dcr
Massachusetts

March 10, 2011

Office of Ecosystem Protection
US EPA – Region 1
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Attn: Thelma Murphy (murphy.thelma@epa.gov)

**RE: Public Notice Comments on the Draft Massachusetts Interstate, Merrimack and South Coastal Watersheds MS4 Permit**

Dear Ms. Murphy:

DCR is committed to improve water quality and minimize the impacts of stormwater runoff from our diverse properties. DCR must achieve these objectives within limited budgets and provide the most cost effective means of achieving improved water quality. The draft Small Municipal Separate Storm Sewer System (MS4) General Permit for the Massachusetts Interstate, Merrimack and South Coastal (IMS) Watersheds includes more prescriptive requirements than the 2003 General Permit for Stormwater Discharges from Small MS4s (MS42003). We understand that these additional requirements are designed to improve the effectiveness of municipal stormwater management programs, however some of these requirements may be challenging and/or inappropriate for DCR. The next generation MS4 permit requirements of concern include new requirements for dischargers to impaired water bodies, illicit discharge detection and elimination (IDDE) requirements and outfall monitoring. DCR has completed a preliminary review of the new draft general permit, and provides a summary of potential concerns below.

*Compliance Requirements with the TMDLs in the IMS Watershed are Unclear*

TMDLs and Waste Load Applications (WLAs) specified in Appendix G of the draft permit contain requirements that apply to MS4s within specific watersheds, but are not explicit to DCR or specific facilities. Furthermore, the permit is unclear how to measure compliance with WLA. DCR suggests that compliance could be determined based on:

- Demonstrating that the BMPs specified in the IMS permit are implemented for the corresponding TMDL applicable to DCR;
- Achieving a percent reduction in pollutant loading; or
- Achieving an absolute pollutant load.

If compliance is based on achieving a percent reduction in pollutant loading or achieving an absolute pollutant load, the permit must clearly specify the required target values for DCR and how compliance with those target value is achieved. In particular, it must clearly define the basis from which reductions


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are measured and define how reductions achieved outside the permit area are credited towards the reduction. Instead of quantitative assessments, DCR recommends assessment based on the implementation of TMDL recommendations to avoid expensive pollutant loading modeling or monitoring. For example, to address the Long Island Sound (LIS) TMDLs for nitrogen, DCR could implement source controls as a reduction measure. This approach also allows DCR to take credit for BMPs that achieve reductions in the pollutant of concern, including those that have been in place historically and good housekeeping measures that address source control. DCR has voluntarily implemented BMPs historically and now would be penalized by being required to demonstrate additional reductions that may be infeasible or impractical based on pollutant loading that occurs from daily vehicle traffic on our many parkways. Also, Appendix G appears to contain errors (e.g. Paxton lists Leesville Pond instead of Southwick Pond) and duplicate listings of water bodies in wrong towns. Appendix G should be checked and corrected.

*2.3.1 New Discharges* – defined as having a discharge that commences after 8/13/79 but is not a "new source", what does this mean?

*Requirements of Phosphorus Control Plan*

Developing and implementing the Phosphorus Control Plan (PCP) across multiple watersheds in a relatively short time frame would be a significant undertaking for DCR. Some of the associated requirements are impracticable for DCR to comply with due to the large number of outfalls, facilities and road miles operated by DCR. In addition, the land use areas specified in the draft permit are broad and may not be directly relevant to DCR facilities (e.g., HD residential areas). DCR recommends that implementation measures include applicable source control measures such as reducing or eliminating fertilizers at parkways and other properties.

*System Mapping*

The system-mapping requirement includes delineations of catchment areas to each outfall. This requirement is onerous for a statewide agency like DCR and will not provide a direct water quality improvement. Identifying the portion of property that drains to each receiving water should be enough detail to make water quality related decisions without requiring this level of detail which adds a significant cost to the MS4.

DCR has already completed mapping of most of its system as part of an agreement with Conservation Law Foundation (CLF) during the last permit term. We are concerned that we would need to revisit our mapping project to address some of the additional requirements within the draft permit with little to no water quality impact. DCR did not map interconnections either discharging into our system or that DCR's system discharges into. We do not agree that we should have to revisit systems to add these features. These features could be added during future construction work with connection to the drainage system.

*Outfall Inventory*

The draft permit requires each outfall to be labeled in the field with a unique identifier. Due to historical provisions in many of DCR's parks and roadways, signage is heavily regulated and installing signs for outfalls would be extremely difficult. The permit should allow for alternatives such as GPS locators to allow staff to identify an outfall and document issues or maintenance performed.

*Illicit Discharge Requirements*

DCR already is performing extensive illicit discharge inventory and sampling as part of its current permit. Draft permit requirements are likely to increase this cost substantially. Specifically, new requirements regarding delineation of catchments and completion of illicit discharge potential assessment and prioritization would require revisiting many miles of roads and park facilities with no additional water quality benefit. Screening factors for ranking of catchments as presented in the draft permit are not readily available via GIS (e.g., age of sewer systems, sewer conversion areas) and therefore would require significant work to capture this information. Although this information may be easier for a municipality to develop from historic knowledge, DCR finds the collection of this information onerous and disagrees that it will provide significant additional information regarding illicit discharges. We recommend providing flexibility in the permit to allow DCR to utilize our existing data on illicit connections to identify and rank Problem Catchments.

The requirement to test for *e.coli* or *enterococcus* will be difficult especially since this testing cannot be performed in the field but must be brought to a lab for analysis based on current technologies. Bacteria samples have restrictive holding times (6 hours) which significantly limit the field work performed each day in order to get the samples to the lab, or would require additional dedicated personnel to bring samples to the lab mid-day. We recommend that the permit limit e.coli and enterococcus testing to stormwater system that drain to pathogen impaired receiving waters.

*Outfall Monitoring*

The draft permit requires permittees to conduct at least one dry weather screening and analytical monitoring and one wet weather analytical monitoring of each outfall. In addition, the draft permit requires the MS4 to conduct field screening and analytical monitoring at locations where stormwater from the MS4 is transferred to another MS4. Conducting wet weather monitoring at all outfalls and interconnections with other MS4s would cost millions of dollars. DCR is responsible for miles of roads and park facilities that include numerous outfalls and interconnections in the region encompassed by this draft general permit. Implementation of monitoring at all outfalls and interconnections would be labor intensive, disruptive to commercial and commuter traffic especially along roadways, and incur costs of millions of dollars. Furthermore, it is unclear how collection of data from a single wet weather monitoring event at each outfall would yield meaningful results. Instead, these data would represent a snapshot in time for multiple locations, and would not be representative of overall existing conditions of a specific watershed. The data would not be comprehensive enough to make future decisions

regarding the impact to the receiving water. What is the purpose of sampling each outfall and why those specific parameters to be monitored?

DCR agrees with the conditions outlined in Part 3.1.4, regarding development of a permittee- specific monitoring plan that reduces the number of outfalls monitored during wet weather. DCR proposes a similar approach to reduce dry weather monitoring events (e.g. utilize existing data to identify specific areas of concern and develop a stormwater monitoring program that accounts for the unique characteristics of the varied systems under DCR control).

*Schedule and Need for Storm Water Pollution Prevention Plans*

Developing SWPPPs for all DCR facilities would be an enormous undertaking. This would be a severe challenge to complete within one year of the effective permit date, as required by the draft permit, since DCR has many facilities. During the last permit term, EPA determined that SWPPPs were not necessary. It is not clear why this determination has changed. DCR suggests that this requirement should be removed, or at a minimum, extend the compliance deadline. DCR has existing Standard Operating Procedures (SOPs), which address the issues in a SWPPP. DCR should be able to use these existing SOPs instead of performing the time consuming and expensive task of developing SWPPPs for each site.

DCR remains committed to implement best management practices to improve water quality, and thereby to create the most positive experience for our neighbors and visitors in our diverse parks, parkways and properties throughout the Commonwealth of Massachusetts.

Thank you for your consideration of our concerns.

Robert Lowell
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