



Broad Meadow Brook Conservation Center and Wildlife Sanctuary

414 Massasoit Road, Worcester, MA 01604-3546

Telephone (508) 753-6087 Fax (508) 755-0148

email: bmbrook@massaudubon.org Web Site: www.massaudubon.org

August 1, 2008

David Gray
U.S. Environmental Protection Agency, Region 1
1 Congress Street, Suite 1100 (CIP)
Boston, MA 02114

Re: Draft NPDES Permit No. MAS010002, Worcester Municipal Separate Storm Sewer System

Dear Mr. Gray,

Mass Audubon strongly supports the draft Stormwater Management Permit for the City of Worcester. We have partnered with the City for many years to protect land and water, and we applaud the City's track record in all that they have accomplished to date. A densely developed industrial city with aging infrastructure certainly presents many challenges, however, and the quality of Worcester's waterways reflect those challenges. Most of them are impaired for one or more designated uses, and polluted runoff (stormwater impacts) is a significant contributor to the impairments. Implementation of this permit and the resulting stormwater management plan will effect tremendous improvements in water quality throughout the City.

We fully understand that the City supports the majority of the permit, but is eager to work with EPA to refine language in three areas.

1. **Clear, Achievable Standards:** Regarding whether the City must meet water quality standards vs. reach them to the maximum extent practicable, we leave that to the EPA and the City to craft wording that is clear about what is required, highly protective of our waterways, achievable, and reasonable in cost. Clarity and specificity here would remove the City's fear of a lawsuit or excessive, unreasonable costs.
2. **IDDP:** The proposed Illicit Discharge Detection Protocol (IDDP) is more aggressive and comprehensive than the Illicit Discharge Detection and Elimination (IDDE) program in the previous permit, and therefore considerably more expensive. The City has had good success with its current program, which, as we learned at the July 30 public hearing, is endorsed and recommended by EPA. Mass Audubon suggests that based on its experience, the City continue to improve upon its existing methods to achieve results similar to those expected from the proposed IDDP.
3. **Monitoring:** A rigorous sampling and monitoring program is essential, and must track the progress of water quality improvement, or lack thereof. However, due to constraints on resources, the program should be fine-tuned to gather data necessary for analysis of BMP effectiveness.

- As a side note, many of the City's smaller brooks are unassessed, but it should not be assumed that they meet water quality standards. We know from our own water quality monitoring data that that Broad Meadow Brook is tremendously impacted by stormwater and does not meet standards. We support all the streams being assessed on a regular basis. If the City feels they don't have the manpower to conduct this required testing, perhaps putting the water sampling and monitoring program out to competitive bid might result in a cost effective solution that the City could support. The commonwealth of Massachusetts has obtained extensive water quality data in many locations from watershed associations conducting programs at low cost using trained volunteers and standardized protocols. In fact, the Blackstone River Coalition's Watershed-wide Volunteer Water Quality Monitoring Program is just such a program.

The lines of communication now open among the City, EPA and Mass DEP bode well for successful negotiations on these three issues.

Holistic Approaches – Using Innovative, Cost-Effective Techniques

Mass Audubon is pleased to note that this draft permit takes a more holistic approach to the issue of stormwater than the previous permit and requires the City, its residents and business owners to do more to address the effects of stormwater on local waterways. The previous permit was issued to the Department of Public Works, and they did an excellent job implementing that stormwater management program. This draft permit is issued to the City as a whole, and not to any one municipal department or board. Therefore, successful implementation will require interdepartmental coordination.

For example, with the understanding that land use practices directly impact water quality, the draft permit requires that the City establish comprehensive and fully enforceable authority to regulate land disturbance activities that minimizes or eliminates adverse effects of stormwater pollutants during and after land development activities. This requires coordination of all municipal departments and boards with jurisdiction over the review, permitting, or approval of land disturbance and development projects within the City of Worcester. Furthermore, strict enforcement and the issuance of fines and penalties for non-compliance must be adopted by the City. Apparently the City currently does not have this comprehensive authority and needs to have it. Such programs and coordination can benefit the City by ensuring consistency in project design and permit requirements, and revenue from violators that could be used to help offset the costs of municipal system monitoring and upgrades.

Part of this authority includes the requirement that developers and construction site operators disturbing one or more acres comply with the equivalent of the Mass DEP's Stormwater Management Standards even for activities located outside of a wetland resource area and that do not require the submission of a Notice of Intent to the Conservation Commission. These standards require project proponents to consider environmentally sensitive site design that incorporates Low Impact Development (LID) techniques. This would ensure that a proponent's proposed use of LID techniques is allowable by right or exception under the City's regulations. By reducing stormwater volume and increasing infiltration to groundwater, these techniques substantially reduce stormwater impacts.

The draft permit often refers to implementation of Best Management Practices (BMP) as the best solution – it should define and define broadly the term BMP so techniques like LID and proactive development and redevelopment practices are pursued by the city. The term BMP often invokes approaches like swirl concentrators or increased street sweeping, which have limited effectiveness and significant costs. Changes in building and zoning regulations can make a great deal of progress over time, in a cost-efficient manner. Measures that gradually reduce stormwater runoff and pollution across all sites over time are ultimately more effective than end-of-pipe solutions, and are the best long term control available.

To that end, the City could position itself as a leader in stormwater mitigation by creating innovative programs to encourage infiltration. One such example is the City of Portland, Oregon’s Downspout Disconnection program (<http://www.portlandonline.com/shared/cfm/image.cfm?id=172333>). Such a program could be developed for existing residences with downspouts that empty directly to their driveway. By encouraging homeowners to angle downspouts away from pavement and toward vegetated areas, millions of gallons of roof runoff would be infiltrated to groundwater rather than overwhelming our roadways, streams and rivers. A strong program to encourage rain gardens, vegetated swales, a robust street tree program, and use of rain barrels would be helpful as well. Another suggestion would be to require that parking lots be designed with bioretention cells.

Education, Nonprofit and Business Partnerships

By expanding the responsibility of implementing the stormwater management program to the entire City, the draft permit also requires increased efforts at education and outreach to not only homeowners, but also to owners and operators of commercial, industrial and institutional facilities regarding their responsibility to control pollutants to stormwater discharges from their property to the City’s MS4. To assist in this effort, Mass Audubon, in collaboration with the Blackstone River Coalition, is committed to working with the City to distribute its “Homeowner’s Guide for Protecting Water Quality in the Blackstone River Watershed” and implementing its “In Business for the Blackstone” program with small to mid-size companies.

Many environmental organizations are eager to work with the City, DEP and EPA to help address stormwater issues in Worcester. We would suggest that a Worcester Stormwater Task Force be formed to develop creative solutions, and Mass Audubon will be there at the table. We would also encourage participation from home owners, business owners and large real estate management companies whose land holdings play a vital role in improving stormwater management.

Obviously there are many other components of the permit, and several of them will be costly. Those costs will be shared by all of those who will benefit from enhanced recreation, economic opportunities, and restored aquatic habitats. Perhaps the time has come for the City to adopt a stormwater utility approach whereby landowners who contribute the most stormwater runoff pay according to square footage of paved areas. This approach is considered fair and equitable, and helps raise the necessary revenue to get the job done.

Public education and outreach about these efforts should be kept at a very high level so that residents and business owners are kept informed about progress and problems, and what they can do to reduce stormwater impacts. Clean water is a shared responsibility, and support for the

substantial municipal investment that this permit requires will be best appreciated if people feel part of the solution.

Thank you for the opportunity to comment.

Sincerely,

Deborah D. Cary,
Director

Donna M. Williams,
Conservation Advocacy Coordinator

Cc: Robert Moylan, Worcester DPW
Michael O'Brien, Worcester City Manager
David Moore, Worcester City Solicitor
Stephen Perkins, US EPA
Glenn Haas, Mass DEP
Paul Hogan, Mass DEP