

Legal Analysis for Lake Phosphorus Control Plan (LPCP)

As an initial step in developing the LPCP for the City of Manchester, an assessment of the regulatory mechanisms available to implement the LPCP must be conducted. This analysis includes all town ordinances and regulations and describes any changes to these regulatory mechanisms that may be necessary to effectively implement the LPCP. This may include the creation or amendment of financial and regulatory authorities. The City must adopt any necessary regulatory changes by the end of the permit term.

2.1 Regulatory Review

A review of relevant municipal regulations and ordinances was conducted as an initial step in the preparation of the LPCP for the city of Manchester. The following regulations were determined to have the greatest likelihood to impact implementation of the LPCP:

- *Code of Ordinances of the city of Manchester, Chapter 54: Stormwater, adopted August 1, 2006, amended June 30, 2021.*
- *Department of Highways Stormwater Regulations, adopted December 5, 2006, amended June 30, 2021.*
- *Department of Highway's Standards Specifications for Road, Drain, and Sewer Construction, adopted February 2017, amended June 30, 2021.*
- *City of Manchester Subdivision and Site Plan Review Regulations, last adopted October 5, 2017, amended June 3, 2021.*
- *City of Manchester Planning and Community Development Department Zoning Ordinance, amended through October 1, 2019.*

The above ordinances and regulations establish the requirements that developers and property owners must meet when developing, redeveloping or disturbing land. These requirements include controlling stormwater runoff during and after construction and specific requirements for the treatment of stormwater runoff designed to remove 60% of total phosphorus from new development sites and 50% of total phosphorus from re-development sites.

Manchester's existing regulations will assist the City in minimizing new phosphorus loads once developed, however, do not apply to existing developed private properties that currently contribute phosphorus loads to the City's MS4 and/or impaired waters. As the City is required to reduce its total phosphorus load from its MS4 by 50% to 71% for its TMDL watersheds (Table 1), a reduction in phosphorus from existing developed private properties that discharge to the MS4 may also be required as these load reduction goals are unlikely to be attainable by focusing on municipal properties and new and re-development sites alone.

As there are no current regulations in place to address the phosphorus load from existing developed commercial and industrial properties, the city of Manchester may want to consider new control mechanisms to make these properties accountable for their phosphorus load contribution and associated required reductions to the MS4 and impaired waters. Options for reducing the phosphorus load from existing developed properties include the development of a Stormwater General Permit through local regulations and/or a Stormwater Utility to promote BMP installation vs. paying higher stormwater fees. Each of these options is described further below.

2.2 Options for Regulatory Updates

The following options should be considered as potential amendments or supplements to the City's existing regulations.

2.2.1 Regulatory Considerations for Existing Properties

The City of Manchester could consider developing a new ordinance and/or regulation that requires existing developed properties that discharge into the MS4 to reduce their phosphorus contributions by the same percentage imposed on the City by EPA under the MS4 Permit. For example, properties within the Stevens Pond watershed would need to reduce phosphorus contributions by 50% and provide proof to the City that any installed BMP(s) provide sufficient phosphorus reduction credits by using the same BMP types and calculation procedures outlined by EPA in the 2017 MS4 Permit (as amended). The property owner can also be required to pay for third party reviews of its calculations to minimize City staff time in reviewing submissions. The City may also consider adjustments to the percent phosphorus reduction, up or down, once it determines its ability to reduce phosphorus loads at the municipal level upon completion of its PCP(s).

While no cases of municipal governments with these types of regulations was found during the preparation of this plan, such an approach is currently underway or being considered at the state/federal level in Vermont and Massachusetts. A brief description of these programs is described below to provide some context on a regulation and framework that could be used at the municipal level to regulate and track phosphorus reductions from existing private developments.

Vermont Stormwater General Permit

The State of Vermont is the first in the region to develop stormwater regulations addressing runoff from existing developed properties. Lake Champlain and Lake Memphremagog are both impaired for phosphorus and the State of Vermont has been working to address these impaired waterbodies for decades. Existing stormwater regulations were determined inadequate to address the large phosphorus loads from developed areas and led to the development of Vermont's [Stormwater General Permit 3-9050](#). This permit addresses stormwater runoff from properties statewide that have impervious surfaces greater than three acres and that were developed before 2002, when their stormwater MS4 requirements for new and re-development projects went into effect. The permit requires property owners to retrofit existing properties to meet phosphorus standards.

The General Permit 3-9050 was issued on September 1, 2020 and went into effect on December 1, 2020. The Vermont Department of Environmental Conservation (Vermont DEC) notifies property owners if they are eligible for coverage under this new permit. The initial permit application is due on a staggered schedule, starting twelve months from the effective date of the Permit through early 2023. Permittees have eighteen months to complete an engineering analysis and submit a stormwater system plan for approval. Once approved, permittees have up to five years to install their new stormwater system(s). Upon completion, the permittee must submit an annual inspection report on the operation, maintenance, and condition of the stormwater management system as well as any noncompliance of the system within 24 hours.

Vermont DEC is working with property owners to allow for some flexibility of implementation. For instance, as some of these properties may not have adequate space for the implementation of new stormwater treatment, property owners can work with the municipality to channel stormwater from their site to a larger treatment area off-site, such as through construction of a joint municipal-private stormwater BMP. In other cases, if the property owner can show they cannot feasibly accomplish the required reductions, property owners can pay offset fees to reduce stormwater pollution elsewhere.

Massachusetts Stormwater General Permit

In 2008, the Massachusetts Department of Environmental Protection published proposed stormwater regulations creating a statewide general permit program regulating stormwater from private property with five or more acres of impervious surfaces. In the Charles River watershed, this threshold would be reduced to two acres. Under the proposed regulations, permittees would submit an initial certification and request for coverage under the permit and create a Stormwater Management Team and Stormwater Management Plan. Permittees would also be required to submit an Annual Compliance Certification to the State. Properties would have five years to design retrofit measures for their properties with an additional five years to construct and implement those measures. These regulations were not finalized and no program currently exists.

In August 2020, EPA notified stakeholders in the Charles River watershed that EPA was at the beginning stages of evaluating whether a new program is needed to control stormwater pollution from certain commercial, industrial, and institutional sources in the Charles River watershed at sites not currently covered under any existing stormwater permits. EPA is expected to release additional information as this program moves forward, however, no further information is currently available.

2.2.2 Stormwater Utility

A stormwater utility collects stormwater “user fees” from property owners which are used to fund efforts to meet or exceed specific compliance requirements in a municipality’s stormwater permit as well as improve stormwater management through the municipality. These fees are often based on the impervious surfaces such as roofs, roads, driveways, and parking lots of each property

within the stormwater utility district though some programs have set fees for specific property types. Stormwater utilities can be developed in any number of ways, however, typically shift the majority of the funding burden to large commercial and industrial sites with much smaller fees required for residential properties.

There are currently over 1,200 stormwater utilities nationwide including the city of Burlington, Vermont which developed a [Stormwater Utility](#) in 2009 in an effort to address the state and federal stormwater permit requirements. Other municipalities have established similar programs including [Fall River, Massachusetts](#), [Northampton, Massachusetts](#), and [Portland, Maine](#).

In 2007, the city of Manchester was given special authority to form a stormwater utility. In 2008, this authority was expanded to provide legal authority for all municipalities in New Hampshire to form stormwater utilities under [RSA 149-I:6](#). Under the statute, stormwater utilities must address flood and erosion control, water quality management, ecological preservation, and annual pollutant loads in stormwater discharges. In 2008, the city of Manchester evaluated establishing a stormwater utility, with the completion of a Stormwater Feasibility Study. Such a utility would allow the City to collect fees related to the control and treatment of stormwater that can be used to fund its stormwater control program, including but not limited to identification and elimination of illicit discharges, street sweeping, catch basin cleaning, infrastructure maintenance, flood control, and installation of structural stormwater BMPs to meet phosphorus reductions outlined in its LPCP(s). It would also provide incentives for existing private property owners to implement stormwater treatment BMPs by offering credits or fee abatements. The City's 2009 Stormwater Utility Feasibility Study presented a full implementation plan including fees and billing mechanisms. However, due to the national economic recession around 2010, the utility was never implemented. This study can easily be updated and used as the implementation framework for a future stormwater utility.

2.3 Next Steps

The City will continue enforcing its stormwater ordinance and regulations to promote phosphorus reductions at new and redevelopment sites. The City may also consider developing an overlay district for each of the TMDL waters and increasing the required phosphorus reductions for new and redevelopment projects in those districts to meet or exceed the requirements in Table 1 per property.

The City will continue to evaluate and pursue a stormwater utility to provide a dedicated source of funds to implement its stormwater program and incentives for existing private property owners to implement stormwater treatment BMPs that reduce phosphorus loads. Stormwater utilities are becoming more common in New England and is preferred by the City over developing a Stormwater General Permit at the local level. A Stormwater General Permit is more practical and politically acceptable coming from the State or federal level.