its phosphorus loading by 529 pounds per year by 2028. This equates to a 25% reduction in current phosphorus loads to the Charles River. The City plans to achieve this by:



- Continuing current street cleaning program.
- Focusing on inspection and maintenance of existing stormwater Best Management Practices (BMPs)
 Implementing additional green infrastructure, such as infiltration trenches, tree box filters, and rain gardens.
- Evaluating various types of projects other than traditional Best Management Practices to reduce Phosphorus loading.
- Spending upwards of \$4.1 Million over the next five years to achieve these goals.