



Curbing Stormwater Pollution in the Charles River: Regulating Large Polluters under the Clean Water Act

Frequently Asked Questions

Why do we need to regulate large sources of stormwater pollution?

Stormwater runoff is the largest source of pollution to the Charles River. Phosphorus carried by stormwater into the river degrades water quality and causes blooms of toxic cyanobacteria, or blue-green algae.

Cyanobacteria blooms are known to cause health effects including skin rashes, fever-like symptoms, respiratory or gastrointestinal distress, and in extreme cases, paralysis leading to death; has been linked to neurodegenerative diseases like ALS; and is extremely toxic to pets. Cyanobacteria also harms aquatic life by reducing oxygen levels in the river, which can and has led to fish kills. This year, the Lower Basin of the Charles has had a public health advisory in place since late June and a second cyanobacteria advisory was issued in July for the Lakes District (Waltham, Newton, Weston), which had not had a bloom since 2012.

Within the Charles River watershed, commercial, industrial, and large multi-unit developments (think big box stores, universities, etc.), which are not currently regulated for stormwater under the Clean Water Act, contribute 50% of the stormwater pollution despite representing only 20% of the watershed area. This represents a disproportionate impact that can be addressed by requiring a relatively small number of property owners to take the same steps local governments are taking to control stormwater runoff pollution.

What is EPA planning to do?

In 2019, CRWA and CLF formally asked EPA to regulate large properties that are polluting the Charles River with stormwater runoff under the Clean Water Act. Where entities are not otherwise subject to traditional permitting frameworks under the Clean Water Act, EPA has something called “residual designation authority,” which gives the agency the power to require stormwater discharge permits in certain situations, like when the discharges contribute to a violation of water quality standards. In the Charles River watershed, these permits are necessary to control sources of stormwater pollution in order to reduce pollution to safe levels, also known as the “[total maximum daily load](#)” (TMDL) for phosphorus. This is the amount of phosphorus that can go into the river without harming the health of the river.

In August 2020, EPA announced that the agency is “beginning to evaluate whether a new program is needed to control stormwater pollution from certain commercial, industrial, and institutional sources in the Charles River watershed at sites that are not currently covered by any existing federal or state stormwater permit.”

EPA is [planning](#) to engage with key stakeholders and explore the development of a workable and practical permitting approach, and has solicited feedback from relevant parties, including affected municipalities and the entities that will potentially be regulated.

How will this address the problem?

Requiring these large properties to obtain stormwater discharge permits will force them to manage their own stormwater pollution, reducing the amount of phosphorus entering the Charles River. They will likely be required to do many of the same things our local governments are already doing. The health of the river cannot be fully restored until these large pollution sources are addressed.

And we know stormwater pollution is not only an issue for the Charles. The outcome of this process will set an important precedent for how large stormwater pollution sources are dealt with statewide.

How can I get involved?

EPA is holding stakeholder input sessions to gather input on how to proceed with addressing these large pollution sources. You have been invited to the stakeholder session with EPA and Mass Rivers on Friday, September 18. During this process, it is critically important that EPA hears from stakeholders who are concerned about protecting the Charles from stormwater pollution—i.e., you! During this session we encourage you to make your voice heard about the importance of science-based decision making and protecting the Charles River. EPA is also holding sessions for additional stakeholder groups, such as those who may be subject to the new permit program, so we want to make sure EPA hears from the environmental perspective as well.