



May 2, 2008

Eloise Lawrence  
Conservation Law Foundation  
62 Summer Street  
Boston, MA 02110-1016

Kate Bowditch  
Charles River Watershed Association  
190 Park Road  
Weston, MA 02493

RE: 2008 Spring Report on DCR Parkway Sweeping and Catch Basin Cleaning

Dear Eloise and Kate:

DCR is pleased to provide you with this semi-annual report on DCR street sweeping and catch basin cleaning activities in accordance with our storm water management policy and the Memorandum of Understanding between DCR and CLF and CRWA.

DCR has completed the drainage infrastructure assessment that combines digitally scanned construction plans and GPS field data collected during maintenance and assessment. DCR and its consultant mapped and identified 10,890 catch basins, 4,547 manholes, 2,183 outlets, 1,774 outfalls and 1,083,535 linear feet (+/- 205 miles) of pipes, swales and linear drainage features. A draft version of the compiled data is now being reviewed and error checked. There are a number of irregularities in the combined data that require

COMMONWEALTH OF MASSACHUSETTS · EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

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Timothy P. Murray  
Lt. Governor

Ian A. Bowles, Secretary, Executive  
Office of Energy & Environmental Affairs

Richard K. Sullivan, Jr., Commissioner  
Department of Conservation & Recreation

field confirmation or correction. DCR's GIS specialists are working with the merged data to analyze the information and prioritize areas to investigate for illicit connections to the storm water system.

During fall and early spring DCR and contractor services mechanically swept Urban Parks and parkways and vacuum swept select beach parking lots (Walden Pond.) The present street sweeping contract covers services through October 2009 and prioritizes sweeping on roadways and parkways that discharge to impaired receiving waters and other high traffic volume parkways that have higher pollutant loads. In accordance with the DCR Maintenance Activity Schedule parkways are swept four times per year and monthly from April through November on parkways and frontage roads where car parking is allowed. Extra trash and debris accumulate in these areas and monthly sweeping provides a predictable schedule for local residents and businesses. In September 2007 DCR contractor began sweeping the Fellsway, sections of Fellsway East and West and Middlesex Avenue (total of 33,500 linear feet of additional parkway.) These Fellsway areas are now added to the monthly street sweeping schedule. Quincy Shore Drive, Revere Beach Boulevard and Shore Drive in Somerville will be added to the street sweeping contract in 2008. DCR's street sweeping program accounted for over 4,000 tons of street sweepings collected and disposed from July through December 2007.

During the fall and starting again in February 2008 DCR is cleaning catch basins, water jetting outlet drain pipes. Since September 1, 2007, DCR and its contractors cleaned, water jetted and recorded 1,230 catch basins locations and their condition using GPS. More than this, an estimated 600 additional catch basins were cleaned in November, but cleaning and assessment data was lost when the GPS unit recording the information was accidentally dropped on the parkway and destroyed by traffic. DCR staff cleaned catch basins in Blue Hills Reservation, Shore Drive (Somerville) and Storrow Drive to address street flooding and icing concerns. DCR identified an illicit drainage connection to Storrow Drive from the CSX rail yard that will be subject to permit requirements. In spring 2008 DCR is enabling GPS units to field check the drainage infrastructure database and update these records. The revised software will collect and keep a maintenance history for each drainage structure visited.

DCR is preparing Notices of Intent under the Wetlands Protection Act to repair several catch basins and drains including locations on the Fenway, Memorial Drive, and the Jamaicaway where street flooding and concentrated run-off have created severely eroded areas leading to the nearby surface waters, especially the Muddy River. DCR will present drainage repair work proposed for 300 Fenway at the May 8, 2008 Boston Conservation Commission meeting.

DCR extended the storm water management contract with its consultant, ENSR, through 2010 to collect storm water drainage information and assess drainage infrastructure at state parks and parkways.

On December 6, 2007 EPA notified DCR that its Phase 2 MS4 Notice of Intent to discharge storm water was essentially sufficient. However, before issuing a NPDES permit EPA required DCR responses to public comments received during the initial comments period, questions raised by EPA and a listing of impaired waters receiving storm water discharges from DCR properties. On March 10, 2008 DCR submitted its revised Storm Water Management Plan and responses to comments to EPA and DEP and expects to receive authorization as soon as the EPA review is complete.

In response to concerns you raised during our April 17 update meeting about use of permeable pavement on the newly installed bituminous pavement sidewalk along Storrow Drive, Dan Driscoll at DCR noted that by paving the path with bituminous mix pitched toward the roadway the resulting design would actually reduce river bank erosion over use of a permeable pavement on such a heavily used path on sloped terrain adjacent to the river. When permeable pavement works effectively, water passes through the pavement to the soil material or pavement base beneath. If permeable pavement were used in this area it would result in softer, more saturated sub-grade soils that may be more prone to washout and erosion. Also, permeable pavements require vacuum sweeping frequently to remove smaller particles from pavement pores to work properly. This level of service is impractical on DCR's smaller pathways based on current equipment limitations.

DCR storm water management efforts are supported by operating and capital appropriations that will total approximately \$4.5 million in FY08 and expects to utilize all available funds to continue our expanded

level of service and to identify better practices to reduce pollution in runoff from parks, parkways and roads. In the coming year additional effort will be expended to monitor, identify and remove unauthorized connections to DCR drainage systems.

Sincerely,

Department of Conservation and Recreation

A handwritten signature in black ink, appearing to read "Robert Lowell". The signature is fluid and cursive, with a large initial "R" and "L".

Robert Lowell

Storm Water Manager

CC: Richard K. Sullivan, Commissioner  
Gary Davis, Office of General Counsel  
Nicholas Vontzalides, Assistant General Counsel