



March 31, 2010

Office of Ecosystem Protection
US EPA – Region 1
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Mail Code: OEP06-4
Boston, MA 02109-3912

Attn: Thelma Murphy (murphy.thelma@epa.gov)

RE: Draft North Coastal Watershed MS4 Permit Comments

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 Permit requirements will present a burden to DCR in the following ways.

Dry Weather Monitoring and Illicit Discharge Requirements

DCR already is performing extensive illicit discharge inventory and sampling as part of its current permit and draft permit requirements are likely to increase this cost substantially. DCR is concerned that it will need to revisit the many miles of roads and park facilities its staff and consultants have already reviewed for illicit connections, since the requirements have changed.

The requirement in the draft permit to evaluate the potential for intermittent dry weather flows in junction manholes by damming the inlets then re-inspecting after a certain timeframe, is particularly troublesome. This would be a very high cost effort from an implementation point of view and will cause serious impacts to commuter and commercial traffic. Installing and removing the inlet dams would require confined space entry procedures and specially trained personnel and equipment. In addition, it would require traffic control measures that are not only costly, but also would result in significant traffic impacts to DCR parkways several of which, including Storrow Drive, carry over 100,000 vehicle per day. As a result, the cost per manhole inspected in this manner would be prohibitive. It is not clear why this effort would be justified. Inspections of drainage systems during dry weather should be sufficient to identify illicit discharges.

The requirement to test for e.coli or enterococcus will also 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

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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.

Also, the requirement for turbidity and conductivity monitoring either will require expensive monitoring equipment to perform the analysis on-site or costly lab analysis. Specific monitoring requirements were not included in the 2003 permit, and as such DCR did not include these parameters in the IDDE monitoring performed to date.

Many of the screening factors required for to rank catchment areas as part of the illicit discharge work will be difficult to develop and are not available in GIS (e.g. age of sewer systems, sewer conversion areas, density of aging septic systems, and density of generating sites). 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.

Wet-Weather Monitoring Requirements

During the public hearing on this permit, EPA indicated that the intent of the proposed monitoring requirements is to identify illicit discharges. It is not clear that this approach is an effective way of detecting illicit discharges. The guidance documents for detecting illicit discharges that we are aware of do not include recommendations for conducting wet weather samplings as a means of detecting illicit discharges. Furthermore, we are not aware of studies demonstrating that wet weather monitoring is effective. Instead, available evidence suggests that wet weather monitoring would not be effective at detecting illicit discharges. Without clear evidence that the proposed monitoring is necessary and effective, the extremely high costs associated with the requirements are not justified.

Implementation of the extensive wet weather monitoring requirements included in the draft permit would be extremely costly. Conducting wet weather monitoring at all outfalls and interconnections with other MS4s would cost millions of dollars. The analytical costs of evaluating a single wet weather discharge from each of the outfalls would exceed \$185 per sample, and at least \$500 per outfall for labor, traffic and analytical costs.

In summary, the wet weather monitoring requirements would not provide results that justify the very high costs and should be removed from the permit. If EPA includes a monitoring requirement, the purpose of the monitoring should be clearly stated and the requirements should be designed to achieve meaningful results in a cost-effective manner. Performing such wet weather monitoring state-wide would not be practicable or cost effective. The permit should allow prioritizing IDDE efforts in areas that have a higher likelihood of having illicit discharges. In addition, the draft permit should allow permittees the opportunity to

demonstrate that their system, or portions of it, do not have a significant potential for illicit discharges and therefore would not require IDDE effort. These goals would be best achieved by allowing permittees significant discretion and flexibility to design a stormwater monitoring program that accounts for the specific characteristics of the varied systems that DCR owns.

Number of Outfalls that Contribute to Each Water Body

The requirement to list the number of outfalls contributing to each water body would be infeasible for DCR to complete within 90 days indicated within the draft general permit. DCR's stormwater systems associated with our numerous parks and parkways discharge to a large number of receiving water bodies. Individual watersheds to each impaired stream or waterbody have not been delineated and made available on MassGIS and delineating these watersheds would require significant effort and time. Therefore, it would be infeasible to determine the number of outfalls that drain to each individual impaired water body in such a short time frame.

This effort, too, would be costly and provide no water quality benefit. As drainage infrastructure mapping is completed as part of the permit, the individual receiving water and watershed associated with the drainage system will be identified, at which time it would be more appropriate to update a list of outfalls to receiving waters.

Compliance Requirements with the TMDLs in the North Coastal Watershed are Unclear.

It is unclear what is necessary for DCR to demonstrate compliance with TMDLs. In particular, it is not clear what waste load allocation (WLA) applies to DCR or how to assess compliance with a specific WLA. Appendix G contains the requirements and WLA that apply to the municipalities in the North Coastal Watershed. It does not include DCR or specific facilities. If EPA defined a WLA for DCR, it is not clear how to assess compliance with the WLA. DCR suggests that compliance could be determined based on:

- Demonstrating that the BMPs specified in the Northern Coastal permit and the TMDL that are applicable to DCR have been implemented,
- 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 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. This approach should allow permittees to take credit for BMPs that achieve reductions in the pollutant of concern, including those that have been in place historically. Otherwise permittees that have voluntarily implemented BMPs historically 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.

Schedule and Requirements of Phosphorus Control Plan

Developing and implementing the Phosphorus Control Plan (PCP) across the entire Charles River Watershed would be a huge undertaking. 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. DCR operates approximately 680 outfalls in the Charles River Watershed alone. In comparison, most municipalities have a few hundred outfalls. This scale indicates that DCR should have additional time for planning and implementation of the plan.

Mapping Requirements

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. In particular, the draft permit requires mapping of additional features, including rim and invert elevations, and a number of sanitary sewers features in the Charles River Watershed. DCR does not operate sanitary sewers and therefore should not be required to meet these expensive requirements. Also 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.

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 2 years, as required by the draft permit. 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 Comments to Thelma Murphy
Draft North Coastal Watershed Permit
March 31, 2010

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.

Sincerely,
Department of Conservation and Recreation

Robert Lowell
Environmental Section Chief
Division of Engineering